Diagnostic Algorithms for NCS/DSM-III-R Di

NCS Working Paper #7

Shanyang Zhao, Ph.D.
Ronald C. Kessler, Ph.D.
Hans-Ulrich Wittchen, Ph.D.

September, 1994

The authors would like to thank Peggy Price and Charlie Cannell for their help in developing the University of Michigan version of the CIDI (UM-CIDI). Peggy was the NCS Field Coordinator during the developmental phase of the NCS. We profited enormously from her extensive experience as an interviewer and interviewer supervisor and from her boundless energy in going through successive revisions of the instrument. Charlie was our advisor and mentor during the entire process of instrument development. He made us appreciate much more than we had before both the logic and the art of instrument design. He also came up with some of the best ideas in the UM-CIDI. We couldn't have done it without him. Address reprint requests to the NCS Study Coordinator, Room 1006 Institute for Social Research, The University of Michigan, Box 1248, Ann Arbor, MI 48106-1248.

Table of Contents

SECTION I. INTRODUCTION

This working paper was prepared for those who want to use the UM-CIDI for generating DSM-III-R diagnoses. As described in NCS Working Paper #2, the UM-CIDI is a modification of the World Health Organization Composite International Diagnostic Interview (WHO-CIDI). The UM-CIDI was developed by a team of investigators from the University of Michigan (UM) led by Dr. Ronald Kessler in collaboration with Dr. Hans-Ulrich Wittchen from the Max Planck Institute of Psychiatry in Munich, Germany, for use in the NCS. As a number of other investigators are interested in replicating the NCS in other areas, we are making our diagnostic programs available.

Sections II through V contain verbal presentations of the UM-CIDI programs, complete with commentary about differences between the UM-CIDI and the WHO-CIDI. Appendix A contains the actual SAS computer programs used to derive UM-CIDI diagnoses. In most cases, the DSM-III-R diagnostic criteria operationalized in the NCS are identical to those used in the WHO-CIDI computer diagnostic programs. Special attention has, therefore, been paid to those areas where the UM-CIDI programs do differ from the WHO-CIDI programs.

NCS Diagnostic Computer Programs for Affective and Anxiety Disorders generate the following diagnoses:

1. Major Depressive Episode (dep1, dep2)

2. Manic Episode (man1, man2)
   Hypomania (hman)

3. Dysthymia (dys1, dys2)

4. Generalized Anxiety Disorder (gad1, gad2)

5. Agoraphobia (ago)

6. Simple Phobia (sim)

7. Social Phobia (soc)

8. Panic Disorder (pd)
   Panic Attacks (pt)

9. Post-Traumatic Stress Disorder (ptsd)

10. Anti-Social Personality Disorder (asp)

11. Adult Anti-Social Behavior (aab)

12. Conduct Disorder (cd)

In cases where a hierarchy rule is required for a diagnosis, two sub-types of the diagnosis are given: DX1 refers to the diagnostic outcome prior to applying the hierarchy rule and DX2 refers to the diagnostic outcome after applying the hierarchy rule. It should be mentioned that the SAS programs for PTSD and CD

provided in this package are simplified versions that may require modifications depending on the researcher's substantive interests.

NCS Diagnostic Computer Programs for Substance Abuse/ Dependence Disorders generate the following diagnoses:

1. Substance Abuse/ Dependence:

   Alcohol
   Sedatives
   Tranquilizers
   Stimulants
   Analgesics
   Inhalants
   Marijuana
   Cocaine
   Hallucinogens
   Heroin

2. Nicotine Dependence

Onset (XXXons), recency (XXXrec), onset age (XXXonsa), and recency age (XXXreca) for the above diagnoses are also computed. The four numbers (1 to 4) assigned to onset and recency are defined as:

   1= last month
   2= last six months
   3= last year
   4= more than one year ago.

It is recommended that users of this package read Working Paper #2 carefully to acquaint themselves with the differences between the WHO-CIDI and the UM-CIDI. It is a good idea to place the UM-CIDI questionnaires side by side with the WHO-CIDI interviews while reading this document. The next step is to read Section II-V of the current Working Paper, which describe the diagnostic criteria used in the NCS for generating the DSM-III-R diagnoses.

The SAS diagnostic computer programs included in Appendix A of this package shall be examined next -- they are organized into mini-programs, each one specific to a DSM-III-R diagnosis. As these programs were initially written for data analysis in the OSIRIS environment, variable numbers such as v1, v1500, and v1708 were used to refer to the questions asked in the questionnaires. Those who will use SPSS, SAS, or other statistical packages equipped with the capability to refer directly to question numbers (e.g., B6, B7, etc.) may want to modify these programs by changing the variables back to question numbers. This can be done by either changing the variable numbers in the text of the programs or by adding a series of RENAME statements at the beginning of the programs. A complete list of all the variables used in the computer programs is provided in Appendix B along with their corresponding question numbers as they appear in the NCS questionnaires.

It is possible to put all the mini-programs together into a master file and run the entire program in one run given adequate computer resources. In case of a memory problem, the master file needs to be broken into several small programs to be run separately. One thing to remember, however, is that these small programs have to be run in the same sequence as they appear in the master program with the results of the antecedent runs being saved and used in the subsequent runs. The main reason for this requirement is the built-in hierarchical rules of the diagnostic criteria.

Finally, it should be mentioned that in the NCS, Nap50, or Nonaffective Psychosis, was diagnosed on a case by case basis by clinical interviewers who administered the psychosis section of the SCID to all NCS respondents who were positive on Section K of the NCS interview. Nap50 was then used as part of the hierarchy rule in the diagnosis of other disorders. If this variable is not available to you, simply comment it out in the subsequent programs. As the number of NAP cases is typically very small, deletion of this variable will have little impact on the diagnostic outcome in most instances.

SECTION II. AFFECTIVE DISORDERS

1. Criteria for Major Depression

There are four Diagnostic Criteria for Major Depressive Episode (MDE) in DSM-III-R (A-D). In addition, the Diagnosis of a Major Depressive Disorder (MDD) requires that the respondent has never had a Manic Episode or an unequivocal Hypomanic Episode. The hierarchical exclusion of respondents with a history of mania is operationalized in the UM-CIDI merely by excluding respondents from MDD if they ever met UM-CIDI criteria for Manic Episode or Hypomanic Episode. The four criteria for MDE were operationalized as follows:

A. At least five symptoms must be present during the same two-week period and present a change from previous functioning. At least one of these symptoms must be depressed mood or loss of interest. Symptoms clearly due to a physical condition, mood-congruent delusions or hallucinations, incoherence, or marked loosening of associations should not be included.

The UM-CIDI, like the CIDI, does not require respondents to report about a particular two-week period, but rather about a particular episode of depression that could go on for much longer than two weeks. Exclusion for organic causes is made in UM-CIDI at the symptom level for the particular episode probed. This is different from the method used in the CIDI, where exclusion for organic causes is made based on symptom probes prior to focusing on a particular episode. So, for example, a respondent can report that a particular symptom that occurred at various times during his/her life was sometimes due to alcohol but not always. The assumption made in the CIDI is that this symptom, if it was present during the index episode of depression being evaluated, was not due to alcohol this time. This assumption can lead to overestimation of rates of depression. The UM-CIDI corrects this problem by probing for organic exclusions at the episode level.

It should also be noted that DSM-III-R is much more explicit about the persistence of depressive symptoms over a two-week period than the CIDI or UM-CIDI. DSM-III-R states that "The symptoms ... are relatively persistent, that is, they occur for most the day, nearly every day, during at least a two-week period." The CIDI and UM-CIDI questions merely ask about "two weeks or more when nearly every day" the symptoms occurred, without mentioning how long the symptoms had to persist within the day. We have developed a new probe for use in subsequent revisions of the UM-CIDI to ask explicitly about whether they occurred "most of the day" on the days they occurred. This probe was not, however, used in the NCS.

A1. The requirement that one of the five must be depressed mood or loss of interest is operationalized as (depressed) B3=1 or B4=1 or B4a=1 or (loss of interest) D22=1 and D84a_19=/=1. Note that B3 is the dysthymia stem question, not a stem question for Major Depression. We allow respondents who were positive to B3 but negative to all other stem questions to continue with the section as a way of providing a "second chance" for getting into the stem-branch structure

of the question series. If these people reported enough other symptoms to qualify for Major Depression, they were asked if these symptoms ever clustered in a two-week period. If it did not, they were terminated. In other words, these people were only allowed to continue in the section if they reversed themselves after initial symptom probing to state that they did have a two-week period of being sad, blue, or depressed. As it happened, not a single respondent out of over 8000 met diagnostic criteria for Major Depression via this route. Therefore, in future use of the UM-CIDI we plan to exclude respondents from further questions if they are positive on only the B3 stem question.

An important difference between the UM-CIDI and the CIDI is that the UM-CIDI skips all further symptom questions if the respondent reports "No" to all the A1 stem questions. This is not done in the CIDI, where the respondent is administered all the symptom questions and given a second chance to admit to depressed mood or loss of interest if there are a total of four or more other symptoms that are reported to have clustered in time. Our decision not to provide this second chance in the UM-CIDI is based on the experience of the ECA Study, which found that only a very small number of respondents met diagnostic criteria because of this second chance. There is a considerable cost associated with providing this second chance in that the large number of people who are negative on all the stem questions for Major Depression are nonetheless administered 35 additional symptom questions and, in the method used in the CIDI, probes for each positive response to these questions for organic exclusions. Based on our experience in pilot tests for the NCS, we estimate that these additional questions take an average of approximately ten minutes to administer. We judged this additional time too high a cost in light of the very small number of cases that are added. Another important consideration in coming to the decision to omit this second chance from the UM-CIDI was that we used a procedure of pulling up stem questions to the beginning of the interview and using commitment and motivation probes to increase accuracy of recall. Our pilot study results show that this method -- which included the addition of B3 and B4a as additional stem question "second chance" questions -- led to a much greater increase in the number of respondents who reported Major Depression than the CIDI second chance option.

A2. The count of five symptoms not due to organic causes is operationalized as one or more positive responses to at least one question in at least five of the following nine categories, with the respondent both reporting that the symptom was present during the index episode and also that this symptom was not due to organic causes during this episode:

symptoms in worst spell: D81s			not due to organic causes medications: D84s
#2	D22=1 and	D81a_19=1	D84a_19=/=1
#3	D2=1 and	D81a_01=1	D84a_01=/=1
	D4=1 and	D81a_03=1	D84a_03=/=1
	D6=1 and	D81a_04=1	D84a_04=/=1
	D7=1 and	D81a_05=1	D84a_05=/=1

#4	D9=1 and	D81a_06=1	D84a_06=/=1
	D11=1 and	D81a_08=1	D84a_08=/=1
	D13=1 and	D81a_10=1	D84a_10=/=1
	D15=1 and	D81a_12=1	D84a_12=/=1
#5	D16=1 and	D81a_13=1	D84a_13=/=1
#6	D19=1 and	D81a_16=1	D84a_16=/=1
	D21=1 and	D81a_18=1	D84a_18=/=1
#7	D27=1 and	D81a_24=1	
	D30=1 and	D81a_27=1	
#8	D34=1 and	D81a_31=1	D84a_31=/=1
	D36=1 and	D81a_33=1	D84a_33=/=1
	D37=1 and	D81a_34=1	D84a_34=/=1
#9	D41=1 and	D81a_36=1	
	D42=1 and	D81a_37=1	
	D43=1 and	D81a_38=1	
	D44=1 and	D81a_39=1	

B. The second criterion is that it cannot be established that an organic factor initiated and maintained the disturbance or that the disturbance is a normal reaction to the death of a loved one. The first of these requirements is fulfilled in the D84 series of organic exclusions. The second is established in questions abut the episode being precipitated by the death of a loved one (single episode, D61=5; multiple episode, D70=5 or D70a=1). If the episode is associated with the death of a loved one, the UM-CIDI can still define it as depression if the reactions go beyond the normal bounds of uncomplicated bereavement. The exceeding of these bounds are operationalized as having two or more of the following:

D19=1
D27=1
D43=1
D44=1
D55=1

D63 (84<=D63a<98 and D63b=1) or — for single episode
(12<=D63a<98 and D63b=2) or
(3 <=D63a<98 and D63b=3) or
(1 <=D63a<98 and D63b=4) or

D74 (84<=D74a<98 and D74b=1) or — for multiple episode
(12<=D74a<98 and D74b=2) or
(3 <=D74a<98 and D74b=3) or
(1 <=D74a<98 and D74b=4) or

C-D. A third criterion is that at no time during the episode were there delusions or hallucinations for as long as two weeks in the absence of prominent mood symptoms, while a fourth criterion is that the episode is not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder NOS. Among the small number of NCS respondents who reported a lifetime history of delusions or hallucinations, these exclusions were operationalized as (K58=/=2 AND K58=/=3 OR K59b=/=2 AND K59b=/=3) AND K59c=/=1.

It should be noted that DSM-III-R distinguishes between Single Episode Major Depression and Recurrent Major Depression by saying that Recurrent MDD requires a minimum of two episodes separated by at least two months of return to more or less usual functioning. This is operationalized in the UM-CIDI as D69b=1 or D69c=1. (It is further stated that "If there has been a previous Major Depressive Episode, the current episode of depression need not meet the full criteria for a Major Depressive Episode". This statement did not play a part in the UM-CIDI, as only one episode of MDE was probed for meeting full criteria).

2. Criteria for Manic Episode

Manic Episode in DSM-III-R is defined as including criteria A to F which require the presence of an elevated or irritable mood lasting at least two days accompanied with at least three symptoms not caused by organic factors and not superimposed on psychotic disorders but resulting in marked impairment. These criteria were operationalized in the UM-CIDI as follows:

A. A period of at least two days during which the predominant mood is either elevated or irritable:

B6=1 or B7=1.

As in the section on Major Depression, the UM-CIDI diverges from the WHO-CIDI in skipping respondents who fail to endorse one of these diagnostic stem questions. The WHO-CIDI continues with all symptom questions and gives the respondent a second chance to endorse the stems. The rationale for our skipping at this point rather than providing a second chance is the same as for DEP. It should be noted, in addition, that NCS validity studies show that the UM-CIDI diagnoses of mania and hypomania have high rates of false positives, meaning that the screening questions select in too many people rather than too few. Indeed, a good case could be made not to use the screening question about irritability (B7) because it is very rare to find a respondent who fails to endorse the euphoria stem question (B6) but does endorse the irritability stem question (B7) and is validated in SCID reinterviews as a case of either mania or hypomania.

B. During the period of mood disturbance (i.e., the worst spell), at least three of the following seven symptom categories have been present (four are required if the mood is only irritable):

(E15=1 or E15a=5) and

E4=1	and E36_1=1	or	E5=1 and E36_2=1
E6=1	and E36_3=1	or	E7=1 and E36_4=1
E8=1	and E36_5=1		
E9=1	and E36_6=1		
E10=1	and E36_7=1		
E11=1	and E36_8=1		
E12=1	and E36_9=1		

C. Mood disturbance is sufficiently severe to cause marked interference in life or result in hospitalization:

E22=1 or E23=1.

D. At no time during the disturbance have there been delusions or hallucinations for as long as two weeks in the absence of prominent mood symptoms:

K59c=/=1.

E. Mood disturbance does not only co-occur with psychotic disorders:

[(K58 =/=2 and K58 =/3) or
(K59b=/=2 and K59b=/=3)] and
K59c=/=1.

F. The disturbance is not initiated and maintained by organic factors such as drugs and alcohol:

1) the mood is not due to organic factors:

E1a=/=1 or E3a=/=1

2) and the symptoms are not due to organic factors:

E37a_1=/=1 or E37a_2=/=1
E37a_3=/=1 or E37a_4=/=1
E37a_5=/=1
E37a_6=/=1
E37a_7=/=1
E37a_8=/=1
E37a_9=/=1

Notes:

There are two places where questions are asked about the influence of organic factors on mood disturbance: respondents were first asked whether the specific mood problem and the symptoms they mentioned were solely caused by medications, drugs or alcohol; toward the end of the section on Mania, respondents were asked again about the possibility of their mood disturbance being due to use of drugs and alcohol and, if the answer was positive, respondents were then probed to provide information on which started first and which lasted longer -- the organic factors or the mood disturbance. Those respondents who said their mood problem was caused by organic factors in the first place (E1a=1 or E3a=1) but reversed their answer in the second place (E39=/=1 or E39a=/=2 or E41=/=1 or E41a=/=1 or E41b=/=2) and also had met all other criteria were included as Mania cases under the UM-CIDI. It turns out that there were 7 such cases out of 8098 respondents.

a. Criteria for Hypomanic Episodes

Hypomanic episodes are defined in the UM-CIDI as including those cases that do not make criteria for Manic Episodes due to the lack of marked impairment. In contrast to the WHO-CIDI, minor impairment is required of Hypomanic episodes in the UM-CIDI. Minor impairment is defined as meeting any of the following conditions:

1. tell a doctor about the mood problem	E16=1
2. given any prescription for the mood problem	E17=1
3. advised to see mental health specialist	E18=1
4. saw mental health specialist	E19=1
5. saw other professional about the mood problem	E20=1
6. took medication more than once for the mood problem	E21=1

3. Criteria for Dysthymia

Dysthymia in DSM-III-R is defined as including criteria A to G which require the presence of depressed mood lasting at least two years accompanied with two or more symptoms not caused by organic factors and not superimposed on other affective disorders. These criteria were operationalized in the UM-CIDI as follows:

A. Depressed mood for most of the day, more days than not, for at least two years. We measured the duration of mood at two different places. First, we provided a stem question at the beginning of the survey asking whether the respondent ever had depressed mood lasting two years or more. A positive answer to that question fulfilled criterion A (B3=1). Those who initially said "No" to this question but later reported that the length of their longest episode of depression was two years or more (D63=>2 years or D74=>2 years) were also treated as meeting Criterion A for Dysthymia.

B. & G. Presence of at least two of the following six symptom categories that are not caused by organic factors while depressed:

6 categories of symptoms		not due to medications (D84s)
#1	D2 =1	D84_01=/=1
	D6 =1	D84_04=/=1
#2	D9 =1	D84_06=/=1
	D11=1	D84_08=/=1
	D13=1	D84_10=/=1
	D15=1	D84_12=/=1
#3	D16=1	D84_13=/=1
#4	D31=1	
	D32=1	
#5	D34=1	D84_31=/=1
	D37=1	D84_34=/=1
#6	C1b=1	

and these symptoms clustered with the depressed mood:

D47=1 or D47a=5.

C. During a two-year period of the disturbance, never without the depressed mood for more than two months at a time:

B3a=1 or D63=> 2 years or D74=> 2 years.

D. No evidence of an unequivocal Major Depressive Episode during the first two years of the disturbance (Note: There may have been a previous Major Depressive Episode, provided there was a full remission before development of the Dysthymia).

If DEP =1 and any of the following three conditions is met, the case is to be excluded from Dysthymia:

1. Those who were negative on B3a but positive on D63 or D74 (more than 2 years):

B3a^=1 and D63 => 2 years (single DEP episode)
B3a^=1 and D74 => 2 years (multiple DEP episode)

2. For the remaining single episode DEP cases (D58=1):

(DYSEND => DEPEND => DYSONSA) or (DYSEND => DEPONSA => DYSONSA) and C3 = 1 or 3

or

C3 = 2 and DYSRECA <= DEPEND or DYSONSA <= DYSRECA <= DYSEND

or

DEPONSA <= DYSONSA and DEPEND => DYSRECA

3. For the remaining multiple-episode DEP cases (D58>1):

DYSONSA <= (DEPONSA or DEPRECA or D78ONSA or LONGONSA or LONGREC) <=DYSEND and C3 = 1 or 3

or

C3 = 2 and (D69 = 5 or D69a = 5 or D69b = 5)

or

D76ONSA <= DYSONSA and (D76ONSA + 1) => DYSRECA

or

LONGREC <= DYSONSA and D77REC => DYSRECA

or

((D77-D76)<= D74)) and D76ONSA <= DYSEND and D77RECA => DYSRECA

where

DEPONSA = DEP onset age
DEPRECA = DEP recency age
DEPEND = D62 - D62b
DYSONSA = DYS onset age
DYSRECA = DYS recency age
DYSEND = DYSONSA + 1

D76ONSA = D76a or D76b or D76c
LONGONSA = D76ONSA + 1

D77REC = R's current age (if 1<=D77<=3)
LONGRECA = D77REC - 1
D77RECA = R's current age (if 1<=D77<=3) or D77a (if D77=4)
D780NSA = D78, D79, D79a-b (onset age of worst episode of DEP)

E. Has never had a Manic Episode or an unequivocal Hypomanic Episode:

Manic Episode=/=1 and Hypomanic episode=/=1.

F. The mood disturbance is not superimposed on a chronic psychotic disorder, such as Schizophrenia or Delusional Disorder:

(K58 =/=2 and K58 =/=3) or
(K59b=/=2 and K59b=/=3) and
K59c=/=1.

Notes:

DSM-III-R Criterion D for Dysthymia requires that Dysthymia should not be diagnosed if an unequivocal Major Depressive Episode occurred during the first two years of the dysthymic disturbance. However, there were no direct questions addressing this issue in either the WHO-CIDI or the UM-CIDI. Nonetheless, we attempted to tackle this problem based on the questions we did ask in the UM-CIDI. All the following categories of respondents were treated as failing to meet the D criterion if they ever had a Major Depressive Episode: (1) those who initially gave a negative answer to the B3a stem question but later reversed their answer to a positive one (D63=> 2 years or D74=>2 years); (2) those whose Major Depression either began (age of onset) or ended (recency age) in the first two years of the dysthymic episode; and (3) those whose dysthymic episode was entirely contained in an episode of Major Depression.

In light of the fact that the number of people disqualified for the diagnosis of Dysthymia Disorder due to criterion D was large, we decided to create an additional diagnostic category named Dysthymic Episode which includes cases not fulfilling criterion D.

SECTION III. ANXIETY DISORDERS

1. Criteria for Generalized Anxiety Disorder

Generalized Anxiety Disorder (GAD) in DSM-III-R is defined as including criteria A to E which require at least 6 month duration of excessive worry of multiple life circumstances with 6 or more accompanying autonomic symptoms not attributable to organic factors and not occurring only during the course of a Mood disorder. These criteria were operationalized in the UM-CIDI as follows:

A. Unrealistic or excessive anxiety and worry about two or more life circumstances for a period of six months or longer:

B2b=1 and (B101=1 or B101a=1) and B102=1

However, if the onset of anxiety took place in the past six months (B106=2), yet its recency was not in the last 30-days (B108=/=1), criterion A is not met.

B. The focus of the anxiety and worry was not about one's mental and/ or physical conditions such as illness and overweight:

B102a=1 or B102c=2

C. The disturbance did not occur only during the course of a Mood Disorder or a psychotic disorder:

1) not during Mood Disorder:

(D89a=/=2 and D89a=/=3) or
(D89b=/=1 and D89b=/=3) or
D94a=5 or
(D94b=/=2 and D94b=/=3) or
(D94c=/=1 and D94c=/=3)

2) not during psychotic disorder:

(K56b=/=2 and K56b=/=3) or
K56a=5 or
(K56c=/=1 and K56c=/=3)

D. & E. Presence of at least 6 of the following 18 symptom categories when anxious that were not caused by organic factors:

categories of anxious symptoms	not due to organic factors
1) Motor tension:	
B103b=1	B105a_02=/=1
B103d=1	B105a_04=/=1
B103c=1	B105a_03=/=1
B103i=1	B105a_09=/=1
2) Autonomic hyperactivity:	
B103h=1	B105a_08=/=1
B103g=1	B105a_07=/=1
B103j=1 or B103w=1	B105a_10=/=1 or B105a_23=/=1
B103k=1	B105a_11=/=1
B103t=1	B105a_20=/=1
B103l=1 or B103q=1	B105a_12=/=1 or B105a_17=/=1
B103n=1	B105a_14=/=1
B103s=1	B105a_19=/=1
B103o=1	B105a_15=/=1
3) Vigilance or scanning	
B103e=1	B105a_05=/=1
B103a=1	B105a_01=/=1
B103r=1 or B103m=1	B105a_18=/=1 or B105a_13=/=1
B103p=1	B105a_16=/=1
B103f=1	B105a_06=/=1

Note:

According to DSM-III-R, symptoms B103g, B103h, B103l, and B103t should not be counted if they occurred only during panic attacks. In the UM-CIDI, however, we didn't probe for the possible co-occurrence of those particular symptoms with panic attacks. We checked this problem after completion of our data collection (we calculated an upper-bound estimate by deleting all positive answers to the four Panic-related GAD symptoms if their corresponding Panic symptoms were also positive) and found that the impact of this omission on the diagnosis of GAD was very small (only two cases were affected).

2. Criteria for Panic Disorder

Panic Disorder in DSM-III-R is defined as including criteria A to E which require the sudden occurrence of an intense fear frequently repeated within one month's period with at least four fast-developing panic symptoms not attributable to organic factors. These criteria were operationalized in the UM-CIDI as follows:

A. The occurrence of one or more discrete periods of intense fear or discomfort that was unexpected and not triggered by situations in which the person was the focus of others' attention:

B1=1 and B70=1.

B. The episode of intense fear or discomfort occurred at least four times within one month or was followed by a period of at least one month of persistent fear of having another attack:

B79=1 or B82=1 or B80=1.

C. At least four of the following 13 categories of symptoms developed during at least one of the attacks:

1) B71a=1 or B71q=1
2) B71c=1 or B71g=1
3) B71b=1
4) B71i=1
5) B71h=1
6) B71f=1
7) B71o=1 or B71p=1
8) B71k=1
9) B71e=1
10) B71j=1
11) B71d=1
12) B71m=1
13) B71n=1

D. During at least some of the attacks, at least four of the symptoms developed suddenly and increased in intensity within ten minutes of the beginning of the episode:

B73=1.

E. These panic attacks were not initiated and maintained by an organic factor:

B93=/=1 and B94=/=1.

In the UM-CIDI we also require that the panic attacks should not occur only in agoraphobic situations: B99c=/=5. The rationale is that if the attack always takes place in an agoraphobic situation then that attack is not unexpected and should thus be seen as a manifestation of Agoraphobia rather than Panic Disorder.

a. Criteria for Panic Attacks

Meets criteria A, C, and D for Panic Disorder.

b. Criteria for Panic Disorder with Agoraphobia

A. meets the full criteria for Panic Disorder.

B. Meets the full criteria for Agoraphobia.

Notes:

In the WHO-CIDI, Agoraphobia in this particular situation is defined as B10=1 or B11=1 or B12=1 or B12a=1.

A subsequent validation study of the UM-CIDI panic diagnosis found that a number of cases classified as having panic actually were phobics. The problem seems to be that the exclusion questions in the UM-CIDI are not adequate to sort out people with simple phobias who have panic attacks only in phobic situations (e.g., a person whose attacks only occur when he sees a snake). The exclusion question B70 is inadequate to exclude a person of this type, who recognizes that he is not in real danger.

Based on this validation study result, we returned to the open-ended material in question B70a. The detailed examples collected here do not exist in the WHO-CIDI. A review of these open-ended responses led to the discovery that a number of NCS respondents provided enough data about the situations in which they had attacks to exclude them from panic. One respondent, for example, gave examples and commentary which made it clear that her attacks occur exclusively when she is on elevators. In cases of this sort, we edited out the respondent as not meeting criteria for panic disorder because the attacks were not unexpected.

In future work, we plan to develop more clear exclusion questions of a structured sort, but this was not done in the NCS. New users may want to develop questions of this sort on their own, or adopt our policy of reviewing all open-ended materials to find cases where the attacks appear to be exclusively associated with phobia. As part of our editing, the most difficult cases were

those whose two examples on B70 were of phobic situations, but who did not say explicitly that their attacks occur exclusively in these situations. In cases of this sort, we found it useful to check the age of onset data in the simple phobia section. In many cases we found that onset ages were the same as for panic. For example, one respondent who reported 50 panic attacks and gave two examples that both involved fear of bridges also reported a bridge phobia and reported that the ages of onset and recency of the bridge phobia were the same as the ages of onset and recency of panic. This kind of consistency increases our faith in the decision to exclude this respondent from a diagnosis of panic in favor of a diagnosis of simple phobia.

3. Criteria for Agoraphobia

Agoraphobia is defined in DSM-III-R as follows: "Fear of being in places or situations from which escape might be difficult (or embarrassing) or in which help might not be available in the event of suddenly developing a symptom(s) that could be incapacitating or extremely embarrassing. Examples include: dizziness or falling, depersonalization or derealization, loss of bladder or bowel control, vomiting, or cardiac distress. As a result of this fear, the person either restricts travel or needs a companion when away from home, or else endures agoraphobic situations despite intense anxiety. Common agoraphobic situations include being outside the home alone, being in a crowd or standing in a line, being on a bridge, and traveling in a bus, train, or car."

The above description was operationalized in the UM-CIDI in terms of the following criteria:

A. Experience of at least one of the following five fears:

B8a=1
B8b=1
B8c=1
B8d=1
B8e=1

B. Fear of either suddenly collapsing or the development of incapacitating/ embarrassing symptoms when no help was available or escape was impossible:

B12=1 or B12a=1.

C. The above fear produced symptoms of severe anxiety, avoidance, endurance, or impairment:

B10=1 or B11=1 or B13=1 or B19=1 or B20=1 or B22=1-3.

In the Simple Phobia section we asked an open-ended question (B49k) about whether respondents ever had any additional unreasonable fears. In coding answers to this question we noticed that some cases that were agoraphobic in nature and among those cases four also met the above criteria B and C. We therefore included those four cases as diagnoses of Agoraphobia.

Note:

In the WHO-CIDI, Agoraphobia was operationalized as Criterion A plus B10=1 or B11=1 or B12=1 or B12a=1 and B13=1 or B19=1 or B20=1 or B22=1.

a. Criteria for Agoraphobia without History of Panic Disorder

A. Meets the full criteria for Agoraphobia.

B. Has never met criteria for Panic Disorder.

4. Criteria for Social Phobia

Social Phobia is defined in DSM-III-R as including criteria A to G which require a persistent and excessive fear of social situations, the exposure to which almost invariably provokes an immediate anxiety response and the avoidance of which interferes with daily functioning. These criteria were operationalized in the UM-CIDI as follows:

A. and F. A persistent and excessive/ unreasonable fear of one or more of the following social situations in which the person was exposed to possible scrutiny by others and fears that he or she might do something or act in a way that would be humiliating or embarrassing:

1) excessive fear of social situations:

B29a=1
B29b=1
B29c=1
B29d=1
B29e=1
B29f=1

2) persistent fear of social phobic situations:

B31=1 or B31a=1 (see note 2 below)

B. The above fear was unrelated to other mental health disorders such as Panic Disorder and Parkinson's disease. This criterion was not directly adopted in the UM-CIDI but was partially implied in the questions about the social phobic situations.

C. During some phase of the disturbance, exposure to the specific phobic stimulus (or stimuli) almost invariably provoked an immediate anxiety response:

B45=1 or B46=1.

D. The phobic situation(s) was avoided or endured with intense anxiety:

B31a=1 or B38=1-3 or B43=1 or B44=1 or B45=1.

E. The avoidance of the phobic situation interfered with daily functioning or there was marked distress about having the fear:

B36=1 or B37=1 or B38=1.

Notes:

According to DSM-III-R (Criterion G), when a person is under 18, Social Phobia should not be diagnosed if the person is already diagnosed as having Avoidant Disorder of Childhood or Adolescence. We didn't include this criterion in the UM-CIDI because the focus of our survey was primarily adults.

In the UM-CIDI, the persistence criterion (A/F_2) was made more strigent by imposing the following requirements: (1) B31=1, or (2) B31a=1 and the fear started a year ago and lasted for at least a year, or (3) the fear started in past year or past six months and was still going on in the past month. In the WHO-CIDI, however, the same criterion was operationalized as B31=1 or B31a=1.

Also in the WHO-CIDI, Criterion C didn't include B31a and B38 while Criterion D included B43, B44 and B45.

In the Simple Phobia section we asked an open-ended question (B49k) about whether respondents ever had any additional unreasonable fears. In coding answers to this question we noticed that some fears were social phobic in nature and among those cases five met all the criteria for Social Phobia. We therefore included those five cases as cases of Social Phobia.

5. Criteria for Simple Phobia

Simple Phobia is defined in DSM-III-R as including criteria A to F which require a persistent and excessive fear of a circumscribed object or situation, the exposure to which almost invariably provokes an immediate anxiety response and the avoidance of which interferes with daily functioning. These criteria were operationalized in UM-CIDI as follows:

A. and E. A persistent and excessive/ unreasonable fear of one or more of the following circumscribed objects or situations:

1) excessive fear of circumscribed objects or situations:

B49a=1
B49b=1
B49c=1
B49d=1
B49e=1
B49g=1
B49h=1
B49i=1
B49j=1
B49k=1

2) persistent fear of circumscribed objects or situations:

B51=1 or B51a=1 (see note 1 below)

B. During some phase of the disturbance, exposure to the specific phobic stimulus (or stimuli) almost invariably provoked an immediate anxiety response:

B65=1.

C. The phobic object or situation was avoided or endured with intense anxiety:

B51a=1 or B58=1-3 or B63=1 or B64=1 or B65=1.

D. The fear or the avoidant behavior interfered with daily functioning or there is marked distress about having the fear:

B56=1 or B57=1 or B58=1.

F. The above fear was unrelated to the content of the obsessions of Obsessive Compulsive Disorder or the Trauma of Post-traumatic Stress Disorder. This criterion was not directly used in the UM-CIDI.

Notes:

1. In the UM-CIDI, the persistence criterion (A/F_2) was made more strigent by imposing the following requirements: (a) B51=1, or (b) B51a=1 and the fear started a year ago and lasted for at least a year, or (c) the fear started in past year or past six months and was still going on in the past month. In the WHO-CIDI, however, the same criterion was operationalized as B51=1 or B51a=1.

2. Also in the WHO-CIDI, Criterion C didn't include B51a and B58 while Criterion C included B63 and B64.

3. In this section we asked an open-ended question (B49k) about whether respondents ever had any additional unreasonable fears. Ten cases were added to the diagnosis of Simple Phobia, for they not only had a fear that was of Simple Phobia in nature but also met all the other criteria for Social Phobia.

6. Criteria for Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder (PTSD) is defined in DSM-III-R as including Criteria A to E which require the development of a set of anxiety symptoms following a psychologically distressing event that is outside the range of usual human experience. These criteria were operationalized in the UM-CIDI as follows:

A. Experience of <u>any</u> of the following events that are outside the range of usual human experience and that would be markedly distressing to almost anyone:

U1=1
U2=1
U3=1
U4=1
U5=1
U6=1
U7=1
U8=1
U9=1
U10=1
U11=1
U12=1

It is worth noting that the UM-CIDI assessed these traumas in a respondent booklet that made it possible to ask about potentially embarrassing events such as rape or sexual assault without ever using the words "rape" or "sexual assault." The use of an explicit list and the respondent booklet method of administration diverge from the procedure first adopted in the Diagnostic Interview Schedule (from which these questions are adopted) to elicit information about lifetime traumas in a single open-ended question.

B. The traumatic event is persistently re-experienced in at least one of the following ways:

U16=1
U17=1
U18=1
U19=1

C. Persistent avoidance of stimuli associated with the trauma or numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:

U21=1
U22=1
U23=1
U24=1
U25=1
U26=1
U27=1

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by at least two of the following:

U29=1
U30=1
U31=1
U32=1
U33=1
U34=1

E. Duration of the disturbance for at least one month: U37=> 1 month.

SECTION IV. SUBSTANCE USE DISORDERS

1. Criteria for Substance Abuse

Substance (drugs and alcohol) Abuse is defined in DSM-III-R as either continued use of the psychoactive substance despite knowledge of its adverse effect on health and social functioning or recurrent use of the substance in situations when use is physically hazardous. This diagnosis is made only when the criteria for dependence for that particular class of substance have never been met. These criteria were operationalized in the UM-CIDI as follows:

The presence of <u>any</u> one of the following symptoms which indicate either continued use of the substance despite knowledge of having a persistent/ recurrent social, occupational, psychological, or physical problem that is caused or exacerbated by use of the psychoactive substance or recurrent use in situations in which use is physically hazardous (e.g., driving while intoxicated):

G32a=1 + recoding:2s or G32e=1

G33a=1 + recoding:2s

G34a=1 often

G36a=1 often

G37a=1 + recoding:2s or G41a=1

G38a=1 + recoding:2s

The duration criterion -- continued use or recurrent use -- is either built into the original questions by emphasizing the phrase "often" or recoded in the diagnostic program as symptoms lasting at least one year (recording procedures are specified in Attachment I).

Although DSM-III-R requires that a respondent not have a diagnosis of Abuse once he or she meets the requirements for Dependence, it is possible for an individual to have a lifetime diagnosis of Abuse prior to the age of first becoming Dependent. In order to capture this information, our program diagnoses Abuse for all respondents irrespective of their meeting criteria for Dependence. Among people who have a lifetime history of both disorders, their diagnosis would have been Abuse up to the age of onset of Dependence and Dependence thereafter. Consistent with previous research, the NCS results show that Dependence typically occurs at a later age than Abuse and that the vast majority of persons with lifetime Dependence also meet criteria for Abuse.

---

* "2s" refers to recoding methods 2_(1), 2_(2)_a, and 2_(2)_b.

2. Criteria for Substance Dependence

Substance (drugs and alcohol) Dependence is defined in DSM-III-R as including criteria A and B which require the presence of the physiologic symptoms of tolerance and withdrawal and continued use of the substance despite adverse consequences. These criteria were operationalized in the UM-CIDI as follows:

A. Presence of at least <u>three</u> of the following nine characteristic symptoms of dependence:

#1	G47a=1
	G48a=1
#2	G42a=1
	G43a=1
	G44a=1
#3	G46a=1
#4	G30a=1
	G31a=1
	G34a=1
#5	G52a=1
#6	G32a=1 + recoding:2s or G32e=1
	G33a=1 + recoding:2s
	G36a (G35a)=1
	G37a=1 + recoding:2s or G41a=1
	G38a=1 + recoding:2s
#7	G49a=1
#8	G50a=1
#9	G51a=1
	(missing b, c, d) *

B. Presence of at least two of the following symptoms that have either occurred very often or persisted for at least one year:

#1	G47a=1	often
	G48a=1	often
#2	G42a=1	recoding:(2)s
	G43a=1	recoding:(2)s
	G44a=1	recoding:(2)s

#3	G46a=1	often
#4	G30a=1	often
	G31a=1	often
	G34a=1	often
#5	G52a=1	recoding:(2)s
#6	G36a (G35a)=1	often
	G32a=1 + recoding:2s or G32e=1	
	G33a=1 + recoding:2s	
	G37a=1 + recoding:2s or G41a=1	
	G38a=1 + recoding:2s	
#7	G49a=1	recoding:(2)s
#8	G50a=1	recoding:(2)s
#9	G51a=1	none
	(missing b, c, d) *	

---

* Criterion 9 was not evaluated for twelve month diagnoses in the NCS. It is, however, possible to use the information in G50b-d to substitute the missing G51b-d when the respondent has answered Yes to both G50a and G51a. We leave this to the discretion of the users.

** "2s" refers to recoding methods 2_(1), 2_(2)_a, and 2_(2)_b and "(2)s" refers to recoding methods 2_(2)_a and 2_(2)_b.

Attachment I. Recoding Procedures for Both Abuse and Dependence Disorders

1. Some items automatically qualify for the duration criterion and they are indicated by the word "often".

2. Other items need to be recoded to meet this criterion and they are indicated by the word "recoding." The aim of recoding is to determine whether substance use ever lasted a year or more. Two types of recoding methods are specified here:

   (1) the criterion is met if the recency of the problem is last year (Gxxc <=3) and the age of recency, which in this case is R's current age, is larger than the age of onset:

   Gxxc ^= 4 and Current age > Gxxb or

   if the recency of the problem is a year ago (Gxxc=4) and the age of recency (Gxxd) is larger than the age of onset (Gxxb):

   Gxxc ^= 1-3 and Gxxd > Gxxb

   (2) _a for drug dependence (G1-G9): this criterion is met if the recency of use is last year (Gxd <=3) and the age of recency of use, which in this case is R's current age, is larger than the age of the onset of the problem (Gxxb):

   Gxd ^= 4 and Current age > Gxxb or

   if the recency of use is more than a year ago (Gxd=4) and the age of recency of use (Gxf) is larger than the age of the onset of the problem (Gxxb):

   Gxd ^= 1-3 and Gxf > Gxxb

   (3) _b for alcohol dependence (F1-F15): this criterion is met if R had 12 or more drinks in the past year (F5-F8) and R's current age is larger than the age of the onset of the problem (Gxxb):

   F5 = A-G or
   F6 = A-H or and Current age > Gxxb or
   F7 = A-F or
   F8 = A-D

if less than 12 drinks in the past year and the age of most excessive use (F11) is larger than the age of the onset of the problem (Gxxb):

F5-F8 < 12 and F11 > Gxxb

---

* for all recodings Gxxa has to be checked as Yes.

Attachment II. Criteria For Tobacco Dependence: A Supplement:

There is no DSM-III-R diagnosis of Tobacco Abuse, but there is a diagnosis of Tobacco (Nicotine) Dependence. The criteria were operationalized in the UM-CIDI as follows:

A. Presence of at least three of the following six characteristic symptoms of dependence:

#1	CC13=1
#2	CC12=1
	CC14=1
#3	CC15=1
#4	CC10=1
	CC11=1
	CC9=1
#5	CC8=1
#6	CC8c=1

B. Presence of at least two of the following symptoms that have either occurred very often or persisted for at least one year:

#1	CC13=1	often
#2	CC12=1	CC12a=1
	CC14=1	*
#3	CC15=1	CC15a=1
#4	CC10=1	CC10a=1
	CC11=1	CC11a=1
	CC9=1	*
#5	CC8=1	CC8a=>30 or CC8b=1
#6	CC8c=1	CC7=>2

---

* We have no direct information on the duration of symptoms for CC14 and CC9. Respondents were coded as meeting criterion B if they have met criterion A and CC7=>2.

It should be noted that Tobacco Dependence was not included in the original NCS interview schedule, but was added in the second half of the study in response to a request from NIMH program staff. Therefore, information about age of onset and quantity and frequency of use is less detailed for tobacco than for the other drugs. New users of the instrument may want to include more detailed questions about quantity, frequency, and timing of use.

SECTION V. OTHER DISORDERS

1. Criteria for Antisocial Personality Disorder

Antisocial Personality Disorder (ASP) is defined in DSM-III-R as including Criteria A to D which require a pattern of irresponsible and antisocial behavior beginning in childhood or early adolescence and continuing into adulthood. These criteria were operationalized in the UM-CIDI as follows:

A. Current age is at least 18 years old: V12=>18.

B. Evidence of Conduct Disorder with onset before age 15, as indicated by a history of three or more of the behavior listed in H1-H7 and H9-H12: H14=>3.

C. A pattern of irresponsible and antisocial behavior since the age of 15, as indicated by at least four of the behaviors listed in H17-H25 and C_9: (H26+ C_9)=>4. On the list of Criterion C for ASP in DSM-III-R is an item (C_9) that requires the absence of "a totally monogamous relationship for more than one year." This question was asked in the Marriage section in Part II of the NCS survey and operationalized here as (M3=5 or M41=5) or ((M9=5 and M14=5 and (M12-M7<=2)).

D. Occurrence of antisocial behavior was not exclusively during the course of Schizophrenia or Manic Episodes: H29a=/=1.

a. Criteria for Adult Antisocial Behavior

Adult Antisocial Behavior (AAB) is defined in DSM-III-R as a persistent pattern of criminal or other aggressive / antisocial behavior in people who do not meet the full criteria for Antisocial Personality Disorder and whose antisocial behavior cannot be attributed to any other mental disorder. This diagnosis was operationalized in the UM-CIDI as meeting ASP criteria A and C.

2. Criteria for Conduct Disorder

Conduct Disorder is defined in DSM-III-R as a persistent pattern of conduct in which the basic rights of others and major age-appropriate societal norms or rules are violated. This diagnosis is made only for people under age 18. For the diagnosis of lifetime Conduct Disorder, the age criterion was dropped in the UM-CIDI: H14=>3.

3. Nonaffective Psychosis (NAP)

The NCS assessed NAP using clinical reinterviews rather than the questions included in the CIDI. The reasons for this were (i) that the ECA Study, which used very similar questions to these in the CIDI to assess NAP, obtained diagnoses with extremely low positive predictive value, and (ii) our own experience training lay interviewers in this section for the NCS pilot studies verified that these interviewers have great difficulty making the judgments required for valid diagnosis.

Therefore, modified versions of the CIDI NAP symptom questions were used as first-stage screens for psychosis in the NCS, followed by clinical reinterviews to diagnose NAP. The latter interviews were carried out under the direct supervision of Jamie Abelson, MSW and under the clinical supervision of Kenneth Kendler, MD. A separate report by Kendler et al. describes the procedures and results of the clinical reinterview study for NAP.

Appendix A

Diagnostic Algorithms for NCS/DSM-III-R Disorders

NCS Working Paper #7

```
*************************************************************************;
*************************************************************************;
*                                                                       *;
*                 NCS Diagnostic Computer Programs For                  *;
*                                                                       *;
*                              DSM-III-R                                *;
*                                                                       *;
*    Affective/ Anxiety/ Substance Abuse and Dependenc Disorders        *;
*                                                                       *;
*                             March  1994                               *;
*                                                                       *;
*************************************************************************;
*************************************************************************;
```

```
*************************************************************;
*                                                           *;
*          1. Not Affective Psychosis (n=50): Nap50         *;
*                                                           *;
*************************************************************;

*    NAP50 was diagnosed on a case by case basis by experts
     in the NCS study.  This variable was subsequently used
     in the diagnosis of some other disorders.  If this
     diagnosis is not available to you, simply delete this
     variable in the following programs.  Since the number
     of Nap50 cases is typically very small, deletion of this
     variable will make little impact on the diagnostic outcome
     in most cases.

;



*************************************************************;
*                                                           *;
*            2. Manic Episode:  Man1, Man2, Hman            *;
*                                                           *;
*************************************************************;

*** A: Persistent Mood - Elevated or Irritable
    F: not due to medication;


if (v312 eq 1 and v1604 ne 1) then elevate=1;
if (v312 eq 1 and v1604 eq 1) then elevate=5;
if (elevate ne 1 and v313 eq 1 and v1607 ne 1) then irritab=1;
if (elevate ne 1 and v313 eq 1 and v1607 eq 1) then irritab=5;


*************************************************************;
*** BF: Symptoms in Worst Spell not due to Medication;


if v1608 eq 1 and v7302 eq 1 and v7312 ne 1 then x1=1;
if v1610 eq 1 and v7303 eq 1 and v7313 ne 1 then x2=1;
if v1611 eq 1 and v7304 eq 1 and v7314 ne 1 then x3=1;
if v1612 eq 1 and v7305 eq 1 and v7315 ne 1 then x4=1;
```

```
if x1 eq 1 or x2 eq 1                                then x5=1;
if x3 eq 1 or x4 eq 1                                then x6=1;
if v1613 eq 1 and v7306 eq 1 and v7316 ne 1 then x7=1;
if v1614 eq 1 and v7307 eq 1 and v7317 ne 1 then x8=1;
if v1615 eq 1 and v7308 eq 1 and v7318 ne 1 then x9=1;
if v1617 eq 1 and v7309 eq 1 and v7319 ne 1 then x10=1;
if v1618 eq 1 and v7310 eq 1 and v7320 ne 1 then x11=1;

if elevate eq 1 and sum(of x5--x11) > 2  then xel=1;
if elevate eq 1 and sum(of x5--x11) <=2  then xel=5;
if irritab eq 1 and sum(of x5--x11) > 3  then xbl=1;
if irritab eq 1 and sum(of x5--x11) <=3  then xbl=5;

if elevate eq 5 and sum(of x5--x11) > 2  then xelm=1;
if irritab eq 5 and sum(of x5--x11) > 3  then xblm=1;

if xel=1 or xbl=1 then ABF1=1;


************************************************************;
*** add comorbidity items;


if  (xelm=1 or xblm=1)       and
    (v1622=1 or v1623=5)     and
   ((v1749 ^=1 or v1750 ^=2) or
    (v1753 ^=1 or v1754 ^=1  or v1755 ^=2)) then ABF2=1;


************************************************************;
*** C1: Functional Impairment for Mania
    C2: Funcitonal Impairment for Hypomania;


if (v1636=1 or v1637=1)       then C=1;


************************************************************;
*** DE: no overlap with schizophrenia;


if    v4338=1             and
   (((v4337=2 or v4337=3) and (v4340=2 and v4340=3))
             or v4341=1) and  nap50=1 then DE=1;


************************************************************;
*** make diagnoses;
```

```
if (ABF1=1 or ABF2=1) and C=1  then man1=1; else man1=0;
label man1= 'manic episode w/o hierarchy';


if man1=1 and DE^=1            then man2=1; else man2=0;
label man2= 'manic episode w hierarchy';


if (ABF1=1 or ABF2=1) and man1^=1
                               then hman=1; else hman=0;
label hman= 'hypomanic w/o hierarchy';


************************************************************;
*** Onset, Recency;


     if v1640=1 then tmanons=1;
else if v1640=2 then tmanons=2;
else if v1640=3 then tmanons=3;
else if v1640=4 then tmanons=4;
else                 tmanons=.;

     if             (1 <= v1640 <= 3)  then tmanonsa=v12;
else if v1640=4 and (1 <= v1642 <= 54) then tmanonsa=v1642;
else if v1640=4 and (1 <= v1643 <= 54) then tmanonsa=v1643;
else                                        tmanonsa=.;

     if v1640=1 or v1644=1 then tmanrec=1;
else if v1644=2            then tmanrec=2;
else if v1644=3            then tmanrec=3;
else if v1644=4            then tmanrec=4;
else                            tmanrec=.;

     if v1640=1 or  (1 <= v1644 <= 3)  then tmanreca=v12;
else if v1644=4 and (1 <= v1645 <= 54) then tmanreca=v1645;
else                                        tmanreca=.;


if man1=1 then do;

   manons=tmanons; manonsa=tmanonsa;
   manrec=tmanrec; manreca=tmanreca; end;


if hman=1 then do;
```

```
   hmanons=tmanons; hmanonsa=tmanonsa;
   hmanrec=tmanrec; hmanreca=tmanreca; end;




*************************************************************;
*                                                           *;
*         3. Major Depressive Episode:  Dep1, Dep2          *;
*                                                           *;
*************************************************************;

A1=0; A2=0; B=0; CD=0;


*** A_1: depressed for at least 2 weeks;


if v306=1 or v308=1 or v309=1 then ds9=1;
if v1121=1 and v1419=1 and v1519 ^=1 then ds8=1;

if ds8=1 or ds9=1 then A1=1;


*************************************************************;
*** A_2: five or more depressive symptoms including ds8 & ds9;


if v1101=1 and v1401=1 and v1501 ^=1 then sx1=1;
if v1103=1 and v1403=1 and v1503 ^=1 then sx2=1;
if v1105=1 and v1404=1 and v1504 ^=1 then sx3=1;
if v1106=1 and v1405=1 and v1505 ^=1 then sx4=1;

if v1108=1 and v1406=1 and v1506 ^=1 then sx5=1;
if v1110=1 and v1408=1 and v1508 ^=1 then sx6=1;
if v1112=1 and v1410=1 and v1510 ^=1 then sx7=1;
if v1114=1 and v1412=1 and v1512 ^=1 then sx8=1;

if v1115=1 and v1413=1 and v1513 ^=1 then sx9=1;

if v1118=1 and v1416=1 and v1516 ^=1 then sx10=1;
if v1120=1 and v1418=1 and v1518 ^=1 then sx11=1;

if v1126=1 and v1424=1               then sx12=1;
if v1129=1 and v1427=1               then sx13=1;

if v1133=1 and v1431=1 and v1531 ^=1 then sx14=1;
if v1135=1 and v1433=1 and v1533 ^=1 then sx15=1;
```

```
if v1136=1 and v1434=1 and v1534 ^=1 then sx16=1;

if v1141=1 and v1436=1                then sx17=1;
if v1142=1 and v1437=1                then sx18=1;
if v1143=1 and v1438=1                then sx19=1;
if v1144=1 and v1439=1                then sx20=1;


if sx1=1 or sx2=1 or sx3=1 or sx4=1       then ds1=1;
if sx5=1 or sx6=1 or sx7=1 or sx8=1       then ds2=1;
if sx9=1                                  then ds3=1;
if sx10=1 or sx11=1                       then ds4=1;
if sx12=1 or sx13=1                       then ds5=1;
if sx14=1 or sx15=1 or sx16=1             then ds6=1;
if sx17=1 or sx18=1 or sx19=1 or sx20=1   then ds7=1;

sxdep=sum(ds1,ds2,ds3,ds4,ds5,ds6,ds7,ds8,ds9);
if sxdep=>5 then A2=1;


************************************************************;
*** B: not due to Bereavement;


if v1235=1  and (v1234 =>84 and v1234<=95) then len1=1;
if v1235=2  and (v1234 =>12 and v1234<=95) then len1=2;
if v1235=3  and (v1234 =>3  and v1234<=95) then len1=3;
if v1235=4  and (v1234 =>1  and v1234<=95) then len1=4;

if v1341=1  and (v1340 =>84 and v1340<=95) then len2=1;
if v1341=2  and (v1340 =>12 and v1340<=95) then len2=2;
if v1341=3  and (v1340 =>3  and v1340<=95) then len2=3;
if v1341=4  and (v1340 =>1  and v1340<=95) then len2=4;


D63=0; D74=0; D19=0; D27=0; D43=0; D44=0; D55=0;

if len1=1 or len1=2 or len1=3 or len1=4   then D63=1;
if len2=1 or len2=2 or len2=3 or len2=4   then D74=1;
if v1416=1                                then D19=1;
if v1424=1                                then D27=1;
if v1438=1                                then D43=1;
if v1439=1                                then D44=1;
if v1220=1                                then D55=1;
count=sum(of D63 D74 D19 D27 D43 D44 D55);

if v1228=5 or (v1305=5 or v1306=1)  then death1=1;
if count => 2                       then death2=1;
```

```
if death1=1 or death2=1 then B=1;


************************************************************;
*** C: never had mania or hypomania;
*** D: not due to schizophrenia;


if man1=1 or hman=1 then ddrop1=1;

if (((v4337=2 or v4337=3) and (v4340=2 or v4340=3)) or
     v4341=1) and nap50=1 then ddrop2=1;

if ddrop1=1 or ddrop2=1 then CD=1;


************************************************************;
*** make diagnoses;


if A1=1 and A2=1 and B=1 then dep1=1; else dep1=0;
label dep1= 'MDE w/o hierarchy';


if dep1=1 and CD^=1      then dep2=1; else dep2=0;
label dep2= 'MDE w hierarchy';


************************************************************;
*** Onset, Recency;

if dep1=1 then do;

     if v1225=1 or v1236=1 then depons=1;
else if v1225=2 or v1236=2 then depons=2;
else if v1225=3 or v1236=3 then depons=3;
else if v1225=4 or v1236=4 then depons=4;
else                            depons=.;

if                  (1 <= v1225 <=3)  then deponsa=v12;
else if v1225=4 and (1 <= v1227 <=54) then deponsa=v1227;
else if             (1 <= v1236 <=3)  then deponsa=v12;
else if v1236=4 and (1 <= v1238 <=54) then deponsa=v1238;
else if v1236=4 and (1 <= v1239 <=54) then deponsa=v1239;
else                                       deponsa=.;

if (1 <= v1231 <=3) or v1230=2        then depreca=v12;
else if (1 <= v1233 <=54)             then depreca=v1233;
else if             (1 <= v1240 <=3)  then depreca=v12;
```

```
else if v1240=4 and (1 <= v1241 <=54) then depreca=v1241;
else                                       depreca=.;

     if v1231=1 or v1230=2  or depons=1 or v1240=1 then deprec=1;
else if v1231=2 or v1240=2                         then deprec=2;
else if v1231=3 or v1240=3                         then deprec=3;
else if v1231=4 or v1240=4                         then deprec=4;
else                                                    deprec=.;

end;




*************************************************************;
*                                                           *;
*                4. Dysthymia: Dys1, Dys2                   *;
*                                                           *;
*************************************************************;

A=0; BG=0; C=0; DE=0;


*** A: depressed for at least two years;


if ((24 <= v1234 < 98) and v1235=3) or
   ((2  <= v1234 < 98) and v1235=4) then leng1=1;
if ((24 <= v1340 < 98) and v1341=3) or
   ((2  <= v1340 < 98) and v1341=4) then leng2=1;
if v306=1 or leng1=1 or leng2=1     then A=1;


*************************************************************;
*** BG: two or more depressive symptoms not due to medication;

if v1101=1 and v1501 ^=1 then d2=1;
if v1105=1 and v1504 ^=1 then d6=1;

if v1108=1 and v1506 ^=1 then d9=1;
if v1110=1 and v1508 ^=1 then d11=1;
if v1112=1 and v1510 ^=1 then d13=1;
if v1114=1 and v1512 ^=1 then d15=1;

if v1115=1 and v1513 ^=1 then d16=1;

if v1133=1 and v1531 ^=1 then d34=1;
if v1136=1 and v1534 ^=1 then d37=1;
```

```
if d2=1 or d6=1                          then b1=1;
if d9=1 or d11=1 or d13=1 or d15=1 then b2=1;
if d16=1                                 then b3=1;
if v1130=1 or v1131=1                    then b4=1;
if d34=1 or d37=1                        then b5=1;
if v1004=1                               then b6=1;

sxdys=sum(of b1--b6);

if sxdys=>2 and (v1205=1 or v1206=5) then BG=1;


************************************************************;
*** C: depressed w/o two months interruption;


if v307=1 or leng1=1 or leng2=1 then C=1;


************************************************************;
*** DE: hierarchy rules;

if man1=1 or hman=1 then sdrop1=1;

if (((v4337=2 or v4337=3) and (v4340=2 or v4340=3))
     or v4341=1) and nap50=1 then sdrop2=1;

if sdrop1=1 or sdrop2=1 then DE=1;


************************************************************;
*** make diagnoses;

if A=1 and BG=1 and C=1   then dys1=1;   else dys1=0;
label dys1= 'dysthymia w/o hierarchy';


*** if you don't like the UM recoding, use the following lines;
* if dys1=1 and DE^=1     then dys2=1; * else dys2=1;
* label dys2= 'dysthymia w hierarchy';


************************************************************;
*** Onset, Recency;

if dys1=1 then do;
                                         dysons=4;
```

```
     if v1007=1 and 1<=v1008<=54 then dysonsa=v1008;
else if 1<=v1009<=54             then dysonsa=v1009;
else if 1<=v1008<=54             then dysonsa=v1008;
else if v1343=1 and 1<=v1344<=54 then dysonsa=v1344;
else if 1<=v1345<=54             then dysonsa=v1345;
else if 1<=v1344<=54             then dysonsa=v1344;
else if 1<=v1227<=54             then dysonsa=v1227;
else                                  dysonsa=.;

     if 1<=v1015<=4 then dysrec=v1015;
else if 1<=v1231<=4 then dysrec=v1231;
else if v1230=2     then dysrec=1;
else if 1<=v1346<=4 then dysrec=v1346;
else                     dysrec=.;

     if 1<=v1015<=3              then dysreca=v12;
else if v1015=4 and 1<=v1016<=54 then dysreca=v1016;
else if 1<=v1346<=3              then dysreca=v12;
else if v1346=4 and 1<=v1347<=54 then dysreca=v1347;
else if v1230=2                  then dysreca=v12;
else if 1<=v1231<=3              then dysreca=v12;
else if 1<=v1233<=54             then dysreca=v1233;
else                                  dysreca=.;

end;


**********************    DYSDEP     ************************;

* The aim of this addition is to create a variable called
  Dysdep  that includes all the dysthymic cases overlapping
  with Major Depressive Episode in the first two years since
  onset.  These cases should then be used in Criterion D to
  be excluded from the diagnosis of Dysthymia with hierarchy.
;

*** excluding 105+188 cases due to overlaps with dep1;

*** 1) B3a=No and mood was more than 2 yrs;

if len1=1 and v307^=1 and dep1=1 then B3Aout1=1;
if len2=1 and v307^=1 and dep1=1 then B3Aout2=1;

*** 2) single episode mde ***********************************;

dysend=dysonsa + 1;
if      (v1230=2 or 1<=v1231<4) then depend=v12;else if v1231=4 and
1<=v1233<=55 then depend=v1233;
```

```
if (dysend=>depend=>dysonsa) or   (dysend=>deponsa=>dysonsa) then
oversn1=1;
if oversn1=1 and (v1010=1 or v1010=3) and dep1=1
                                          then sinout1=1;
if oversn1=1 and v1010=2 and (dysreca<=depend or
   (dysonsa<=dysreca<=dysend)) and dep1=1
                                          then sinout2=1;
if deponsa<=dysonsa and depend=>dysreca and sinout1^=1 and
   sinout2^=1 and B3Aout1^=1 and dep1=1  then sinout3=1;


*** 3) multiple episode mde ********************************;

if      v1343=1 and 1<=v1344<=55 then D76onsa=v1344;else if v1343=5
and 1<=v1345<=55 then D76onsa=v1345;
longonsa=(D76onsa + 1);
if      1<=v1348<=55 then D78onsa=v1348;else if v1348=95 and
1<=v1350<=55 then D78onsa=v1350;
if 1<=v1340<98  then long=v1340;

if      v1341=2 then do; longdep=long/52; end;
else if v1341=3 then do; longdep=long/12; end;
else if v1341=4 then     longdep=long;

if ((24<=v1011<98) and v1012=3)  or
   ((2 <=v1011<98) and v1012=4)  then yr2=1;

if ((60<=v1013<98) and v1014=1)  or
   ((8 <=v1013<98) and v1014=2)  or
   ((2 <=v1013<98) and v1014=3)  or
   ((1 <=v1013<98) and v1014=4)  then mth2=1;

if 1<=v1346<=3 then D77rec=v12;
longrec=(D77rec - 1);

D76len=(D77rec - D76onsa);

if      1<=v1346<=3 then D77reca=v12;
else if V1346=4 and 1<=v1347<=55 then D77reca=v1347;

if (dysonsa <= deponsa <= dysend)  or
   (dysonsa <= depreca <= dysend)  or
   (dysonsa <= D78onsa <= dysend)  or
   (dysonsa <= longonsa <= dysend) or
   (dysonsa <= longrec <= dysend) then overmu1=1;


if overmu1=1 and v1010=1 and dep1=1    then mulout1=1;
if overmu1=1 and v1010=2 and (v1301=5 or v1302=5 or v1303=5)
```

```
                          and dep1=1    then mulout2=1;
if D76onsa<=dysonsa  and longonsa=>dysreca and dep1=1
                                        then mulout3=1;
if longrec<=dysonsa  and D77rec=>dysreca and dep1=1
                                        then mulout4=1;
if (D76len<=longdep) and D76onsa<=dysend and D77reca=>dysreca
                     and dep1=1         then mulout5=1;


*************************************************************;

if B3Aout1=1 or sinout1=1 or   sinout2=1 or sinout3=1 or
   B3Aout2=1 or mulout1=1 or   mulout2=1 or mulout3=1 or
   mulout4=1 or mulout5=1 then dysdep=1; else dysdep=0;

*************************************************************;

if dys1=1 and DE^=1 and dysdep^=1 then dys2=1; else dys2=0;
label dys2= 'dysthymia w hierarchy';




*************************************************************;
*                                                           *;
*                  5. GAD: gad1, gad2                       *;
*                                                           *;
*************************************************************;

A=0; B=0; C=0; DE=0;


*** A: excessive worry for 6 months;


if v305=1 then month1=1;

if v304=1 and      v303=>180  then mth1=1;
if v304=2 and (24<=v303<=95)  then mth2=1;
if v304=3 and (6 <=v303<=95)  then mth3=1;
if v304=4 and (1 <=v303<=95)  then mth4=1;
if (v303=98 or v303=99) and v305=1 then mth5=1;
if mth1=1 or mth2=1 or mth3=1 or mth4=1 or mth5=1 then month6=1;

if v803=1 or v804=1 then worry=1;
if v805=1           then thing2=1;

if month6=1 and worry=1 and thing2=1 then A=1;
```

```
*************************************************************;
*** B: worry unrelated to one's physical conditions;


if v806=1 or v807=2 then B=1;


*************************************************************;
*** C: worry not during mood or psychotic disorder;


if v1546=1 and ((v1547=2 or v1547=3) and (v1548=1 or v1548=3))
   or (v1556=1 and v1557=1 and ((v1558=2 or v1558=3) and
      (v1559=1 or v1559=3))) then gaddep=1; else gaddep=0;
if gaddep=1 and dep1=1 then gdrop1=1; else gdrop1=0;

if v4331=1 and ((v4332=2 or v4332=3) and (v4333=1 or v4333=3))
           and nap50=1 then gdrop2=1; else gdrop2=0;

if gdrop1=1 or gdrop2=1 then C=1;


*************************************************************;
*** DE: 6 or more anxiety symptoms not due to organic factors;


array s{23} v808-v830;
array p{23} v902-v924;
do i=1 to 23;
if s{i}=1 and p{i}^=1 then s{i}=1; else s{i}=0;
end; drop i;

if v817=1 or v830=1 then set1=1; else set1=0;
if v820=1 or v825=1 then set2=1; else set2=0;
if v819=1 or v824=1 then set3=1; else set3=0;

array h{18} set1 set2 set3 v808-v816 v818 v821-v823 v826-v827;
count=0;
do i=1 to 18;
if h{i}=1 then count=count+1;
end; drop i;
if count=>6 then DE=1;


*************************************************************;
*** exclude those with onset & recency inconsistency;
```

```
if v925=2 and v929^=1 then gdrop=1;


************************************************************;
*** make diagnoses;

if A=1 and B=1 and DE=1 and gdrop^=1 then gad1=1; else gad1=0;
label gad1= 'gad w/o hierarchy';


if gad1=1 and C^=1                    then gad2=1; else gad2=0;
label gad2= 'gad w hierarchy';


************************************************************;
*** Onset, Recency;

if gad1=1 then do;

     if v926=0 and (1<=v925<=3)              then gadonsa=v12;
else if v925=4 and v926=1 and (1<=v927<=56) then gadonsa=v927;
else if v925=4 and (1<=v928<=56)            then gadonsa=v928;
else if v925=4 and (1<=v927<=56)            then gadonsa=v927;
else                                             gadonsa=.;

     if (2<=v925<=4)     then gadons=v925;
else if gadonsa lt v12   then gadons=4;
else                          gadons=.;

     if (1<=v929<=3) or v925=1   then gadreca=v12;
else if v929=4 and (1<=v930<=55) then gadreca=v930;
else                                  gadreca=.;

     if v925=1 and v929=0 then gadrec=1;
else if (1<=v929<=4)      then gadrec=v929;
else                           gadrec=.;

end;



************************************************************;
*                                                          *;
*                  6. Agoraphobia: ago                     *;
*                                                          *;
************************************************************;

A=0; B=0; C=0;
```

```
*** A: experienced at least one fear;

if v320=1 then A=1;

************************************************************;
*** B: fear of collapsing and incapacitating symptoms;

if v323=1 or v324=1 then B=1;

************************************************************;
*** C: symptoms of severe anxiety, avoidance, endurance;

if v321=1 or v322=1 or v325=1 or v334=1 or v335=1 or
   (v337 in (1,2,3)) then C=1;

************************************************************;
*** make diangosis;

if A=1 and B=1 and C=1 then ago=1; else ago=0;
label ago= 'agoraphobia';

************************************************************;
*** Onset, Recency;

if ago=1 then do;

     if v340=0 and            (1<=v339<= 3) then agonsa=v12;
else if v339=4 and v340=1 and (1<=v341<=56) then agonsa=v341;
else if v339=4 and            (1<=v342<=56) then agonsa=v342;
else if v339=4 and            (1<=v341<=56) then agonsa=v341;
else                                             agonsa=.;

     if (1<=v339<=4)   then agons=v339;
else if agonsa lt v12  then agons=4;
else                        agons=.;

     if v339=1 or  (1<=v343<=3)  then agreca=v12;
else if v343=4 and (1<=v344<=55) then agreca=v344;
else                                  agreca=.;
```

```
     if v339=1 and v343=0 then agrec=1;
else if (1<=v343<=4)      then agrec=v343;
else                           agrec=.;

end;



*************************************************************;
*                                                           *;
*                  7. Simple Phobia: sim                    *;
*                                                           *;
*************************************************************;

AE=0; B=0; C=0; D=0;


*** A & E: persistent fear of a circumscribed stimulus;


if v511=1 and (v512=1 or v513=1) then AE=1;


*************************************************************;
*** B: immediate anxiety response upon exposure;


if v533=1 then B=1;


*************************************************************;
*** C: avoidance or endurance;


if v513=1 or v523 in (1,2,3) or v531=1 or v532=1 or v533=1 then C=1;


*************************************************************;
*** D: functional impairment;


if v521=1 or v522=1 or v523=1 then D=1;


*************************************************************;
*** make diagnosis;


if AE=1 and B=1 and C=1 and D=1 then sim=1; else sim=0;
```

```
label sim= 'simple phobia';


************************************************************;
*** Onset, Recency;

if sim=1 then do;

     if (1<=v525<=4)            then simons=v525;
else                                 simons=.;

     if v526=1 and 1<=v527<=54 then simonsa=v527;
else if 1<=v528<=54            then simonsa=v528;
else if 1<=v527<=54            then simonsa=v527;
else if 1<=v525<=3             then simonsa=v12;
else                                 simonsa=.;

     if v525=1                 then simrec=1;
else if (1<=v529<=4)           then simrec=v529;
else                                 simrec=.;

     if 1<=v529<=3             then simreca=v12;
else if 1<=v530<=54            then simreca=v530;
else                                 simreca=.;

end;



************************************************************;
*                                                          *;
*                  8. Social Phobia: soc                   *;
*                                                          *;
************************************************************;

AF=0; C=0; D=0; E=0;


*** A & F: persistent fear of social phobic situations;


if v407=1 and (v408=1 or v409=1) then AF=1;


************************************************************;
*** C: immediate anxiety response upon exposure;


if v429=1 or v430=1 then C=1;
```

```
************************************************************;
*** D: avoidance or endurance;

if v409=1 or v419 in (1,2,3) or v427=1 or v428=1 or v429=1 then D=1;

************************************************************;
*** E: functional impairment;

if v417=1 or v418=1 or v419=1 then E=1;



************************************************************;
*** make diagnosis;

if AF=1 and C=1 and D=1 and E=1 then soc=1; else soc=0;
label soc= 'social phobia';



************************************************************;
*** Onset, Recency;

if soc=1 then do;

     if (1<=v421<=4)           then socons=v421;
else                                socons=.;

     if v422=1 and 1<=v423<=54 then soconsa=v423;
else if 1<=v424<=54            then soconsa=v424;
else if 1<=v423<=54            then soconsa=v423;
else if 1<=v421<=3             then soconsa=v12;
else                                soconsa=.;

     if v421=1                 then socrec=1;
else if (1<=v425<=4)           then socrec=v425;
else                                socrec=.;

     if 1<=socrec<=3 then socreca=v12;
else if 1<=v426<=54  then socreca=v426;
else                      socreca=.;

end;
```

```
*************************************************************;
*                                                           *;
*         9. Panic Disorder, Panic Attack: pd, pt           *;
*                                                           *;
*************************************************************;

A=0; B=0; C=0; D=0; E=0;


*** A: sudden episode of intense fear;


if v301=1 and v609=1 then A=1;


*************************************************************;
*** B: frequency of attacks;


if ((v701 eq 1) or (v638 eq 1) or (v642 eq 1)) then B=1;


*************************************************************;
*** C: four or more panic symptoms;


if ((v610 eq 1) or (v626 eq 1)) then pa1=1;
if ((v612 eq 1) or (v616 eq 1)) then pa2=1;
if ((v624 eq 1) or (v625 eq 1)) then pa3=1;

array y{13} pa1-pa3 v611 v613-v615 v617-v620 v622-v623;
nom4=0; do i=1 to 13;
        if y{i}=1 then nom4=nom4+1;  end;

if nom4=>4 then C=1;


*************************************************************;
*** D: intensity of attacks;


if v629=1 then D=1;


*************************************************************;
*** E: not due to physical injury or organic factors;
```

```
if v718^=1 and v719^=1 then E=1;


*************************************************************;
**** exclude those always occurred in agoraphobic situations;


if (v732=1 or v733=1) and v734=5 then agout=1;


*************************************************************;
*** make diagnoses;


if A=1 and B=1 and C=1 and D=1 and E=1 and agout^=1 then pd=1; else
pd=0;
label pd= 'panic disorder';


if A=1 and C and D=1 then pt=1; else pt=0;
label pt= 'panic attacks';


*************************************************************;
*** Onset, Recency;

if pt=1 then do;

     if v630=1 then ptons=1;
else if v630=2 then ptons=2;
else if v630=3 then ptons=3;
else if v630=4 then ptons=4;
else                ptons=.;

     if            (1 <= v630 <= 3)  then ptonsa=v12;
else if v630=4 and (1 <= v632 <= 54) then ptonsa=v632;
else if v630=4 and (1 <= v633 <= 54) then ptonsa=v633;
else                                      ptonsa=.;

     if v630=1 or v634=1 then ptrec=1;
else if v634=2           then ptrec=2;
else if v634=3           then ptrec=3;
else if v634=4           then ptrec=4;
else                          ptrec=.;

     if v630=1 or (1 <= v634 <= 3)   then ptreca=v12;
else if v634=4 and (1 <= v635 <= 54) then ptreca=v635;
```

```
else                                          ptreca=.;

end;


if pd=1 then do;

     if v638=1 and v639=1 and (1 <= v640 <= 54) then pdonsa=V640;
else if v638=1 and v639=5 and (1 <= v641 <= 54) then pdonsa=v641;
else if v642=1 and v643=1 and (1 <= v644 <= 54) then pdonsa=v644;
else if v642=1 and v643=5 and (1 <= v645 <= 54) then pdonsa=v645;


     if ptons=1 and pd=1                then pdons=1;
else if ptons=2 and pd=1                then pdons=2;
else if ptons=3 and pd=1                then pdons=3;
else if ptons=4 and pd=1 and pdonsa=v12 then pdons=3;
else if ptons=4 and pd=1 and pdonsa<v12 then pdons=4;

pdrec =ptrec;

pdreca=ptreca;

end;



*************************************************************;
*                                                           *;
*         10. Post-Traumatic Stress Disorder: ptsd          *;
*                                                           *;
*************************************************************;

A=0; B=0; C=0; D=0; E=0;

*** A: experiencing a trauma;
if v6101=1 or v6102=1 or v6104=1 or v6109=1 or v6114=1 or v6126=1 or
v6138=1 or v6143=1 or v6144=1 or v6145=1 or v6201=1 or v6209=1
then A=1;

*************************************************************;*** B:
re-experiencing the trauma;
if v6217=1 or v6218=1 or v6219=1 or v6220=1 then B=1;

*************************************************************;*** C:
three or more avoidance reactions;
array x{7} v6222-v6228;
count1=0; do i=1 to 7;
if x{i}=1 then count1=count1+1; end; drop i;
```

```
if count1=>3 then C=1;

************************************************************;*** D:
two or more arousal symptoms;
array z{6} v6231-v6236;
count2=0; do i=1 to 6;
if z{i}=1 then count2=count2+1; end; drop i;
if count2=>2 then D=1;

************************************************************;*** E:
duration of at least one month;
if (v6242=1 and v6241=>30 and v6241<=96) or   (v6242=2 and v6241=>4
and v6241<=96) or
   (v6242=3 and v6241=>1  and v6241<=96) or   (v6242=4 and v6241=>1
and v6241<=96) or v6241=96
                          then E=1;
************************************************************;*** make
diagnoses;

if A=1 and B=1 and C=1 and D=1 and E=1 then ptsd=1; else ptsd=0;label
ptsd= 'post-traumatic disorder';


************************************************************;
*                                                           *;
*      11. Anti-social Personality Disorder: asp1, asp2     *;
*                                                           *;
************************************************************;


len=v4516-v4509;
*** code item C_9: stable relations;

if v4503=5 or v4628=5 then sr1=5;
if v4513=5 and len<=2 and v4519=5 then sr2=5;

if sr1=5 or sr2=5 then sr=5; else sr=1;

if v3807=99 then v3807=.;

subtot=v3807;
if sr=1 then aspc=subtot;
* add sr to criterion C;
if sr=5 then aspc=subtot+1;

if v3812^=1 or (v3812=1 and nap50^=1 and Man1^=1 and hman^=1)
                        then mood=1; else mood=0;
```

```
*** make diagnoses;


if v3803=99 then v3803=.;

if v12=>18 and v3803=>3 and aspc=>4 then asp1=1; else asp1=0;
label asp1= 'asp w/o hierarchy';

if v12=>18 and v3803=>3 and aspc=>4
                        and mood=1  then asp2=1; else asp2=0;
label asp2= 'asp w hierarchy';



*************************************************************;
*                                                           *;
*          12. Adult Anti-social Behavior: aab              *;
*                                                           *;
*************************************************************;


if v12=>18 and aspc=>4 then aab=1; else aab=0;
label aab= 'adult anti-social behavior';



*************************************************************;
*                                                           *;
*                  13. Conduct Disorder: cd                 *;
*                                                           *;
*************************************************************;


if v3803=>3 then cd=1; else cd=0;
label cd= 'conduct disorder';




*************************************************************;
*************************************************************;
*                                                           *;
*                                                           *;
*       14. Substance Abuse and Dependence Disorders        *;
*                                                           *;
*                                                           *;
*************************************************************;
```

```
*************************************************************;
*************************************************************;
*                                                           *;
*          Substance Abuse and Dependence Disorders         *;
*                                                           *;
*************************************************************;
*************************************************************;

/*
Overview of 6 drug programs:

(1)  command file DRUG1.SAS creates the following variables:
     DLIFxxx:  DEPENDENCE, LIFETIME

(2)  command file DRUG2.SAS creates the following variables:
     DLOAxxx:  DEPENDENCE, LIFETIME, ONSET AGE

(3)  command file DRUG3.SAS creates the following variables:
     (** denotes: "Full Dependence Criteria Not Required")
  ** D1Pxxx:   Dependence- Ever had at least 1 problem
  ** D1POAxxx: Dependence first Problem Onset Age
  ** DPRECxxx: Dependence problem, RECENCY
  ** DPRAGxxx: Dependence problem, RECENCY AGE
     DF1Yxxx:  DEPENDENCE, FULL criteria in PAST 12 MONTHS (Y/N)
     DF1Mxxx:  DEPENDENCE, FULL criteria in PAST MONTH

(4)  command file DRUG4.SAS creates the following variables:
     ALIFxxx:  ABUSE, LIFETIME
     ALOAxxx:  ABUSE, LIFETIME, ONSET AGE
  ** APRECxxx: ABUSE, PROBLEM, RECENCY
  ** APRAGxxx: ABUSE, PROBLEM, RECENCY AGE
     ASRECxxx: ABUSE, SYMPTOM RECENCY
     ASRAGxxx: ABUSE, SYMPTOM RECENCY AGE
     AF1Yxxx:  ABUSE, FULL criteria in PAST 12 MONTHS (Y/N)
     AF1Mxxx:  ABUSE, FULL criteria in PAST MONTH

(5)  command file TOBACCO.SAS creates the following variables:
     RCUSETOB: recency of use, tobacco
     DLIFTOB:  dependence lifetime tobacco
     DLOATOB:  dependence lifetime ONSET AGE
     D1PTOB:   ever had at least 1 problem with tobacco
     D1POATOB: dependence first problem ONSET AGE
     DPRECTOB: dependence problem RECENCY
     DPRAGTOB: dependence problem RECENCY AGE
     DF1YTOB:  dependence full criteria in past year
     DF1MTOB:  dependence full criteria in past 1 month

(6) command file DRUG5.SAS creates ANY CONTROLLED SUBSTANCE vars:
     DLIFCON: Dep Lifetime any controlled substance (exclude alc
and tob)
     DLOACON: Dep lifetime any controlled substance onset age
  ** D1POACON: Dep first prob onset age any controlled substance
```

** DPRECCON: Dep problem recency any controlled substance
** DPRAGCON: Dep problem recency age any controlled substance
ALIFCON: Abuse lifetime any controlled sub (exclud alc and tobacco)
ALOACON: Abuse lifetime onset age any controlled substance
** APRECCON: Abuse Problem Recency any controlled substance
** APRAGCON: Abuse Problem recency age any controlled substance

****

Note: Before writing programs in this section, we need to clean the data so that a respondent won't have valid information on the onset/recency of a symptom (Gxxb-d) unless the symptom has been endorsed (Gxxa=1). Otherwise, we need to modify the following types of conditional statements whenever they occur:

e.g., IF G32ATRQ=1 AND
((1<=G32CTRQ<=3) AND (CRTAGE>G32BTRQ)) OR
((G32CTRQ=4) AND (1<=DB32TRQ<=54))
THEN TRQ32A6=1

which should be changed to

IF G32ATRQ=1 AND
(((1<=G32CTRQ<=3) AND (CRTAGE>G32BTRQ)) OR
((G32CTRQ=4) AND (1<=DB32TRQ<=54)))
THEN TRQ32A6=1

The third parenthesis is added to make sure that all those who have met the duration criterion also met the symptom criterion.

```
*********************************************************************;
*                                                                   *;
*    setting all zero and  >= 96 to new code 999  (to eliminate     *;
*    problems with missing data in age comparisons) and assigning   *;
*    names to variable numbers                                      *;
*                                                                   *;
*********************************************************************;

     array miss(*) v1801--v3757;
        do i=1 to dim(miss);
          if miss(i)=0 or miss(i)=. or miss(i) >= 96 then miss(i)=999;
        end;
        drop i;
     crtage=v12;

    /* vars for use with abuse of alcohol (drinks in past year)*/
    f5=v1805; f6=v1806; f7=v1807; f8=v1808;

    /* vars for later use with past year dependence*/
     g1d=v1822; g2d=v1830; g3d=v1838; g4d=v1846; g5d=v1904;
     g6d=v1910; g7d=v1916; g8d=v1922; g9d=v1928;
    /* RECENCY OF USE (sedative thru heroin)*/

     rcusesed=v1822; rcusetrq=v1830; rcusesti=v1838;
     rcuseags=v1846; rcuseinh=v1904; rcusemar=v1910;
     rcusecoc=v1916; rcusehal=v1922; rcuseher=v1928;
    /* vars holding "age first use"*/

     agefsed=v1820;
     ageftrq=v1828;
     agefsti=v1836;
     agefags=v1844;
     agefinh=v1902;
     agefmar=v1908;
     agefcoc=v1914;
     agefhal=v1920;
     agefher=v1926;
     g30aalc=v2002; g31aalc=v2102; g32aalc=v2202;
     g33aalc=v2302; g34aalc=v2402; g36aalc=v2502;
     g37aalc=v2602; g38aalc=v2702; g41aalc=v2802;
     g42aalc=v2902; g43aalc=v3002; g44aalc=v3102;
     g46aalc=v3202; g47aalc=v3302; g48aalc=v3402;
     g49aalc=v3502; g50aalc=v3602;    g51aalc=v3643;
     g52aalc=v3702;
     g30balc=v2003; g30calc=v2004; g30dalc=v2005;
     g31balc=v2103; g31calc=v2104; g31dalc=v2105;
     g32balc=v2203; g32calc=v2204; g32dalc=v2205; g32ealc=v2206;
     g33balc=v2303; g33calc=v2304; g33dalc=v2305;
     g34balc=v2403; g34calc=v2404; g34dalc=v2405;
     g36balc=v2503;
     g37balc=v2603; g37calc=v2604; g37dalc=v2605;
     g38balc=v2703; g38calc=v2704; g38dalc=v2705;
```

```
     g41balc=v2803; g41calc=v2804; g41dalc=v2805;
     g42balc=v2903; g42calc=v2904; g42dalc=v2905;
     g43balc=v3003; g43calc=v3004; g43dalc=v3005;
     g44balc=v3103; g44calc=v3104; g44dalc=v3105;
     g46balc=v3203; g46calc=v3204; g46dalc=v3205;
     g47balc=v3303; g47calc=v3304; g47dalc=v3305;
     g48balc=v3403; g48calc=v3404; g48dalc=v3405;
     g49balc=v3503; g49calc=v3504; g49dalc=v3505;
     g50balc=v3603; g50calc=v3604; g50dalc=v3605;
    /* note: there is only g51a. the b,c,d were omitted*/
     g52balc=v3703; g52calc=v3704; g52dalc=v3705;
     g30ased=v2006; g31ased=v2106;    g32ased=v2207;
     g33ased=v2306; g34ased=v2406;    g36ased=v2504;
     g37ased=v2606; g38ased=v2706; g41ased=v2806;
     g42ased=v2906; g43ased=v3006; g44ased=v3106;
     g46ased=v3206; g47ased=v3306; g48ased=v3406;
     g49ased=v3506; g50ased=v3606;    g51ased=v3644;
     g52ased=v3706;
     g30bsed=v2007; g30csed=v2008; g30dsed=v2009;
     g31bsed=v2107; g31csed=v2108; g31dsed=v2109;
     g32bsed=v2208; g32csed=v2209; g32dsed=v2210; g32esed=v2211;
g1f=v1824;
     g33bsed=v2307; g33csed=v2308; g33dsed=v2309;
     g34bsed=v2407; g34csed=v2408; g34dsed=v2409;
     g36bsed=v2505;
     g37bsed=v2607; g37csed=v2608; g37dsed=v2609;
     g38bsed=v2707; g38csed=v2708; g38dsed=v2709;
     g41bsed=v2807; g41csed=v2808; g41dsed=v2809;
     g42bsed=v2907; g42csed=v2908; g42dsed=v2909;
     g43bsed=v3007; g43csed=v3008; g43dsed=v3009;
     g44bsed=v3107; g44csed=v3108; g44dsed=v3109;
     g46bsed=v3207; g46csed=v3208; g46dsed=v3209;
     g47bsed=v3307; g47csed=v3308; g47dsed=v3309;
     g48bsed=v3407; g48csed=v3408; g48dsed=v3409;
     g49bsed=v3507; g49csed=v3508; g49dsed=v3509;
     g50bsed=v3607; g50csed=v3608; g50dsed=v3609;
     g52bsed=v3707; g52csed=v3708; g52dsed=v3709;
     g30atrq=v2010; g31atrq=v2110;    g32atrq=v2212;
     g33atrq=v2310; g34atrq=v2410;    g36atrq=v2506;
     g37atrq=v2610; g38atrq=v2710; g41atrq=v2810;
     g42atrq=v2910; g43atrq=v3010; g44atrq=v3110;
     g46atrq=v3210; g47atrq=v3310; g48atrq=v3410;
     g49atrq=v3510; g50atrq=v3610;    g51atrq=v3645;
     g52atrq=v3710;
     g30btrq=v2011; g30ctrq=v2012; g30dtrq=v2013;
     g31btrq=v2111; g31ctrq=v2112; g31dtrq=v2113;
     g32btrq=v2213; g32ctrq=v2214; g32dtrq=v2215; g32etrq=v2216;
g2f=v1832;
     g33btrq=v2311; g33ctrq=v2312; g33dtrq=v2313;
     g34btrq=v2411; g34ctrq=v2412; g34dtrq=v2413;
     g36btrq=v2507;
     g37btrq=v2611; g37ctrq=v2612; g37dtrq=v2613;
```

```
      g38btrq=v2711; g38ctrq=v2712; g38dtrq=v2713;
      g41btrq=v2811; g41ctrq=v2812; g41dtrq=v2813;
      g42btrq=v2911; g42ctrq=v2912; g42dtrq=v2913;
      g43btrq=v3011; g43ctrq=v3012; g43dtrq=v3013;
      g44btrq=v3111; g44ctrq=v3112; g44dtrq=v3113;
      g46btrq=v3211; g46ctrq=v3212; g46dtrq=v3213;
      g47btrq=v3311; g47ctrq=v3312; g47dtrq=v3313;
      g48btrq=v3411; g48ctrq=v3412; g48dtrq=v3413;
      g49btrq=v3511; g49ctrq=v3512; g49dtrq=v3513;
      g50btrq=v3611; g50ctrq=v3612; g50dtrq=v3613;
      g52btrq=v3711; g52ctrq=v3712; g52dtrq=v3713;
      g30asti=v2014; g31asti=v2114;    g32asti=v2217;
      g33asti=v2314; g34asti=v2414;    g36asti=v2508;
      g37asti=v2614; g38asti=v2714; g41asti=v2814;
      g42asti=v2914; g43asti=v3014; g44asti=v3114;
      g46asti=v3214; g47asti=v3314; g48asti=v3414;
      g49asti=v3514; g50asti=v3614;    g51asti=v3646;
      g52asti=v3714;
      g30bsti=v2015; g30csti=v2016; g30dsti=v2017;
      g31bsti=v2115; g31csti=v2116; g31dsti=v2117;
      g32bsti=v2218; g32csti=v2219; g32dsti=v2220; g32esti=v2221;
g3f=v1840;
      g33bsti=v2315; g33csti=v2316; g33dsti=v2317;
      g34bsti=v2415; g34csti=v2416; g34dsti=v2417;
      g36bsti=v2509;
      g37bsti=v2615; g37csti=v2616; g37dsti=v2617;
      g38bsti=v2715; g38csti=v2716; g38dsti=v2717;
      g41bsti=v2815; g41csti=v2816; g41dsti=v2817;
      g42bsti=v2915; g42csti=v2916; g42dsti=v2917;
      g43bsti=v3015; g43csti=v3016; g43dsti=v3017;
      g44bsti=v3115; g44csti=v3116; g44dsti=v3117;
      g46bsti=v3215; g46csti=v3216; g46dsti=v3217;
      g47bsti=v3315; g47csti=v3316; g47dsti=v3317;
      g48bsti=v3415; g48csti=v3416; g48dsti=v3417;
      g49bsti=v3515; g49csti=v3516; g49dsti=v3517;
      g50bsti=v3615; g50csti=v3616; g50dsti=v3617;
      g52bsti=v3715; g52csti=v3716; g52dsti=v3717;
      g30aags=v2018; g31aags=v2118;    g32aags=v2222;
      g33aags=v2318; g34aags=v2418;    g36aags=v2510;
      g37aags=v2618; g38aags=v2718; g41aags=v2818;
      g42aags=v2918; g43aags=v3018; g44aags=v3118;
      g46aags=v3218; g47aags=v3318; g48aags=v3418;
      g49aags=v3518; g50aags=v3618;    g51aags=v3647;
      g52aags=v3718;
      g30bags=v2019; g30cags=v2020; g30dags=v2321;
      g31bags=v2119; g31cags=v2120; g31dags=v2321;
      g32bags=v2223; g32cags=v2224; g32dags=v2225; g32eags=v2226;
 g4f=v1848;
      g33bags=v2319; g33cags=v2320; g33dags=v2321;
      g34bags=v2419; g34cags=v2420; g34dags=v2421;
      g36bags=v2511;
      g37bags=v2619; g37cags=v2620; g37dags=v2621;
```

```
     g38bags=v2719; g38cags=v2720; g38dags=v2721;
     g41bags=v2819; g41cags=v2820; g41dags=v2821;
     g42bags=v2919; g42cags=v2920; g42dags=v2921;
     g43bags=v3019; g43cags=v3020; g43dags=v3021;
     g44bags=v3119; g44cags=v3120; g44dags=v3121;
     g46bags=v3219; g46cags=v3220; g46dags=v3221;
     g47bags=v3319; g47cags=v3320; g47dags=v3321;
     g48bags=v3419; g48cags=v3420; g48dags=v3421;
     g49bags=v3519; g49cags=v3520; g49dags=v3521;
     g50bags=v3619; g50cags=v3620; g50dags=v3621;
     g52bags=v3719; g52cags=v3720; g52dags=v3721;
     g30ainh=v2022; g31ainh=v2122;    g32ainh=v2227;
     g33ainh=v2322; g34ainh=v2422;    g36ainh=v2512;
     g37ainh=v2622; g38ainh=v2722; g41ainh=v2822;
     g42ainh=v2922; g43ainh=v3022; g44ainh=v3122;
     g46ainh=v3222; g47ainh=v3322; g48ainh=v3422;
     g49ainh=v3522; g50ainh=v3622;    g51ainh=v3648;
     g52ainh=v3722;
     g30binh=v2019; g30cinh=v2020; g30dinh=v2021;
     g31binh=v2119; g31cinh=v2120; g31dinh=v2121;
     g32binh=v2228; g32cinh=v2229; g32dinh=v2230; g32einh=v2231;
g5f=v1906;
     g33binh=v2323; g33cinh=v2324; g33dinh=v2325;
     g34binh=v2423; g34cinh=v2424; g34dinh=v2425;
     g36binh=v2513;
     g37binh=v2623; g37cinh=v2624; g37dinh=v2625;
     g38binh=v2723; g38cinh=v2724; g38dinh=v2725;
     g41binh=v2823; g41cinh=v2824; g41dinh=v2825;
     g42binh=v2923; g42cinh=v2924; g42dinh=v2925;
     g43binh=v3023; g43cinh=v3024; g43dinh=v3025;
     g44binh=v3123; g44cinh=v3124; g44dinh=v3125;
     g46binh=v3223; g46cinh=v3224; g46dinh=v3225;
     g47binh=v3323; g47cinh=v3324; g47dinh=v3325;
     g48binh=v3423; g48cinh=v3424; g48dinh=v3425;
     g49binh=v3523; g49cinh=v3524; g49dinh=v3525;
     g50binh=v3623; g50cinh=v3624; g50dinh=v3625;
     g52binh=v3723; g52cinh=v3724; g52dinh=v3725;
     g30amar=v2026; g31amar=v2126;    g32amar=v2232;
     g33amar=v2326; g34amar=v2426;    g36amar=v2514;
     g37amar=v2626; g38amar=v2726; g41amar=v2826;
     g42amar=v2926; g43amar=v3026; g44amar=v3126;
     g46amar=v3226; g47amar=v3326; g48amar=v3426;
     g49amar=v3526; g50amar=v3626;    g51amar=v3649;
     g52amar=v3726;
     g30bmar=v2027; g30cmar=v2028; g30dmar=v2029;
     g31bmar=v2127; g31cmar=v2128; g31dmar=v2129;
     g32bmar=v2233; g32cmar=v2234; g32dmar=v2235; g32emar=v2236;
g6f=v1912;
     g33bmar=v2327; g33cmar=v2328; g33dmar=v2329;
     g34bmar=v2427; g34cmar=v2428; g34dmar=v2429;
     g36bmar=v2515;
     g37bmar=v2627; g37cmar=v2628; g37dmar=v2629;
```

```
      g38bmar=v2727; g38cmar=v2728; g38dmar=v2729;
      g41bmar=v2827; g41cmar=v2828; g41dmar=v2829;
      g42bmar=v2927; g42cmar=v2928; g42dmar=v2929;
      g43bmar=v3027; g43cmar=v3028; g43dmar=v3029;
      g44bmar=v3127; g44cmar=v3128; g44dmar=v3129;
      g46bmar=v3227; g46cmar=v3228; g46dmar=v3229;
      g47bmar=v3327; g47cmar=v3328; g47dmar=v3329;
      g48bmar=v3427; g48cmar=v3428; g48dmar=v3429;
      g49bmar=v3527; g49cmar=v3528; g49dmar=v3529;
      g50bmar=v3627; g50cmar=v3628; g50dmar=v3629;
      g52bmar=v3727; g52cmar=v3728; g52dmar=v3729;
      g30acoc=v2030; g31acoc=v2130;    g32acoc=v2237;
      g33acoc=v2330; g34acoc=v2430;    g36acoc=v2516;
      g37acoc=v2630; g38acoc=v2730; g41acoc=v2830;
      g42acoc=v2930; g43acoc=v3030; g44acoc=v3130;
      g46acoc=v3230; g47acoc=v3330; g48acoc=v3430;
      g49acoc=v3530; g50acoc=v3630;    g51acoc=v3650;
      g52acoc=v3730;
      g30bcoc=v2031; g30ccoc=v2032; g30dcoc=v2033;
      g31bcoc=v2131; g31ccoc=v2132; g31dcoc=v2133;
      g32bcoc=v2238; g32ccoc=v2239; g32dcoc=v2240; g32ecoc=v2241;
g7f=v1918;
      g33bcoc=v2331; g33ccoc=v2332; g33dcoc=v2333;
      g34bcoc=v2431; g34ccoc=v2432; g34dcoc=v2433;
      g36bcoc=v2517;
      g37bcoc=v2631; g37ccoc=v2632; g37dcoc=v2633;
      g38bcoc=v2731; g38ccoc=v2732; g38dcoc=v2733;
      g41bcoc=v2831; g41ccoc=v2832; g41dcoc=v2833;
      g42bcoc=v2931; g42ccoc=v2932; g42dcoc=v2933;
      g43bcoc=v3031; g43ccoc=v3032; g43dcoc=v3033;
      g44bcoc=v3131; g44ccoc=v3132; g44dcoc=v3133;
      g46bcoc=v3231; g46ccoc=v3232; g46dcoc=v3233;
      g47bcoc=v3331; g47ccoc=v3332; g47dcoc=v3333;
      g48bcoc=v3431; g48ccoc=v3432; g48dcoc=v3433;
      g49bcoc=v3531; g49ccoc=v3532; g49dcoc=v3533;
      g50bcoc=v3631; g50ccoc=v3632; g50dcoc=v3633;
      g52bcoc=v3731; g52ccoc=v3732; g52dcoc=v3733;
      g30ahal=v2034; g31ahal=v2134;    g32ahal=v2242;
      g33ahal=v2334; g34ahal=v2434;    g36ahal=v2518;
      g37ahal=v2634; g38ahal=v2734; g41ahal=v2834;
      g42ahal=v2934; g43ahal=v3034; g44ahal=v3134;
      g46ahal=v3234; g47ahal=v3334; g48ahal=v3434;
      g49ahal=v3534; g50ahal=v3634;    g51ahal=v3651;
      g52ahal=v3734;
      g30bhal=v2035; g30chal=v2036; g30dhal=v2037;
      g31bhal=v2135; g31chal=v2136; g31dhal=v2137;
      g32bhal=v2243; g32chal=v2244; g32dhal=v2245; g32ehal=v2246;
g8f=v1924;
      g33bhal=v2335; g33chal=v2336; g33dhal=v2337;
      g34bhal=v2435; g34chal=v2436; g34dhal=v2437;
      g36bhal=v2519;
      g37bhal=v2635; g37chal=v2636; g37dhal=v2637;
```

```
      g38bhal=v2735; g38chal=v2736; g38dhal=v2737;
      g41bhal=v2835; g41chal=v2836; g41dhal=v2837;
      g42bhal=v2935; g42chal=v2936; g42dhal=v2937;
      g43bhal=v3035; g43chal=v3036; g43dhal=v3037;
      g44bhal=v3135; g44chal=v3136; g44dhal=v3137;
      g46bhal=v3235; g46chal=v3236; g46dhal=v3237;
      g47bhal=v3335; g47chal=v3336; g47dhal=v3337;
      g48bhal=v3435; g48chal=v3436; g48dhal=v3437;
      g49bhal=v3535; g49chal=v3536; g49dhal=v3537;
      g50bhal=v3635; g50chal=v3636; g50dhal=v3637;
      g52bhal=v3735; g52chal=v3736; g52dhal=v3737;
      g30aher=v2038; g31aher=v2138;    g32aher=v2247;
      g33aher=v2338; g34aher=v2438;    g36aher=v2520;
      g37aher=v2638; g38aher=v2738; g41aher=v2838;
      g42aher=v2938; g43aher=v3038; g44aher=v3138;
      g46aher=v3238; g47aher=v3338; g48aher=v3438;
      g49aher=v3538; g50aher=v3638;    g51aher=v3652;
      g52aher=v3738;
      g30bher=v2039; g30cher=v2040; g30dher=v2041;
      g31bher=v2139; g31cher=v2140; g31dher=v2141;
      g32bher=v2248; g32cher=v2249; g32dher=v2250; g32eher=v2251;
g9f=v1930;
      g33bher=v2339; g33cher=v2340; g33dher=v2341;
      g34bher=v2439; g34cher=v2440; g34dher=v2441;
      g36bher=v2521;
      g37bher=v2639; g37cher=v2640; g37dher=v2641;
      g38bher=v2739; g38cher=v2740; g38dher=v2741;
      g41bher=v2839; g41cher=v2840; g41dher=v2841;
      g42bher=v2939; g42cher=v2940; g42dher=v2941;
      g43bher=v3039; g43cher=v3040; g43dher=v3041;
      g44bher=v3139; g44cher=v3140; g44dher=v3141;
      g46bher=v3239; g46cher=v3240; g46dher=v3241;
      g47bher=v3339; g47cher=v3340; g47dher=v3341;
      g48bher=v3439; g48cher=v3440; g48dher=v3441;
      g49bher=v3539; g49cher=v3540; g49dher=v3541;
      g50bher=v3639; g50cher=v3640; g50dher=v3641;
      g52bher=v3739; g52cher=v3740; g52dher=v3741;
```

```
*****************************************************************;
*                                                               *;
*                      Substance Dependence                     *;
*                                                               *;
*****************************************************************;

/* 1. DRUG1.SAS
      CRITERIA FOR SUBSTANCE DEPENDENCE

     A. Criterion A: Symptoms of dependence
        At least 3 of A1 - A9
        (no exception for marijuana and hallucinogens)
     A1. often take larger amounts than intended   G47a or G48a=YES
     A2. persistent desire or efforts to cut down  G42a, G43a, or G44a=YES
     A3. a lot of time spent to get substance      G46a=YES
     A4. frequent intoxication or use is hazardous G30a, G31a, or G34a=YES
     A5. activities given up                       G52a=YES
     A6. continued use despite negative effects
           G32a=YES plus additional comparisons of
            (1) age of recency of problem with age of onset of problem
            (2) age of recency of use with age of onset of use
            (3) (for Alcohol only) 12+ drinks/yr and current age > age
                of onset of problem
                OR
                < 12 drinks/yr and age recent use > age onset of problem
           G33a=YES plus additional comparisons (same as G32a)
           G36a=YES
           G37a=YES plus additional comparisons (same as G32a)
           G38a=YES plus additional comparisons (same as G32a)
     A7. marked tolerance                          G49a=YES
     A8. withdrawal symptoms                       G50a=YES
     A9. taken to relieve withdrawal symptomes     G51a=YES

     Criterion B: Symptoms persisted or repeated
        The A criterion must be met in order for the B criterion to be met.
        For Symptoms 1,3,4,6 criterion B is automatically met.
        For Symptoms 2,5,7,8 a comparison is made of
              (1) age of recency of problem with age of onset of problem
                  (same method as for symptom 6, Criterion A.)
*/
```

```
********************** ALCOHOL ********************************;

    /* age in f11 minus age in b (valid if difference is in range of 1-54)*/
    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32alc=g32dalc-g32balc;
     db33alc=g33dalc-g33balc;
     db37alc=g37dalc-g37balc;
     db38alc=g38dalc-g38balc;
     db42alc=g42dalc-g42balc;
     db43alc=g43dalc-g43balc;
     db44alc=g44dalc-g44balc;
     db49alc=g49dalc-g49balc;
     db50alc=g50dalc-g50balc;
     db52alc=g52dalc-g52balc;
     f11=v1812;          /* f11 = age began drinking the most */
     lb32alc=f11-g32balc;
     lb33alc=f11-g33balc;
     lb37alc=f11-g37balc;
     lb38alc=f11-g38balc;

* Criterion A;

     if g47aalc eq 1 or g48aalc eq 1                then alca1=1;
     if g42aalc eq 1 or g43aalc eq 1 or g44aalc eq 1 then alca2=1;
     if g46aalc eq 1                                then alca3=1;
     if g30aalc eq 1 or g31aalc eq 1 or g34aalc eq 1 then alca4=1;
     if g52aalc eq 1                                then alca5=1;
     if g32aalc eq 1 and
          ((1 <= g32calc <= 3) and (crtage > g32balc))
      or  ((g32calc eq 4) and (1 <= db32alc <=54))   then alc32a6=1;

    /* alcohol only--use having 12 drinks in past yr as comparison var
       had at least 12 drinks in past year? 0=no 1=yes */

       if (1 <= f5 <= 8)
       or (1 <= f6 <= 7)
       or (1 <= f7 <= 6)
       or (f7 eq 7 and (5 <= f8 <= 7))
       or (f7 eq 8 and f8 eq 5)
       or (1 <= f8 <= 4) then drk12pyr=1;
       else                   drk12pyr=0;

     if g32aalc eq 1 and drk12pyr eq 1 and (crtage > g32balc)   then alc32a6=1;
     if g32aalc eq 1 and drk12pyr eq 0 and (1 <= lb32alc <= 54) then alc32a6=2;
     if g32aalc eq 1 and g32ealc eq 1                           then alc32a6=3;
     * repeat A6 criteria for G33 series;
     if g33aalc eq 1 and
         ((1 <= g33calc <= 3) and (crtage > g33balc))
      or ((g33calc eq 4) and (1 <= db33alc <=54))               then alc33a6=1;
     if g33aalc eq 1 and drk12pyr eq 1 and (crtage > g33balc)   then alc33a6=2;
     if g33aalc eq 1 and drk12pyr eq 0 and (1 <= lb33alc <=54)  then alc33a6=3;
```

```
if g36aalc eq 1                                                    then alc36a6=1;
if g37aalc eq 1 and
    ((1 <= g37calc <= 3) and (crtage > g37balc))
 or ((g37calc eq 4) and (1 <= db37alc <= 54))                      then alc37a6=1;
if g37aalc eq 1 and drkl2pyr eq 1 and (crtage > g37balc)           then alc37a6=2;
if g37aalc eq 1 and drkl2pyr eq 0 and (1 <= lb37alc <=54)          then alc37a6=3;
if g41aalc eq 1                                                    then alc41a6=1;
if g38aalc eq 1 and
    ((1 <= g38calc <= 3) and (crtage > g38balc))
 or ((g38calc eq 4) and (1 <= db38alc <=54))                       then alc38a6=1;
if g38aalc eq 1 and drkl2pyr eq 1 and (crtage > g38balc)           then alc38a6=2;
if g38aalc eq 1 and drkl2pyr eq 0 and (1 <= lb38alc <=54)          then alc38a6=3;
if  (1 <= alc32a6 <=3) or (1 <=alc33a6 <= 3) or (alc36a6 =1)
 or (1 <= alc37a6 <=3) or (alc41a6 eq 1)     or (1 <=alc38a6 <=3)
                                                                    then alca6=1;
if g49aalc eq 1                                                    then alca7=1;
if g50aalc eq 1                                                    then alca8=1;
if g51aalc eq 1                                                    then alca9=1;
alcatot=sum(of alcal-alca9);
if alcatot >= 3                                                   then alccrita=1;
```

* B CRITERIA;

```
if alcal eq 1                                        then alcb1=1;
if g42aalc eq 1 and
    (( 1 <= g42calc <= 3) and (crtage > g42balc))
 or ((g42calc eq 4) and (1 <= db42alc <=54))         then alc42b=1;
if g43aalc eq 1 and
    (( 1 <= g43calc <= 3) and (crtage > g43balc))
 or ((g43calc eq 4) and (1 <= db43alc <=54))         then alc43b=1;
if g44aalc eq 1 and
    (( 1 <= g44calc <= 3) and (crtage > g44balc))
 or ((g44calc eq 4) and (1 <= db44alc <=54))         then alc44b=1;
if alc42b eq 1 or alc43b eq 1 or alc44b eq 1         then alcb2=1;
if g46aalc eq 1                                      then alcb3=1;
if g30aalc eq 1 or g31aalc eq 1 or g34aalc eq 1      then alcb4=1;
if g52aalc eq 1 and
    (( 1 <= g52calc <= 3) and (crtage > g52balc))
 or ((g52calc eq 4) and (1 <= db52alc <=54))         then alcb5=1;
if alca6=1                                           then alcb6=1;
if g49aalc eq 1 and
    (( 1 <= g49calc <= 3) and (crtage > g49balc))
 or ((g49calc eq 4) and (1 <= db49alc <=54))         then alcb7=1;
if g50aalc eq 1 and
    (( 1 <= g50calc <= 3) and (crtage > g50balc))
 or ((g50calc eq 4) and (1 <= db50alc <=54))         then alcb8=1;
alcbtot=sum(of alcb1-alcb8);
if alcbtot >= 2 then alccritb=1;

if alccrita eq 1 and alccritb eq 1 then dlifalc=1; else dlifalc=0;
```

```
************************** SEDATIVES ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32sed=g32dsed-g32bsed;
     db33sed=g33dsed-g33bsed;
     db37sed=g37dsed-g37bsed;
     db38sed=g38dsed-g38bsed;
     db42sed=g42dsed-g42bsed;
     db43sed=g43dsed-g43bsed;
     db44sed=g44dsed-g44bsed;
     db49sed=g49dsed-g49bsed;
     db50sed=g50dsed-g50bsed;
     db52sed=g52dsed-g52bsed;

    /* age in glf minus age in b (valid if difference is in range of 1-54)
       glf = age last time used sed */

     lb32sed=glf-g32bsed;
     lb33sed=glf-g33bsed;
     lb37sed=glf-g37bsed;
     lb38sed=glf-g38bsed;

* A CRITERIA;

     if g47ased eq 1 or g48ased eq 1                 then seda1=1;
     if g42ased eq 1 or g43ased eq 1 or g44ased eq 1 then seda2=1;
     if g46ased eq 1                                 then seda3=1;
     if g30ased eq 1 or g31ased eq 1 or g34ased eq 1 then seda4=1;
     if g52ased eq 1                                 then seda5=1;
     if g32ased eq 1 and
          ((1 <= g32csed <= 3) and (crtage > g32bsed))
      or  ((g32csed eq 4) and (1 <= db32sed <=54))   then sed32a6=1;
     if g32ased eq 1 and
          ((1 <= rcusesed <=3) and (crtage > g32bsed))
       or ((rcusesed eq 4) and (1 <= lb32sed <=54))  then sed32a6=2;
     if g32ased eq 1 and g32esed eq 1                then sed32a6=3;
     if g33ased eq 1 and
          ((1 <= g33csed <= 3) and (crtage > g33bsed))
       or ((g33csed eq 4) and (1 <= db33sed <=54))   then sed33a6=1;
     if g33ased eq 1 and
          ((1 <= rcusesed <=3) and (crtage > g33bsed))
       or ((rcusesed eq 4) and (1 <= lb33sed <=54))  then sed33a6=2;
     if g36ased eq 1                                 then sed36a6=1;

     if g37ased eq 1 and
          ((1 <= g37csed <= 3) and (crtage > g37bsed))
      or  ((g37csed eq 4) and (1 <= db37sed <=54))   then sed37a6=1;
     if g37ased eq 1 and
          ((1 <= rcusesed <=3) and (crtage > g37bsed))
       or ((rcusesed eq 4) and (1 <= lb37sed <=54))  then sed37a6=2;

     if g41ased eq 1                                 then sed41a6=1;
```

```
      if g38ased eq 1 and
           ((1 <= g38csed <= 3) and (crtage > g38bsed))
       or  ((g38csed eq 4) and (1 <= db38sed <=54))   then sed38a6=1;

      if g38ased eq 1 and
           ((1 <= rcusesed <=3) and (crtage > g38bsed))
        or ((rcusesed eq 4) and (1 <= lb38sed <=54))  then sed38a6=2;
      if  (1 <= sed32a6 <=3) or (1 <=sed33a6 <= 2) or (sed36a6 =1)
       or (1 <= sed37a6 <=2) or (sed41a6 eq 1) or (1 <= sed38a6 <=2)
                                                      then seda6=1;
      if g49ased eq 1                                 then seda7=1;
      if g50ased eq 1                                 then seda8=1;
      if g51ased eq 1                                 then seda9=1;
      sedatot=sum(of seda1-seda9);
      if sedatot >= 3 then sedcrita=1;

* B CRITERIA;

      if seda1 eq 1                                   then sedb1=1;
      if g42ased eq 1 and
          (( 1 <= g42csed <= 3) and (crtage > g42bsed))
       or ((g42csed eq 4) and (1 <= db42sed <= 54))   then sed42b=1;
      if g43ased eq 1 and
          (( 1 <= g43csed <= 3) and (crtage > g43bsed))
       or ((g43csed eq 4) and (1 <= db43sed <= 54))   then sed43b=1;
      if g44ased eq 1 and
          (( 1 <= g44csed <= 3) and (crtage > g44bsed))
       or ((g44csed eq 4) and (1 <= db44sed <= 54))   then sed44b=1;
      if sed42b eq 1 or sed43b eq 1 or sed44b eq 1    then sedb2=1;
      if g46ased eq 1                                 then sedb3=1;
      if g30ased eq 1 or g31ased eq 1 or g34ased eq 1 then sedb4=1;
      if g52ased eq 1 and
          (( 1 <= g52csed <= 3) and (crtage > g52bsed))
       or ((g52csed eq 4) and (1 <= db52sed <= 54))   then sedb5=1;
      if seda6=1                                      then sedb6=1;
      if g49ased eq 1 and
          (( 1 <= g49csed <= 3) and (crtage > g49bsed))
       or ((g49csed eq 4) and (1 <= db49sed <= 54))   then sedb7=1;
      if g50ased eq 1 and
          (( 1 <= g50csed <= 3) and (crtage > g50bsed))
       or ((g50csed eq 4) and (1 <= db50sed <= 54))   then sedb8=1;
      sedbtot=sum(of sedb1-sedb8);
      if sedbtot >= 2 then sedcritb=1;

      if sedcrita eq 1 and sedcritb eq 1 then dlifsed=1; else dlifsed=0;
```

```
********************* TRANQUILIZERS *********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32trq=g32dtrq-g32btrq;
     db33trq=g33dtrq-g33btrq;
     db37trq=g37dtrq-g37btrq;
     db38trq=g38dtrq-g38btrq;
     db42trq=g42dtrq-g42btrq;
     db43trq=g43dtrq-g43btrq;
     db44trq=g44dtrq-g44btrq;
     db49trq=g49dtrq-g49btrq;
     db50trq=g50dtrq-g50btrq;
     db52trq=g52dtrq-g52btrq;

    /* age in g2f minus age in b (valid if difference is in range of 1-54)
       g2f = age last time used trq */
     lb32trq=g2f-g32btrq;
     lb33trq=g2f-g33btrq;
     lb37trq=g2f-g37btrq;
     lb38trq=g2f-g38btrq;

* A CRITERIA;

     if g47atrq eq 1 or g48atrq eq 1                 then trqa1=1;
     if g42atrq eq 1 or g43atrq eq 1 or g44atrq eq 1 then trqa2=1;
     if g46atrq eq 1                                 then trqa3=1;
     if g30atrq eq 1 or g31atrq eq 1 or g34atrq eq 1 then trqa4=1;
     if g52atrq eq 1                                 then trqa5=1;
     if g32atrq eq 1 and
          ((1 <= g32ctrq <= 3) and (crtage > g32btrq))
      or  ((g32ctrq eq 4) and (1 <= db32trq <=54))   then trq32a6=1;
     if g32atrq eq 1 and
          ((1 <= rcusetrq <=3) and (crtage > g32btrq))
       or ((rcusetrq eq 4) and (1 <= lb32trq <=54))  then trq32a6=2;
     if g32atrq eq 1 and g32etrq eq 1                then trq32a6=3;
     if g33atrq eq 1 and
          ((1 <= g33ctrq <= 3) and (crtage > g33btrq))
       or ((g33ctrq eq 4) and (1 <= db33trq <=54))   then trq33a6=1;
     if g33atrq eq 1 and
          ((1 <= rcusetrq <=3) and (crtage > g33btrq))
       or ((rcusetrq eq 4) and (1 <= lb33trq <=54))  then trq33a6=2;
     if g36atrq eq 1                                 then trq36a6=1;

     if g37atrq eq 1 and
          ((1 <= g37ctrq <= 3) and (crtage > g37btrq))
      or  ((g37ctrq eq 4) and (1 <= db37trq <=54))   then trq37a6=1;
     if g37atrq eq 1 and
          ((1 <= rcusetrq <=3) and (crtage > g37btrq))
       or ((rcusetrq eq 4) and (1 <= lb37trq <=54))  then trq37a6=2;

     if g41atrq eq 1                                 then trq41a6=1;
     if g38atrq eq 1 and
```

```
        ((1 <= g38ctrq <= 3) and (crtage > g38btrq))
     or  ((g38ctrq eq 4) and (1 <= db38trq <=54))    then trq38a6=1;

    if g38atrq eq 1 and
        ((1 <= rcusetrq <=3) and (crtage > g38btrq))
      or ((rcusetrq eq 4) and (1 <= lb38trq <=54))   then trq38a6=2;
    if  (1 <= trq32a6 <=3) or (1 <=trq33a6 <= 2) or (trq36a6 =1)
     or (1 <= trq37a6 <=2) or (trq41a6 eq 1) or (1 <= trq38a6 <=2)
                                                    then trqa6=1;
    if g49atrq eq 1                                 then trqa7=1;
    if g50atrq eq 1                                 then trqa8=1;
    if g51atrq eq 1                                 then trqa9=1;
    trqatot=sum(of trqa1-trqa9);
    if trqatot >= 3 then trqcrita=1;

* B CRITERIA;

    if trqa1 eq 1                                   then trqb1=1;
    if g42atrq eq 1 and
        (( 1 <= g42ctrq <= 3) and (crtage > g42btrq))
     or ((g42ctrq eq 4) and (1 <= db42trq <= 54))   then trq42b=1;
    if g43atrq eq 1 and
        (( 1 <= g43ctrq <= 3) and (crtage > g43btrq))
     or ((g43ctrq eq 4) and (1 <= db43trq <= 54))   then trq43b=1;
    if g44atrq eq 1 and
        (( 1 <= g44ctrq <= 3) and (crtage > g44btrq))
     or ((g44ctrq eq 4) and (1 <= db44trq <= 54))   then trq44b=1;
    if trq42b eq 1 or trq43b eq 1 or trq44b eq 1    then trqb2=1;
    if g46atrq eq 1                                 then trqb3=1;
    if g30atrq eq 1 or g31atrq eq 1 or g34atrq eq 1 then trqb4=1;
    if g52atrq eq 1 and
        (( 1 <= g52ctrq <= 3) and (crtage > g52btrq))
     or ((g52ctrq eq 4) and (1 <= db52trq <= 54))   then trqb5=1;
    if trqa6=1                                      then trqb6=1;
    if g49atrq eq 1 and
        (( 1 <= g49ctrq <= 3) and (crtage > g49btrq))
     or ((g49ctrq eq 4) and (1 <= db49trq <= 54))   then trqb7=1;
    if g50atrq eq 1 and
        (( 1 <= g50ctrq <= 3) and (crtage > g50btrq))
     or ((g50ctrq eq 4) and (1 <= db50trq <= 54))   then trqb8=1;
    trqbtot=sum(of trqb1-trqb8);
    if trqbtot >= 2 then trqcritb=1;

    if trqcrita eq 1 and trqcritb eq 1 then dliftrq=1; else dliftrq=0;
```

```
************************ STIMULANTS ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32sti=g32dsti-g32bsti;
     db33sti=g33dsti-g33bsti;
     db37sti=g37dsti-g37bsti;
     db38sti=g38dsti-g38bsti;
     db42sti=g42dsti-g42bsti;
     db43sti=g43dsti-g43bsti;
     db44sti=g44dsti-g44bsti;
     db49sti=g49dsti-g49bsti;
     db50sti=g50dsti-g50bsti;
     db52sti=g52dsti-g52bsti;

    /* age in g3f minus age in b (valid if difference is in range of 1-54)
       g3f = age last time used sti*/
     lb32sti=g3f-g32bsti;
     lb33sti=g3f-g33bsti;
     lb37sti=g3f-g37bsti;
     lb38sti=g3f-g38bsti;

* A CRITERIA;

     if g47asti eq 1 or g48asti eq 1                    then stia1=1;
     if g42asti eq 1 or g43asti eq 1 or g44asti eq 1    then stia2=1;
     if g46asti eq 1                                    then stia3=1;
     if g30asti eq 1 or g31asti eq 1 or g34asti eq 1    then stia4=1;
     if g52asti eq 1                                    then stia5=1;
     if g32asti eq 1 and
          ((1 <= g32csti <= 3) and (crtage > g32bsti))
      or  ((g32csti eq 4) and (1 <= db32sti <=54))      then sti32a6=1;
     if g32asti eq 1 and
          ((1 <= rcusesti <=3) and (crtage > g32bsti))
       or ((rcusesti eq 4) and (1 <= lb32sti <=54))     then sti32a6=2;
     if g32asti eq 1 and g32esti eq 1                   then sti32a6=3;
     if g33asti eq 1 and
          ((1 <= g33csti <= 3) and (crtage > g33bsti))
       or ((g33csti eq 4) and (1 <= db33sti <=54))      then sti33a6=1;
     if g33asti eq 1 and
          ((1 <= rcusesti <=3) and (crtage > g33bsti))
       or ((rcusesti eq 4) and (1 <= lb33sti <=54))     then sti33a6=2;
     if g36asti eq 1                                    then sti36a6=1;

     if g37asti eq 1 and
          ((1 <= g37csti <= 3) and (crtage > g37bsti))
      or  ((g37csti eq 4) and (1 <= db37sti <=54))      then sti37a6=1;
     if g37asti eq 1 and
          ((1 <= rcusesti <=3) and (crtage > g37bsti))
       or ((rcusesti eq 4) and (1 <= lb37sti <=54))     then sti37a6=2;

     if g41asti eq 1                                    then sti41a6=1;
```

```
      * repeat A6 criteria for G38 series;
      if g38asti eq 1 and
           ((1 <= g38csti <= 3) and (crtage > g38bsti))
       or  ((g38csti eq 4) and (1 <= db38sti <=54))    then sti38a6=1;

      if g38asti eq 1 and
           ((1 <= rcusesti <=3) and (crtage > g38bsti))
        or ((rcusesti eq 4) and (1 <= lb38sti <=54))   then sti38a6=2;
      if  (1 <= sti32a6 <=3) or (1 <=sti33a6 <= 2) or (sti36a6 =1)
       or (1 <= sti37a6 <=2) or (sti41a6 eq 1) or (1 <= sti38a6 <=2)
                                                       then stia6=1;
      if g49asti eq 1                                  then stia7=1;
      if g50asti eq 1                                  then stia8=1;
      if g51asti eq 1                                  then stia9=1;
      stiatot=sum(of stia1-stia9);
      if stiatot >= 3 then sticrita=1;

* B CRITERIA;

      if stia1 eq 1                                 then stib1=1;
      if g42asti eq 1 and
          (( 1 <= g42csti <= 3) and (crtage > g42bsti))
       or ((g42csti eq 4) and (1 <= db42sti <= 54))   then sti42b=1;
      if g43asti eq 1 and
          (( 1 <= g43csti <= 3) and (crtage > g43bsti))
       or ((g43csti eq 4) and (1 <= db43sti <= 54))   then sti43b=1;
      if g44asti eq 1 and
          (( 1 <= g44csti <= 3) and (crtage > g44bsti))
       or ((g44csti eq 4) and (1 <= db44sti <= 54))   then sti44b=1;
      if sti42b eq 1 or sti43b eq 1 or sti44b eq 1    then stib2=1;
      if g46asti eq 1                                 then stib3=1;
      if g30asti eq 1 or g31asti eq 1 or g34asti eq 1 then stib4=1;
      if g52asti eq 1 and
          (( 1 <= g52csti <= 3) and (crtage > g52bsti))
       or ((g52csti eq 4) and (1 <= db52sti <= 54))   then stib5=1;
      if stia6=1                                      then stib6=1;
      if g49asti eq 1 and
          (( 1 <= g49csti <= 3) and (crtage > g49bsti))
       or ((g49csti eq 4) and (1 <= db49sti <= 54))   then stib7=1;
      if g50asti eq 1 and
          (( 1 <= g50csti <= 3) and (crtage > g50bsti))
       or ((g50csti eq 4) and (1 <= db50sti <= 54))   then stib8=1;
      stibtot=sum(of stib1-stib8);
      if stibtot >= 2 then sticritb=1;

      if sticrita eq 1 and sticritb eq 1 then dlifsti=1; else dlifsti=0;
```

```
********************** ANALGESICS ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32ags=g32dags-g32bags;
     db33ags=g33dags-g33bags;
     db37ags=g37dags-g37bags;
     db38ags=g38dags-g38bags;
     db42ags=g42dags-g42bags;
     db43ags=g43dags-g43bags;
     db44ags=g44dags-g44bags;
     db49ags=g49dags-g49bags;
     db50ags=g50dags-g50bags;
     db52ags=g52dags-g52bags;

    /* age in g4f minus age in b (valid if difference is in range of 1-54)
       g4f = age last time used ags*/
     lb32ags=g4f-g32bags;
     lb33ags=g4f-g33bags;
     lb37ags=g4f-g37bags;
     lb38ags=g4f-g38bags;

* A CRITERIA;

     if g47aags eq 1 or g48aags eq 1                 then agsa1=1;
     if g42aags eq 1 or g43aags eq 1 or g44aags eq 1 then agsa2=1;
     if g46aags eq 1                                 then agsa3=1;
     if g30aags eq 1 or g31aags eq 1 or g34aags eq 1 then agsa4=1;
     if g52aags eq 1                                 then agsa5=1;
     if g32aags eq 1 and
          ((1 <= g32cags <= 3) and (crtage > g32bags))
      or  ((g32cags eq 4) and (1 <= db32ags <=54))   then ags32a6=1;
     if g32aags eq 1 and
          ((1 <= rcuseags <=3) and (crtage > g32bags))
       or ((rcuseags eq 4) and (1 <= lb32ags <=54))  then ags32a6=2;
     if g32aags eq 1 and g32eags eq 1                then ags32a6=3;
     if g33aags eq 1 and
          ((1 <= g33cags <= 3) and (crtage > g33bags))
       or ((g33cags eq 4) and (1 <= db33ags <=54))   then ags33a6=1;
     if g33aags eq 1 and
          ((1 <= rcuseags <=3) and (crtage > g33bags))
       or ((rcuseags eq 4) and (1 <= lb33ags <=54))  then ags33a6=2;
     if g36aags eq 1                                 then ags36a6=1;

     if g37aags eq 1 and
          ((1 <= g37cags <= 3) and (crtage > g37bags))
      or  ((g37cags eq 4) and (1 <= db37ags <=54))   then ags37a6=1;
     if g37aags eq 1 and
          ((1 <= rcuseags <=3) and (crtage > g37bags))
       or ((rcuseags eq 4) and (1 <= lb37ags <=54))  then ags37a6=2;

     if g41aags eq 1                                 then ags41a6=1;
     if g38aags eq 1 and
```

```
        ((1 <= g38cags <= 3) and (crtage > g38bags))
     or ((g38cags eq 4) and (1 <= db38ags <=54))   then ags38a6=1;

    if g38aags eq 1 and
        ((1 <= rcuseags <=3) and (crtage > g38bags))
      or ((rcuseags eq 4) and (1 <= lb38ags <=54))  then ags38a6=2;
    if  (1 <= ags32a6 <=3) or (1 <=ags33a6 <= 2) or (ags36a6 =1)
     or (1 <= ags37a6 <=2) or (ags41a6 eq 1) or (1 <= ags38a6 <=2)
                                                    then agsa6=1;
    if g49aags eq 1                                 then agsa7=1;
    if g50aags eq 1                                 then agsa8=1;
    if g51aags eq 1                                 then agsa9=1;
    agsatot=sum(of agsa1-agsa9);
    if agsatot >= 3 then agscrita=1;

* B CRITERIA;

    if agsa1 eq 1                                    then agsb1=1;
    if g42aags eq 1 and
        (( 1 <= g42cags <= 3) and (crtage > g42bags))
     or ((g42cags eq 4) and (1 <= db42ags <= 54))    then ags42b=1;
    if g43aags eq 1 and
        (( 1 <= g43cags <= 3) and (crtage > g43bags))
     or ((g43cags eq 4) and (1 <= db43ags <= 54))    then ags43b=1;
    if g44aags eq 1 and
        (( 1 <= g44cags <= 3) and (crtage > g44bags))
     or ((g44cags eq 4) and (1 <= db44ags <= 54))    then ags44b=1;
    if ags42b eq 1 or ags43b eq 1 or ags44b eq 1     then agsb2=1;
    if g46aags eq 1                                  then agsb3=1;
    if g30aags eq 1 or g31aags eq 1 or g34aags eq 1  then agsb4=1;
    if g52aags eq 1 and
        (( 1 <= g52cags <= 3) and (crtage > g52bags))
     or ((g52cags eq 4) and (1 <= db52ags <= 54))    then agsb5=1;
    if agsa6=1                                       then agsb6=1;
    if g49aags eq 1 and
        (( 1 <= g49cags <= 3) and (crtage > g49bags))
     or ((g49cags eq 4) and (1 <= db49ags <= 54))    then agsb7=1;
    if g50aags eq 1 and
        (( 1 <= g50cags <= 3) and (crtage > g50bags))
     or ((g50cags eq 4) and (1 <= db50ags <= 54))    then agsb8=1;
    agsbtot=sum(of agsb1-agsb8);
    if agsbtot >= 2 then agscritb=1;

    if agscrita eq 1 and agscritb eq 1 then dlifags=1; else dlifags=0;
```

```
********************** INHALANTS ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32inh=g32dinh-g32binh;
     db33inh=g33dinh-g33binh;
     db37inh=g37dinh-g37binh;
     db38inh=g38dinh-g38binh;
     db42inh=g42dinh-g42binh;
     db43inh=g43dinh-g43binh;
     db44inh=g44dinh-g44binh;
     db49inh=g49dinh-g49binh;
     db50inh=g50dinh-g50binh;
     db52inh=g52dinh-g52binh;

    /* age in g5f minus age in b (valid if difference is in range of 1-54)
       g5f = age last time used inh*/
     lb32inh=g5f-g32binh;
     lb33inh=g5f-g33binh;
     lb37inh=g5f-g37binh;
     lb38inh=g5f-g38binh;

* A CRITERIA;

     if g47ainh eq 1 or g48ainh eq 1                  then inha1=1;
     if g42ainh eq 1 or g43ainh eq 1 or g44ainh eq 1 then inha2=1;
     if g46ainh eq 1                                  then inha3=1;
     if g30ainh eq 1 or g31ainh eq 1 or g34ainh eq 1 then inha4=1;
     if g52ainh eq 1                                  then inha5=1;
     if g32ainh eq 1 and
          ((1 <= g32cinh <= 3) and (crtage > g32binh))
      or  ((g32cinh eq 4) and (1 <= db32inh <=54))    then inh32a6=1;
     if g32ainh eq 1 and
          ((1 <= rcuseinh <=3) and (crtage > g32binh))
       or ((rcuseinh eq 4) and (1 <= lb32inh <=54))   then inh32a6=2;
     if g32ainh eq 1 and g32einh eq 1                 then inh32a6=3;
     if g33ainh eq 1 and
          ((1 <= g33cinh <= 3) and (crtage > g33binh))
       or ((g33cinh eq 4) and (1 <= db33inh <=54))    then inh33a6=1;
     if g33ainh eq 1 and
          ((1 <= rcuseinh <=3) and (crtage > g33binh))
       or ((rcuseinh eq 4) and (1 <= lb33inh <=54))   then inh33a6=2;
     if g36ainh eq 1                                  then inh36a6=1;

     if g37ainh eq 1 and
          ((1 <= g37cinh <= 3) and (crtage > g37binh))
      or  ((g37cinh eq 4) and (1 <= db37inh <=54))    then inh37a6=1;
     if g37ainh eq 1 and
          ((1 <= rcuseinh <=3) and (crtage > g37binh))
       or ((rcuseinh eq 4) and (1 <= lb37inh <=54))   then inh37a6=2;

     if g41ainh eq 1                                  then inh41a6=1;
     if g38ainh eq 1 and
```

```
     ((1 <= g38cinh <= 3) and (crtage > g38binh))
 or  ((g38cinh eq 4) and (1 <= db38inh <=54))   then inh38a6=1;

if g38ainh eq 1 and
     ((1 <= rcuseinh <=3) and (crtage > g38binh))
  or ((rcuseinh eq 4) and (1 <= lb38inh <=54))  then inh38a6=2;
if  (1 <= inh32a6 <=3) or (1 <=inh33a6 <= 2) or (inh36a6 =1)
 or (1 <= inh37a6 <=2) or (inh41a6 eq 1) or (1 <= inh38a6 <=2)
                                                then inha6=1;
if g49ainh eq 1                                 then inha7=1;
if g50ainh eq 1                                 then inha8=1;
if g51ainh eq 1                                 then inha9=1;
inhatot=sum(of inha1-inha9);
if inhatot >= 3 then inhcrita=1;

* B CRITERIA;

if inha1 eq 1                                   then inhb1=1;
if g42ainh eq 1 and
    (( 1 <= g42cinh <= 3) and (crtage > g42binh))
 or ((g42cinh eq 4) and (1 <= db42inh <= 54))   then inh42b=1;
if g43ainh eq 1 and
    (( 1 <= g43cinh <= 3) and (crtage > g43binh))
 or ((g43cinh eq 4) and (1 <= db43inh <= 54))   then inh43b=1;
if g44ainh eq 1 and
    (( 1 <= g44cinh <= 3) and (crtage > g44binh))
 or ((g44cinh eq 4) and (1 <= db44inh <= 54))   then inh44b=1;
if inh42b eq 1 or inh43b eq 1 or inh44b eq 1    then inhb2=1;
if g46ainh eq 1                                 then inhb3=1;
if g30ainh eq 1 or g31ainh eq 1 or g34ainh eq 1 then inhb4=1;
if g52ainh eq 1 and
    (( 1 <= g52cinh <= 3) and (crtage > g52binh))
 or ((g52cinh eq 4) and (1 <= db52inh <= 54))   then inhb5=1;
if inha6=1                                      then inhb6=1;
if g49ainh eq 1 and
    (( 1 <= g49cinh <= 3) and (crtage > g49binh))
 or ((g49cinh eq 4) and (1 <= db49inh <= 54))   then inhb7=1;
if g50ainh eq 1 and
    (( 1 <= g50cinh <= 3) and (crtage > g50binh))
 or ((g50cinh eq 4) and (1 <= db50inh <= 54))   then inhb8=1;
inhbtot=sum(of inhb1-inhb8);
if inhbtot >= 2 then inhcritb=1;

if inhcrita eq 1 and inhcritb eq 1 then dlifinh=1; else dlifinh=0;
```

```
********************** MARIJUANA ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32mar=g32dmar-g32bmar;
     db33mar=g33dmar-g33bmar;
     db37mar=g37dmar-g37bmar;
     db38mar=g38dmar-g38bmar;
     db42mar=g42dmar-g42bmar;
     db43mar=g43dmar-g43bmar;
     db44mar=g44dmar-g44bmar;
     db49mar=g49dmar-g49bmar;
     db50mar=g50dmar-g50bmar;
     db52mar=g52dmar-g52bmar;

    /* age in g6f minus age in b (valid if difference is in range of 1-54)
       g6f = age last time used mar*/
     lb32mar=g6f-g32bmar;
     lb33mar=g6f-g33bmar;
     lb37mar=g6f-g37bmar;
     lb38mar=g6f-g38bmar;

* A CRITERIA;

     if g47amar eq 1 or g48amar eq 1                 then mara1=1;
     if g42amar eq 1 or g43amar eq 1 or g44amar eq 1 then mara2=1;
     if g46amar eq 1                                 then mara3=1;
     if g30amar eq 1 or g31amar eq 1 or g34amar eq 1 then mara4=1;
     if g52amar eq 1                                 then mara5=1;
     if g32amar eq 1 and
          ((1 <= g32cmar <= 3) and (crtage > g32bmar))
      or  ((g32cmar eq 4) and (1 <= db32mar <=54))   then mar32a6=1;
     if g32amar eq 1 and
          ((1 <= rcusemar <=3) and (crtage > g32bmar))
       or ((rcusemar eq 4) and (1 <= lb32mar <=54))  then mar32a6=2;
     if g32amar eq 1 and g32emar eq 1                then mar32a6=3;

     if g33amar eq 1 and
          ((1 <= g33cmar <= 3) and (crtage > g33bmar))
       or ((g33cmar eq 4) and (1 <= db33mar <=54))   then mar33a6=1;
     if g33amar eq 1 and
          ((1 <= rcusemar <=3) and (crtage > g33bmar))
       or ((rcusemar eq 4) and (1 <= lb33mar <=54))  then mar33a6=2;

     if g36amar eq 1                                 then mar36a6=1;

     if g37amar eq 1 and
          ((1 <= g37cmar <= 3) and (crtage > g37bmar))
      or  ((g37cmar eq 4) and (1 <= db37mar <=54))   then mar37a6=1;
     if g37amar eq 1 and
          ((1 <= rcusemar <=3) and (crtage > g37bmar))
       or ((rcusemar eq 4) and (1 <= lb37mar <=54))  then mar37a6=2;
```

```
     if g41amar eq 1                                    then mar41a6=1;

     if g38amar eq 1 and
          ((1 <= g38cmar <= 3) and (crtage > g38bmar))
      or  ((g38cmar eq 4) and (1 <= db38mar <=54))      then mar38a6=1;

     if g38amar eq 1 and
          ((1 <= rcusemar <=3) and (crtage > g38bmar))
       or ((rcusemar eq 4) and (1 <= lb38mar <=54))     then mar38a6=2;
     if  (1 <= mar32a6 <=3) or (1 <=mar33a6 <= 2) or (mar36a6 =1)
      or (1 <= mar37a6 <=2) or (mar41a6 eq 1) or (1 <= mar38a6 <=2)
                                                       then mara6=1;
     if g49amar eq 1                                   then mara7=1;
     if g50amar eq 1                                   then mara8=1;
     if g51amar eq 1                                   then mara9=1;
     maratot=sum(of mara1-mara9);
     if maratot >= 3 then marcrita=1;

* B CRITERIA;

     if mara1 eq 1                                     then marb1=1;
     if g42amar eq 1 and
         (( 1 <= g42cmar <= 3) and (crtage > g42bmar))
      or ((g42cmar eq 4) and (1 <= db42mar <= 54))     then mar42b=1;
     if g43amar eq 1 and
         (( 1 <= g43cmar <= 3) and (crtage > g43bmar))
      or ((g43cmar eq 4) and (1 <= db43mar <= 54))     then mar43b=1;
     if g44amar eq 1 and
         (( 1 <= g44cmar <= 3) and (crtage > g44bmar))
      or ((g44cmar eq 4) and (1 <= db44mar <= 54))     then mar44b=1;
     if mar42b eq 1 or mar43b eq 1 or mar44b eq 1      then marb2=1;
     if g46amar eq 1                                   then marb3=1;
     if g30amar eq 1 or g31amar eq 1 or g34amar eq 1 then marb4=1;
     if g52amar eq 1 and
         (( 1 <= g52cmar <= 3) and (crtage > g52bmar))
      or ((g52cmar eq 4) and (1 <= db52mar <= 54))     then marb5=1;
     if mara6=1                                        then marb6=1;
     if g49amar eq 1 and
         (( 1 <= g49cmar <= 3) and (crtage > g49bmar))
      or ((g49cmar eq 4) and (1 <= db49mar <= 54))     then marb7=1;
     if g50amar eq 1 and
         (( 1 <= g50cmar <= 3) and (crtage > g50bmar))
      or ((g50cmar eq 4) and (1 <= db50mar <= 54))     then marb8=1;
     marbtot=sum(of marb1-marb8);
     if marbtot >= 2 then marcritb=1;

     if marcrita eq 1 and marcritb eq 1 then dlifmar=1; else dlifmar=0;
```

```
********************** COCAINE ********************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32coc=g32dcoc-g32bcoc;
     db33coc=g33dcoc-g33bcoc;
     db37coc=g37dcoc-g37bcoc;
     db38coc=g38dcoc-g38bcoc;
     db42coc=g42dcoc-g42bcoc;
     db43coc=g43dcoc-g43bcoc;
     db44coc=g44dcoc-g44bcoc;
     db49coc=g49dcoc-g49bcoc;
     db50coc=g50dcoc-g50bcoc;
     db52coc=g52dcoc-g52bcoc;

    /* age in g7f minus age in b (valid if difference is in range of 1-54)
       g7f = age last time used coc */
     lb32coc=g7f-g32bcoc;
     lb33coc=g7f-g33bcoc;
     lb37coc=g7f-g37bcoc;
     lb38coc=g7f-g38bcoc;

* A CRITERIA;

     if g47acoc eq 1 or g48acoc eq 1                 then coca1=1;
     if g42acoc eq 1 or g43acoc eq 1 or g44acoc eq 1 then coca2=1;
     if g46acoc eq 1                                 then coca3=1;
     if g30acoc eq 1 or g31acoc eq 1 or g34acoc eq 1 then coca4=1;
     if g52acoc eq 1                                 then coca5=1;
     if g32acoc eq 1 and
          ((1 <= g32ccoc <= 3) and (crtage > g32bcoc))
      or  ((g32ccoc eq 4) and (1 <= db32coc <=54))   then coc32a6=1;
     if g32acoc eq 1 and
          ((1 <= rcusecoc <=3) and (crtage > g32bcoc))
       or ((rcusecoc eq 4) and (1 <= lb32coc <=54))  then coc32a6=2;
     if g32acoc eq 1 and g32ecoc eq 1                then coc32a6=3;
     if g33acoc eq 1 and
          ((1 <= g33ccoc <= 3) and (crtage > g33bcoc))
       or ((g33ccoc eq 4) and (1 <= db33coc <=54))   then coc33a6=1;
     if g33acoc eq 1 and
          ((1 <= rcusecoc <=3) and (crtage > g33bcoc))
       or ((rcusecoc eq 4) and (1 <= lb33coc <=54))  then coc33a6=2;
     if g36acoc eq 1                                 then coc36a6=1;

     if g37acoc eq 1 and
          ((1 <= g37ccoc <= 3) and (crtage > g37bcoc))
      or  ((g37ccoc eq 4) and (1 <= db37coc <=54))   then coc37a6=1;
     if g37acoc eq 1 and
          ((1 <= rcusecoc <=3) and (crtage > g37bcoc))
       or ((rcusecoc eq 4) and (1 <= lb37coc <=54))  then coc37a6=2;

     if g41acoc eq 1                                 then coc41a6=1;
     if g38acoc eq 1 and
```

```
        ((1 <= g38ccoc <= 3) and (crtage > g38bcoc))
     or  ((g38ccoc eq 4) and (1 <= db38coc <=54))   then coc38a6=1;

    if g38acoc eq 1 and
        ((1 <= rcusecoc <=3) and (crtage > g38bcoc))
      or ((rcusecoc eq 4) and (1 <= lb38coc <=54))  then coc38a6=2;
    if  (1 <= coc32a6 <=3) or (1 <=coc33a6 <= 2) or (coc36a6 =1)
     or (1 <= coc37a6 <=2) or (coc41a6 eq 1) or (1 <= coc38a6 <=2)
                                                    then coca6=1;
    if g49acoc eq 1                                 then coca7=1;
    if g50acoc eq 1                                 then coca8=1;
    if g51acoc eq 1                                 then coca9=1;
    cocatot=sum(of coca1-coca9);
    if cocatot >= 3 then coccrita=1;

* B CRITERIA;

    if coca1 eq 1                                   then cocb1=1;
    if g42acoc eq 1 and
        (( 1 <= g42ccoc <= 3) and (crtage > g42bcoc))
     or ((g42ccoc eq 4) and (1 <= db42coc <= 54))   then coc42b=1;
    if g43acoc eq 1 and
        (( 1 <= g43ccoc <= 3) and (crtage > g43bcoc))
     or ((g43ccoc eq 4) and (1 <= db43coc <= 54))   then coc43b=1;
    if g44acoc eq 1 and
        (( 1 <= g44ccoc <= 3) and (crtage > g44bcoc))
     or ((g44ccoc eq 4) and (1 <= db44coc <= 54))   then coc44b=1;
    if coc42b eq 1 or coc43b eq 1 or coc44b eq 1    then cocb2=1;
    if g46acoc eq 1                                 then cocb3=1;
    if g30acoc eq 1 or g31acoc eq 1 or g34acoc eq 1 then cocb4=1;
    if g52acoc eq 1 and
        (( 1 <= g52ccoc <= 3) and (crtage > g52bcoc))
     or ((g52ccoc eq 4) and (1 <= db52coc <= 54))   then cocb5=1;
    if coca6=1                                      then cocb6=1;
    if g49acoc eq 1 and
        (( 1 <= g49ccoc <= 3) and (crtage > g49bcoc))
     or ((g49ccoc eq 4) and (1 <= db49coc <= 54))   then cocb7=1;
    if g50acoc eq 1 and
        (( 1 <= g50ccoc <= 3) and (crtage > g50bcoc))
     or ((g50ccoc eq 4) and (1 <= db50coc <= 54))   then cocb8=1;
    cocbtot=sum(of cocb1-cocb8);
    if cocbtot >= 2 then coccritb=1;

    if coccrita eq 1 and coccritb eq 1 then dlifcoc=1; else dlifcoc=0;
```

```
********************* HALLUCINOGENS ****************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32hal=g32dhal-g32bhal;
     db33hal=g33dhal-g33bhal;
     db37hal=g37dhal-g37bhal;
     db38hal=g38dhal-g38bhal;
     db42hal=g42dhal-g42bhal;
     db43hal=g43dhal-g43bhal;
     db44hal=g44dhal-g44bhal;
     db49hal=g49dhal-g49bhal;
     db50hal=g50dhal-g50bhal;
     db52hal=g52dhal-g52bhal;

    /* age in g8f minus age in b (valid if difference is in range of 1-54)
       g8f = age last time used hal */
     lb32hal=g8f-g32bhal;
     lb33hal=g8f-g33bhal;
     lb37hal=g8f-g37bhal;
     lb38hal=g8f-g38bhal;

* A CRITERIA;

     if g47ahal eq 1 or g48ahal eq 1                then hala1=1;
     if g42ahal eq 1 or g43ahal eq 1 or g44ahal eq 1 then hala2=1;
     if g46ahal eq 1                                then hala3=1;
     if g30ahal eq 1 or g31ahal eq 1 or g34ahal eq 1 then hala4=1;
     if g52ahal eq 1                                then hala5=1;
     if g32ahal eq 1 and
          ((1 <= g32chal <= 3) and (crtage > g32bhal))
      or  ((g32chal eq 4) and (1 <= db32hal <=54))   then hal32a6=1;
     if g32ahal eq 1 and
          ((1 <= rcusehal <=3) and (crtage > g32bhal))
       or ((rcusehal eq 4) and (1 <= lb32hal <=54))  then hal32a6=2;
     if g32ahal eq 1 and g32ehal eq 1               then hal32a6=3;
     if g33ahal eq 1 and
          ((1 <= g33chal <= 3) and (crtage > g33bhal))
       or ((g33chal eq 4) and (1 <= db33hal <=54))   then hal33a6=1;
     if g33ahal eq 1 and
          ((1 <= rcusehal <=3) and (crtage > g33bhal))
       or ((rcusehal eq 4) and (1 <= lb33hal <=54))  then hal33a6=2;
     if g36ahal eq 1                                then hal36a6=1;

     if g37ahal eq 1 and
          ((1 <= g37chal <= 3) and (crtage > g37bhal))
      or  ((g37chal eq 4) and (1 <= db37hal <=54))   then hal37a6=1;
     if g37ahal eq 1 and
          ((1 <= rcusehal <=3) and (crtage > g37bhal))
       or ((rcusehal eq 4) and (1 <= lb37hal <=54))  then hal37a6=2;

     if g41ahal eq 1                                then hal41a6=1;
     if g38ahal eq 1 and
```

```
      ((1 <= g38chal <= 3) and (crtage > g38bhal))
   or  ((g38chal eq 4) and (1 <= db38hal <=54))   then hal38a6=1;

  if g38ahal eq 1 and
      ((1 <= rcusehal <=3) and (crtage > g38bhal))
    or ((rcusehal eq 4) and (1 <= lb38hal <=54))  then hal38a6=2;
  if  (1 <= hal32a6 <=3) or (1 <=hal33a6 <= 2) or (hal36a6 =1)
   or (1 <= hal37a6 <=2) or (hal41a6 eq 1) or (1 <= hal38a6 <=2)
                                                  then hala6=1;
  if g49ahal eq 1                                 then hala7=1;
  if g50ahal eq 1                                 then hala8=1;
  if g51ahal eq 1                                 then hala9=1;
  halatot=sum(of halal-hala9);
  if halatot >= 3 then halcrita=1;

* B CRITERIA;

  if halal eq 1                                   then halb1=1;
  if g42ahal eq 1 and
      (( 1 <= g42chal <= 3) and (crtage > g42bhal))
   or ((g42chal eq 4) and (1 <= db42hal <= 54))   then hal42b=1;
  if g43ahal eq 1 and
      (( 1 <= g43chal <= 3) and (crtage > g43bhal))
   or ((g43chal eq 4) and (1 <= db43hal <= 54))   then hal43b=1;
  if g44ahal eq 1 and
      (( 1 <= g44chal <= 3) and (crtage > g44bhal))
   or ((g44chal eq 4) and (1 <= db44hal <= 54))   then hal44b=1;
  if hal42b eq 1 or hal43b eq 1 or hal44b eq 1    then halb2=1;
  if g46ahal eq 1                                 then halb3=1;
  if g30ahal eq 1 or g31ahal eq 1 or g34ahal eq 1 then halb4=1;
  if g52ahal eq 1 and
      (( 1 <= g52chal <= 3) and (crtage > g52bhal))
   or ((g52chal eq 4) and (1 <= db52hal <= 54))   then halb5=1;
  if hala6=1                                      then halb6=1;
  if g49ahal eq 1 and
      (( 1 <= g49chal <= 3) and (crtage > g49bhal))
   or ((g49chal eq 4) and (1 <= db49hal <= 54))   then halb7=1;
  if g50ahal eq 1 and
      (( 1 <= g50chal <= 3) and (crtage > g50bhal))
   or ((g50chal eq 4) and (1 <= db50hal <= 54))   then halb8=1;
  halbtot=sum(of halb1-halb8);
  if halbtot >= 2 then halcritb=1;

  if halcrita eq 1 and halcritb eq 1 then dlifhal=1; else dlifhal=0;
```

```
******************** HEROIN ****************************;

    /* age in d minus age in b (valid if difference is in range of 1-54)*/
     db32her=g32dher-g32bher;
     db33her=g33dher-g33bher;
     db37her=g37dher-g37bher;
     db38her=g38dher-g38bher;
     db42her=g42dher-g42bher;
     db43her=g43dher-g43bher;
     db44her=g44dher-g44bher;
     db49her=g49dher-g49bher;
     db50her=g50dher-g50bher;
     db52her=g52dher-g52bher;

    /* age in g9f minus age in b (valid if difference is in range of 1-54)
       g9f = age last time used her */
     lb32her=g9f-g32bher;
     lb33her=g9f-g33bher;
     lb37her=g9f-g37bher;
     lb38her=g9f-g38bher;

* A CRITERIA;

     if g47aher eq 1 or g48aher eq 1                  then hera1=1;
     if g42aher eq 1 or g43aher eq 1 or g44aher eq 1 then hera2=1;
     if g46aher eq 1                                  then hera3=1;
     if g30aher eq 1 or g31aher eq 1 or g34aher eq 1 then hera4=1;
     if g52aher eq 1                                  then hera5=1;
     if g32aher eq 1 and
          ((1 <= g32cher <= 3) and (crtage > g32bher))
      or  ((g32cher eq 4) and (1 <= db32her <=54))    then her32a6=1;
     if g32aher eq 1 and
          ((1 <= rcuseher <=3) and (crtage > g32bher))
       or ((rcuseher eq 4) and (1 <= lb32her <=54))   then her32a6=2;
     if g32aher eq 1 and g32eher eq 1                 then her32a6=3;
     if g33aher eq 1 and
          ((1 <= g33cher <= 3) and (crtage > g33bher))
       or ((g33cher eq 4) and (1 <= db33her <=54))    then her33a6=1;
     if g33aher eq 1 and
          ((1 <= rcuseher <=3) and (crtage > g33bher))
       or ((rcuseher eq 4) and (1 <= lb33her <=54))   then her33a6=2;
     if g36aher eq 1                                  then her36a6=1;

     if g37aher eq 1 and
          ((1 <= g37cher <= 3) and (crtage > g37bher))
      or  ((g37cher eq 4) and (1 <= db37her <=54))    then her37a6=1;
     if g37aher eq 1 and
          ((1 <= rcuseher <=3) and (crtage > g37bher))
       or ((rcuseher eq 4) and (1 <= lb37her <=54))   then her37a6=2;

     if g41aher eq 1                                  then her41a6=1;
     if g38aher eq 1 and
```

```
        ((1 <= g38cher <= 3) and (crtage > g38bher))
     or  ((g38cher eq 4) and (1 <= db38her <=54))    then her38a6=1;

    if g38aher eq 1 and
        ((1 <= rcuseher <=3) and (crtage > g38bher))
      or ((rcuseher eq 4) and (1 <= lb38her <=54))  then her38a6=2;
    if  (1 <= her32a6 <=3) or (1 <=her33a6 <= 2) or (her36a6 =1)
     or (1 <= her37a6 <=2) or (her41a6 eq 1) or (1 <= her38a6 <=2)
                                                    then hera6=1;
    if g49aher eq 1                                 then hera7=1;
    if g50aher eq 1                                 then hera8=1;
    if g51aher eq 1                                 then hera9=1;
    heratot=sum(of heral-hera9);
    if heratot >= 3 then hercrita=1;

* B CRITERIA;

    if heral eq 1                                   then herb1=1;
    if g42aher eq 1 and
        (( 1 <= g42cher <= 3) and (crtage > g42bher))
     or ((g42cher eq 4) and (1 <= db42her <= 54))   then her42b=1;
    if g43aher eq 1 and
        (( 1 <= g43cher <= 3) and (crtage > g43bher))
     or ((g43cher eq 4) and (1 <= db43her <= 54))   then her43b=1;
    if g44aher eq 1 and
        (( 1 <= g44cher <= 3) and (crtage > g44bher))
     or ((g44cher eq 4) and (1 <= db44her <= 54))   then her44b=1;
    if her42b eq 1 or her43b eq 1 or her44b eq 1    then herb2=1;
    if g46aher eq 1                                 then herb3=1;
    if g30aher eq 1 or g31aher eq 1 or g34aher eq 1 then herb4=1;
    if g52aher eq 1 and
        (( 1 <= g52cher <= 3) and (crtage > g52bher))
     or ((g52cher eq 4) and (1 <= db52her <= 54))   then herb5=1;
    if hera6=1                                      then herb6=1;
    if g49aher eq 1 and
        (( 1 <= g49cher <= 3) and (crtage > g49bher))
     or ((g49cher eq 4) and (1 <= db49her <= 54))   then herb7=1;
    if g50aher eq 1 and
        (( 1 <= g50cher <= 3) and (crtage > g50bher))
     or ((g50cher eq 4) and (1 <= db50her <= 54))   then herb8=1;
    herbtot=sum(of herb1-herb8);
    if herbtot >= 2 then hercritb=1;

    if hercrita eq 1 and hercritb eq 1 then dlifher=1; else dlifher=0;
```

```
*************************************************************;
/* 2. DRUG2.SAS
      DLOAxxx:  DEPENDENCE, LIFETIME, ONSET AGE

                and/or 2nd A and/or 1st A and/or B age is missing.
                rank ages of A3rd, A2nd, A1st, B2nd, B1st and
                select max valid as the lifetime onset age
                (rather than imputing)
                exception: 2 cases still hand-coded see end of program

        Ages as stored in nshsdrug.ssd01 are set to 999 rather than '.'
        When using the min function, . is considered less than a value;
        But when a valid age is compared to 999 (as in crtage > 999) the
        expression is correctly evaluated as false.
*/

*---------------------------------------------------------------*
|                            ALCOHOL                            |
*---------------------------------------------------------------*;

* A Criteria Ages;

     if dlifalc eq 1 and alca1 eq 1 then
           oaalca1 = min(g47balc,g48balc); else oaalca1=999;
     if dlifalc eq 1 and alca2 eq 1 then
           oaalca2 = min(g42balc,g43balc,g44balc); else oaalca2=999;
     if dlifalc eq 1 and alca3 eq 1 then oaalca3 = g46balc; else oaalca3=999;
     if dlifalc eq 1 and alca4 eq 1 then
           oaalca4= min(g30balc,g31balc,g34balc); else oaalca4=999;
     if dlifalc eq 1 and alca5 eq 1 then oaalca5 = g52balc; else oaalca5=999;
     if dlifalc eq 1 and alca6 eq 1 then
           oaalca6 = min(g32balc,g33balc,g36balc,g37balc,g38balc,g41balc);
                     else oaalca6=999;
     if dlifalc eq 1 and alca7 eq 1 then oaalca7 = g49balc; else oaalca7=999;
     if dlifalc eq 1 and alca8 eq 1 then oaalca8 = g50balc; else oaalca8=999;

         /*  there is no g51balc so cannot make oaalca9  */

* B criteria ages;

     if dlifalc eq 1 and alcb1 eq 1 then
           oaalcb1 = min(g47balc,g48balc); else oaalcb1=999;
     if dlifalc eq 1 and alcb2 eq 1 then
           oaalcb2 = min(g42balc,g43balc,g44balc); else oaalcb2=999;
     if dlifalc eq 1 and alcb3 eq 1 then oaalcb3 = g46balc; else oaalcb3=999;
     if dlifalc eq 1 and alcb4 eq 1 then oaalcb4= min(g30balc,g31balc,g34balc);
                                    else oaalcb4=999;
     if dlifalc eq 1 and alcb5 eq 1 then oaalcb5 = g52balc; else oaalcb5=999;
     if dlifalc eq 1 and alcb6 eq 1 then
           oaalcb6 =min(g32balc,g33balc,g36balc,g37balc,g38balc,g41balc);
                    else oaalcb6=999;
     if dlifalc eq 1 and alcb7 eq 1 then oaalcb7 = g49balc;  else oaalcb7=999;
```

```
     if dlifalc eq 1 and alcb8 eq 1 then oaalcb8 = g50balc; else oaalcb8=999;

     alca3rd=ordinal(3, oaalca1, oaalca2, oaalca3, oaalca4, oaalca5,
             oaalca6, oaalca7, oaalca8);
     alca2nd=ordinal(2, oaalca1, oaalca2, oaalca3, oaalca4, oaalca5,
             oaalca6, oaalca7, oaalca8);
     alcalst=ordinal(1, oaalca1, oaalca2, oaalca3, oaalca4, oaalca5,
             oaalca6, oaalca7, oaalca8);
     alcb2nd=ordinal(2, oaalcb1, oaalcb2, oaalcb3, oaalcb4, oaalcb5,
             oaalcb6, oaalcb7, oaalcb8);
     alcblst=ordinal(1, oaalcb1, oaalcb2, oaalcb3, oaalcb4, oaalcb5,
             oaalcb6, oaalcb7, oaalcb8);

     array miss1(*) alca3rd alca2nd alcalst aclb2nd alcblst;
           do i=1 to dim(miss1);
           if miss1(i)=999 then miss1(i)=.; end; drop i;

      dloaalc=max(alca3rd,alca2nd,alcalst,aclb2nd,alcblst);


*-------------------------------------------------------------------*
|                          SEDATIVES                                |
*-------------------------------------------------------------------*;

          /* A Criteria Ages */
     if dlifsed eq 1 and seda1 eq 1 then
           oaseda1 = min(g47bsed,g48bsed); else oaseda1=999;
     if dlifsed eq 1 and seda2 eq 1 then
           oaseda2 = min(g42bsed,g43bsed,g44bsed); else oaseda2=999;
     if dlifsed eq 1 and seda3 eq 1 then
           oaseda3 = g46bsed; else oaseda3=999;
     if dlifsed eq 1 and seda4 eq 1 then
           oaseda4= min(g30bsed,g31bsed,g34bsed); else oaseda4=999;
     if dlifsed eq 1 and seda5 eq 1 then
           oaseda5 = g52bsed; else oaseda5=999;
     if dlifsed eq 1 and seda6 eq 1 then
           oaseda6 =min(g32bsed,g33bsed,g36bsed,g37bsed,g38bsed,g41bsed);
                    else oaseda6=999;
     if dlifsed eq 1 and seda7 eq 1 then
           oaseda7 = g49bsed; else oaseda7=999;
     if dlifsed eq 1 and seda8 eq 1 then
           oaseda8 = g50bsed; else oaseda8=999;
         /*  there is no g51bsed so cannot make oaseda9  */

* B criteria ages;

     if dlifsed eq 1 and sedb1 eq 1 then
           oasedb1 = min(g47bsed,g48bsed); else oasedb1=999;
     if dlifsed eq 1 and sedb2 eq 1 then
           oasedb2 = min(g42bsed,g43bsed,g44bsed); else oasedb2=999;
     if dlifsed eq 1 and sedb3 eq 1 then
           oasedb3 = g46bsed; else oasedb3=999;
```

```
      if dlifsed eq 1 and sedb4 eq 1 then
            oasedb4= min(g30bsed,g31bsed,g34bsed); else oasedb4=999;
      if dlifsed eq 1 and sedb5 eq 1 then
            oasedb5 = g52bsed; else oasedb5=999;
      if dlifsed eq 1 and sedb6 eq 1 then
            oasedb6 =min(g32bsed,g33bsed,g36bsed,g37bsed,g38bsed,g41bsed);
                  else oasedb6=999;
      if dlifsed eq 1 and sedb7 eq 1 then
            oasedb7 = g49bsed;  else oasedb7=999;
      if dlifsed eq 1 and sedb8 eq 1 then
            oasedb8 = g50bsed; else oasedb8=999;

      seda3rd=ordinal(3, oaseda1, oaseda2, oaseda3, oaseda4, oaseda5,
              oaseda6, oaseda7, oaseda8);
      seda2nd=ordinal(2, oaseda1, oaseda2, oaseda3, oaseda4, oaseda5,
              oaseda6, oaseda7, oaseda8);
      sedalst=ordinal(1, oaseda1, oaseda2, oaseda3, oaseda4, oaseda5,
              oaseda6, oaseda7, oaseda8);
      sedb2nd=ordinal(2, oasedb1, oasedb2, oasedb3, oasedb4, oasedb5,
              oasedb6, oasedb7, oasedb8);
      sedb1st=ordinal(1, oasedb1, oasedb2, oasedb3, oasedb4, oasedb5,
              oasedb6, oasedb7, oasedb8);

      array miss2(*) seda3rd seda2nd sedalst sedb2nd sedb1st;
            do i=1 to dim(miss2);
            if miss2(i)=999 then miss2(i)=.; end; drop i;

       dloased=max(seda3rd,seda2nd,sedalst,sedb2nd,sedb1st);

*-------------------------------------------------------------------*
|                          TRANQUILIZERS                            |
*-------------------------------------------------------------------*;

* A Criteria Ages;

      if dliftrq eq 1 and trqa1 eq 1 then
            oatrqa1 = min(g47btrq,g48btrq); else oatrqa1=999;
      if dliftrq eq 1 and trqa2 eq 1 then
            oatrqa2 = min(g42btrq,g43btrq,g44btrq); else oatrqa2=999;
      if dliftrq eq 1 and trqa3 eq 1 then
            oatrqa3 = g46btrq; else oatrqa3=999;
      if dliftrq eq 1 and trqa4 eq 1 then
            oatrqa4= min(g30btrq,g31btrq,g34btrq); else oatrqa4=999;
      if dliftrq eq 1 and trqa5 eq 1 then
            oatrqa5 = g52btrq; else oatrqa5=999;
      if dliftrq eq 1 and trqa6 eq 1 then
            oatrqa6 =min(g32btrq,g33btrq,g36btrq,g37btrq,g38btrq,g41btrq);
                  else oatrqa6=999;
      if dliftrq eq 1 and trqa7 eq 1 then
            oatrqa7 = g49btrq; else oatrqa7=999;
      if dliftrq eq 1 and trqa8 eq 1 then
            oatrqa8 = g50btrq; else oatrqa8=999;
```

```
         /*  there is no g51btrq so cannot make oatrqa9  */

* B criteria ages;

     if dliftrq eq 1 and trqb1 eq 1 then
           oatrqb1 = min(g47btrq,g48btrq); else oatrqb1=999;
     if dliftrq eq 1 and trqb2 eq 1 then
           oatrqb2 = min(g42btrq,g43btrq,g44btrq); else oatrqb2=999;
     if dliftrq eq 1 and trqb3 eq 1 then
           oatrqb3 = g46btrq; else oatrqb3=999;
     if dliftrq eq 1 and trqb4 eq 1 then
           oatrqb4= min(g30btrq,g31btrq,g34btrq); else oatrqb4=999;
     if dliftrq eq 1 and trqb5 eq 1 then
           oatrqb5 = g52btrq; else oatrqb5=999;
     if dliftrq eq 1 and trqb6 eq 1 then
           oatrqb6 = min(g32btrq,g33btrq,g36btrq,g37btrq,g38btrq,g41btrq);
                      else oatrqb6=999;
     if dliftrq eq 1 and trqb7 eq 1 then
           oatrqb7 = g49btrq;  else oatrqb7=999;
     if dliftrq eq 1 and trqb8 eq 1 then
           oatrqb8 = g50btrq; else oatrqb8=999;

     trqa3rd=ordinal(3, oatrqa1, oatrqa2, oatrqa3, oatrqa4, oatrqa5,
             oatrqa6, oatrqa7, oatrqa8);
     trqa2nd=ordinal(2, oatrqa1, oatrqa2, oatrqa3, oatrqa4, oatrqa5,
             oatrqa6, oatrqa7, oatrqa8);
     trqa1st=ordinal(1, oatrqa1, oatrqa2, oatrqa3, oatrqa4, oatrqa5,
             oatrqa6, oatrqa7, oatrqa8);
     trqb2nd=ordinal(2, oatrqb1, oatrqb2, oatrqb3, oatrqb4, oatrqb5,
             oatrqb6, oatrqb7, oatrqb8);
     trqb1st=ordinal(1, oatrqb1, oatrqb2, oatrqb3, oatrqb4, oatrqb5,
             oatrqb6, oatrqb7, oatrqb8);

     array miss3(*) trqa3rd trqa2nd trqa1st trqb2nd trqb1st;
           do i=1 to dim(miss3);
           if miss3(i)=999 then miss3(i)=.; end; drop i;

      dloatrq=max(trqa3rd,trqa2nd,trqa1st,trqb2nd,trqb1st);

*-------------------------------------------------------------------*
|                          STIMULANTS                               |
*-------------------------------------------------------------------*;

* A Criteria Ages;

     if dlifsti eq 1 and stia1 eq 1 then
           oastia1 = min(g47bsti,g48bsti); else oastia1=999;
     if dlifsti eq 1 and stia2 eq 1 then
           oastia2 = min(g42bsti,g43bsti,g44bsti); else oastia2=999;
     if dlifsti eq 1 and stia3 eq 1 then
           oastia3 = g46bsti; else oastia3=999;
     if dlifsti eq 1 and stia4 eq 1 then
```

```
      oastia4= min(g30bsti,g31bsti,g34bsti); else oastia4=999;
if dlifsti eq 1 and stia5 eq 1 then
      oastia5 = g52bsti; else oastia5=999;
if dlifsti eq 1 and stia6 eq 1 then
      oastia6 = min(g32bsti,g33bsti,g36bsti,g37bsti,g38bsti,g41bsti);
                 else oastia6=999;
if dlifsti eq 1 and stia7 eq 1 then
      oastia7 = g49bsti; else oastia7=999;
if dlifsti eq 1 and stia8 eq 1 then
      oastia8 = g50bsti; else oastia8=999;
    /*  there is no g51bsti so cannot make oastia9  */

* B criteria ages;

if dlifsti eq 1 and stib1 eq 1 then
      oastib1 = min(g47bsti,g48bsti); else oastib1=999;
if dlifsti eq 1 and stib2 eq 1 then
      oastib2 = min(g42bsti,g43bsti,g44bsti); else oastib2=999;
if dlifsti eq 1 and stib3 eq 1 then
      oastib3 = g46bsti; else oastib3=999;
if dlifsti eq 1 and stib4 eq 1 then
      oastib4= min(g30bsti,g31bsti,g34bsti); else oastib4=999;
if dlifsti eq 1 and stib5 eq 1 then
      oastib5 = g52bsti; else oastib5=999;
if dlifsti eq 1 and stib6 eq 1 then
      oastib6 = min(g32bsti,g33bsti,g36bsti,g37bsti,g38bsti,g41bsti);
                 else oastib6=999;
if dlifsti eq 1 and stib7 eq 1 then
      oastib7 = g49bsti;  else oastib7=999;
if dlifsti eq 1 and stib8 eq 1 then
      oastib8 = g50bsti; else oastib8=999;

stia3rd=ordinal(3, oastia1, oastia2, oastia3, oastia4, oastia5,
        oastia6, oastia7, oastia8);
stia2nd=ordinal(2, oastia1, oastia2, oastia3, oastia4, oastia5,
        oastia6, oastia7, oastia8);
stialst=ordinal(1, oastia1, oastia2, oastia3, oastia4, oastia5,
        oastia6, oastia7, oastia8);
stib2nd=ordinal(2, oastib1, oastib2, oastib3, oastib4, oastib5,
        oastib6, oastib7, oastib8);
stiblst=ordinal(1, oastib1, oastib2, oastib3, oastib4, oastib5,
        oastib6, oastib7, oastib8);

array miss4{*} stia3rd stia2nd stialst stib2nd stiblst;
      do i=1 to dim(miss4);
      if miss4{i}=999 then miss4{i}=.; end; drop i;

 dloasti=max(stia3rd,stia2nd,stialst,stib2nd,stiblst);
```

```
*-------------------------------------------------------------------*
|                          ANALGESICS                               |
*-------------------------------------------------------------------*;

* A Criteria Ages;

     if dlifags eq 1 and agsa1 eq 1 then
           oaagsa1 = min(g47bags,g48bags); else oaagsa1=999;
     if dlifags eq 1 and agsa2 eq 1 then
           oaagsa2 = min(g42bags,g43bags,g44bags); else oaagsa2=999;
     if dlifags eq 1 and agsa3 eq 1 then
           oaagsa3 = g46bags; else oaagsa3=999;
     if dlifags eq 1 and agsa4 eq 1 then
           oaagsa4= min(g30bags,g31bags,g34bags); else oaagsa4=999;
     if dlifags eq 1 and agsa5 eq 1 then
           oaagsa5 = g52bags; else oaagsa5=999;
     if dlifags eq 1 and agsa6 eq 1 then
           oaagsa6 = min(g32bags,g33bags,g36bags,g37bags,g38bags,g41bags);
                      else oaagsa6=999;
     if dlifags eq 1 and agsa7 eq 1 then
           oaagsa7 = g49bags; else oaagsa7=999;
     if dlifags eq 1 and agsa8 eq 1 then
           oaagsa8 = g50bags; else oaagsa8=999;
        /*  there is no g51bags so cannot make oaagsa9  */

* B criteria ages;

     if dlifags eq 1 and agsb1 eq 1 then
           oaagsb1 = min(g47bags,g48bags); else oaagsb1=999;
     if dlifags eq 1 and agsb2 eq 1 then
           oaagsb2 = min(g42bags,g43bags,g44bags); else oaagsb2=999;
     if dlifags eq 1 and agsb3 eq 1 then
           oaagsb3 = g46bags; else oaagsb3=999;
     if dlifags eq 1 and agsb4 eq 1 then
           oaagsb4= min(g30bags,g31bags,g34bags); else oaagsb4=999;
     if dlifags eq 1 and agsb5 eq 1 then
           oaagsb5 = g52bags; else oaagsb5=999;
     if dlifags eq 1 and agsb6 eq 1 then
           oaagsb6 = min(g32bags,g33bags,g36bags,g37bags,g38bags,g41bags);
                      else oaagsb6=999;
     if dlifags eq 1 and agsb7 eq 1 then
           oaagsb7 = g49bags;  else oaagsb7=999;
     if dlifags eq 1 and agsb8 eq 1 then
           oaagsb8 = g50bags; else oaagsb8=999;


     agsa3rd=ordinal(3, oaagsa1, oaagsa2, oaagsa3, oaagsa4, oaagsa5,
             oaagsa6, oaagsa7, oaagsa8);
     agsa2nd=ordinal(2, oaagsa1, oaagsa2, oaagsa3, oaagsa4, oaagsa5,
             oaagsa6, oaagsa7, oaagsa8);
     agsa1st=ordinal(1, oaagsa1, oaagsa2, oaagsa3, oaagsa4, oaagsa5,
             oaagsa6, oaagsa7, oaagsa8);
```

```
      agsb2nd=ordinal(2, oaagsb1, oaagsb2, oaagsb3, oaagsb4, oaagsb5,
              oaagsb6, oaagsb7, oaagsb8);
      agsb1st=ordinal(1, oaagsb1, oaagsb2, oaagsb3, oaagsb4, oaagsb5,
              oaagsb6, oaagsb7, oaagsb8);

      array miss5(*) agsa3rd agsa2nd agsalst agsb2nd agsb1st;
            do i=1 to dim(miss5);
            if miss5(i)=999 then miss5(i)=.; end; drop i;

       dloaags=max(agsa3rd,agsa2nd,agsalst,agsb2nd,agsb1st);

*-------------------------------------------------------------------*
|                          INHALANTS                                |
*-------------------------------------------------------------------*;

* A Criteria Ages;

      if dlifinh eq 1 and inha1 eq 1 then
            oainha1 = min(g47binh,g48binh); else oainha1=999;
      if dlifinh eq 1 and inha2 eq 1 then
            oainha2 = min(g42binh,g43binh,g44binh); else oainha2=999;
      if dlifinh eq 1 and inha3 eq 1 then
            oainha3 = g46binh; else oainha3=999;
      if dlifinh eq 1 and inha4 eq 1 then
            oainha4= min(g30binh,g31binh,g34binh); else oainha4=999;
      if dlifinh eq 1 and inha5 eq 1 then
            oainha5 = g52binh; else oainha5=999;
      if dlifinh eq 1 and inha6 eq 1 then
            oainha6 = min(g32binh,g33binh,g36binh,g37binh,g38binh,g41binh);
                      else oainha6=999;
      if dlifinh eq 1 and inha7 eq 1 then
            oainha7 = g49binh; else oainha7=999;
      if dlifinh eq 1 and inha8 eq 1 then
            oainha8 = g50binh; else oainha8=999;
          /*  there is no g51binh so cannot make oainha9  */

* B criteria ages;

      if dlifinh eq 1 and inhb1 eq 1 then
            oainhb1 = min(g47binh,g48binh); else oainhb1=999;
      if dlifinh eq 1 and inhb2 eq 1 then
            oainhb2 = min(g42binh,g43binh,g44binh); else oainhb2=999;
      if dlifinh eq 1 and inhb3 eq 1 then
            oainhb3 = g46binh; else oainhb3=999;
      if dlifinh eq 1 and inhb4 eq 1 then
            oainhb4= min(g30binh,g31binh,g34binh); else oainhb4=999;
      if dlifinh eq 1 and inhb5 eq 1 then
            oainhb5 = g52binh; else oainhb5=999;
      if dlifinh eq 1 and inhb6 eq 1 then
            oainhb6 = min(g32binh,g33binh,g36binh,g37binh,g38binh,g41binh);
                      else oainhb6=999;
      if dlifinh eq 1 and inhb7 eq 1 then
```

```
      oainhb7 = g49binh;  else oainhb7=999;
if dlifinh eq 1 and inhb8 eq 1 then
      oainhb8 = g50binh; else oainhb8=999;

inha3rd=ordinal(3, oainha1, oainha2, oainha3, oainha4, oainha5,
        oainha6, oainha7, oainha8);
inha2nd=ordinal(2, oainha1, oainha2, oainha3, oainha4, oainha5,
        oainha6, oainha7, oainha8);
inha1st=ordinal(1, oainha1, oainha2, oainha3, oainha4, oainha5,
        oainha6, oainha7, oainha8);
inhb2nd=ordinal(2, oainhb1, oainhb2, oainhb3, oainhb4, oainhb5,
        oainhb6, oainhb7, oainhb8);
inhb1st=ordinal(1, oainhb1, oainhb2, oainhb3, oainhb4, oainhb5,
        oainhb6, oainhb7, oainhb8);

array miss6(*) inha3rd inha2nd inha1st inhb2nd inhb1st;
      do i=1 to dim(miss6);
      if miss6(i)=999 then miss6(i)=.; end; drop i;

 dloainh=max(inha3rd,inha2nd,inha1st,inhb2nd,inhb1st);


*-------------------------------------------------------------------*
|                          MARIJUANA                                |
*-------------------------------------------------------------------*;

* A Criteria Ages;

     if dlifmar eq 1 and mara1 eq 1 then
          oamara1 = min(g47bmar,g48bmar); else oamara1=999;
     if dlifmar eq 1 and mara2 eq 1 then
          oamara2 = min(g42bmar,g43bmar,g44bmar); else oamara2=999;
     if dlifmar eq 1 and mara3 eq 1 then
          oamara3 = g46bmar; else oamara3=999;
     if dlifmar eq 1 and mara4 eq 1 then
          oamara4= min(g30bmar,g31bmar,g34bmar); else oamara4=999;
     if dlifmar eq 1 and mara5 eq 1 then
          oamara5 = g52bmar; else oamara5=999;
     if dlifmar eq 1 and mara6 eq 1 then
          oamara6 = min(g32bmar,g33bmar,g36bmar,g37bmar,g38bmar,g41bmar);
                     else oamara6=999;
     if dlifmar eq 1 and mara7 eq 1 then
          oamara7 = g49bmar; else oamara7=999;
     if dlifmar eq 1 and mara8 eq 1 then
          oamara8 = g50bmar; else oamara8=999;
        /*  there is no g51bmar so cannot make oamara9  */

* B criteria ages;

     if dlifmar eq 1 and marb1 eq 1 then
          oamarb1 = min(g47bmar,g48bmar); else oamarb1=999;
     if dlifmar eq 1 and marb2 eq 1 then
```

```
      oamarb2 = min(g42bmar,g43bmar,g44bmar); else oamarb2=999;
if dlifmar eq 1 and marb3 eq 1 then
      oamarb3 = g46bmar; else oamarb3=999;
if dlifmar eq 1 and marb4 eq 1 then
      oamarb4= min(g30bmar,g31bmar,g34bmar); else oamarb4=999;
if dlifmar eq 1 and marb5 eq 1 then
      oamarb5 = g52bmar; else oamarb5=999;
if dlifmar eq 1 and marb6 eq 1 then
      oamarb6 = min(g32bmar,g33bmar,g36bmar,g37bmar,g38bmar,g41bmar);
                 else oamarb6=999;
if dlifmar eq 1 and marb7 eq 1 then
      oamarb7 = g49bmar;  else oamarb7=999;
if dlifmar eq 1 and marb8 eq 1 then
      oamarb8 = g50bmar; else oamarb8=999;

mara3rd=ordinal(3, oamara1, oamara2, oamara3, oamara4, oamara5,
        oamara6, oamara7, oamara8);
mara2nd=ordinal(2, oamara1, oamara2, oamara3, oamara4, oamara5,
        oamara6, oamara7, oamara8);
maralst=ordinal(1, oamara1, oamara2, oamara3, oamara4, oamara5,
        oamara6, oamara7, oamara8);
marb2nd=ordinal(2, oamarb1, oamarb2, oamarb3, oamarb4, oamarb5,
        oamarb6, oamarb7, oamarb8);
marblst=ordinal(1, oamarb1, oamarb2, oamarb3, oamarb4, oamarb5,
        oamarb6, oamarb7, oamarb8);

array miss7{*} mara3rd mara2nd maralst marb2nd marblst;
      do i=1 to dim(miss7);
      if miss7{i}=999 then miss7{i}=.; end; drop i;

 dloamar=max(mara3rd,mara2nd,maralst,marb2nd,marblst);

*-------------------------------------------------------------*
|                          COCAINE                            |
*-------------------------------------------------------------*;

* A Criteria Ages;

if dlifcoc eq 1 and coca1 eq 1 then
      oacoca1 = min(g47bcoc,g48bcoc); else oacoca1=999;
if dlifcoc eq 1 and coca2 eq 1 then
      oacoca2 = min(g42bcoc,g43bcoc,g44bcoc); else oacoca2=999;
if dlifcoc eq 1 and coca3 eq 1 then
      oacoca3 = g46bcoc; else oacoca3=999;
if dlifcoc eq 1 and coca4 eq 1 then
      oacoca4= min(g30bcoc,g31bcoc,g34bcoc); else oacoca4=999;
if dlifcoc eq 1 and coca5 eq 1 then
      oacoca5 = g52bcoc; else oacoca5=999;
if dlifcoc eq 1 and coca6 eq 1 then
      oacoca6 = min(g32bcoc,g33bcoc,g36bcoc,g37bcoc,g38bcoc,g41bcoc);
                 else oacoca6=999;
if dlifcoc eq 1 and coca7 eq 1 then
```

```
            oacoca7 = g49bcoc; else oacoca7=999;
      if dlifcoc eq 1 and coca8 eq 1 then
            oacoca8 = g50bcoc; else oacoca8=999;
          /*  there is no g51bcoc so cannot make oacoca9  */

* B criteria ages;

      if dlifcoc eq 1 and cocb1 eq 1 then
            oacocb1 = min(g47bcoc,g48bcoc); else oacocb1=999;
      if dlifcoc eq 1 and cocb2 eq 1 then
            oacocb2 = min(g42bcoc,g43bcoc,g44bcoc); else oacocb2=999;
      if dlifcoc eq 1 and cocb3 eq 1 then
            oacocb3 = g46bcoc; else oacocb3=999;
      if dlifcoc eq 1 and cocb4 eq 1 then
            oacocb4= min(g30bcoc,g31bcoc,g34bcoc); else oacocb4=999;
      if dlifcoc eq 1 and cocb5 eq 1 then
            oacocb5 = g52bcoc; else oacocb5=999;
      if dlifcoc eq 1 and cocb6 eq 1 then
            oacocb6 = min(g32bcoc,g33bcoc,g36bcoc,g37bcoc,g38bcoc,g41bcoc);
                      else oacocb6=999;
      if dlifcoc eq 1 and cocb7 eq 1 then
            oacocb7 = g49bcoc;  else oacocb7=999;
      if dlifcoc eq 1 and cocb8 eq 1 then
            oacocb8 = g50bcoc; else oacocb8=999;

      coca3rd=ordinal(3, oacocal, oacoca2, oacoca3, oacoca4, oacoca5,
              oacoca6, oacoca7, oacoca8);
      coca2nd=ordinal(2, oacocal, oacoca2, oacoca3, oacoca4, oacoca5,
              oacoca6, oacoca7, oacoca8);
      cocalst=ordinal(1, oacocal, oacoca2, oacoca3, oacoca4, oacoca5,
              oacoca6, oacoca7, oacoca8);
      cocb2nd=ordinal(2, oacocb1, oacocb2, oacocb3, oacocb4, oacocb5,
              oacocb6, oacocb7, oacocb8);
      cocb1st=ordinal(1, oacocb1, oacocb2, oacocb3, oacocb4, oacocb5,
              oacocb6, oacocb7, oacocb8);

      array miss8{*} coca3rd coca2nd cocalst cocb2nd cocb1st;
            do i=1 to dim(miss8);
            if miss8{i}=999 then miss8{i}=.; end; drop i;

       dloacoc=max(coca3rd,coca2nd,cocalst,cocb2nd,cocb1st);

*-------------------------------------------------------------------*
|                          HALLUCINOGENS                            |
*-------------------------------------------------------------------*;

          /* A Criteria Ages */
      if dlifhal eq 1 and hala1 eq 1 then
            oahala1 = min(g47bhal,g48bhal); else oahala1=999;
      if dlifhal eq 1 and hala2 eq 1 then
            oahala2 = min(g42bhal,g43bhal,g44bhal); else oahala2=999;
      if dlifhal eq 1 and hala3 eq 1 then
```

```
      oahala3 = g46bhal; else oahala3=999;
   if dlifhal eq 1 and hala4 eq 1 then
      oahala4= min(g30bhal,g31bhal,g34bhal); else oahala4=999;
   if dlifhal eq 1 and hala5 eq 1 then
      oahala5 = g52bhal; else oahala5=999;
   if dlifhal eq 1 and hala6 eq 1 then
      oahala6 = min(g32bhal,g33bhal,g36bhal,g37bhal,g38bhal,g41bhal);
                 else oahala6=999;
   if dlifhal eq 1 and hala7 eq 1 then
      oahala7 = g49bhal; else oahala7=999;
   if dlifhal eq 1 and hala8 eq 1 then
      oahala8 = g50bhal; else oahala8=999;
     /*  there is no g51bhal so cannot make oahala9  */

* B criteria ages;

   if dlifhal eq 1 and halb1 eq 1 then
      oahalb1 = min(g47bhal,g48bhal); else oahalb1=999;
   if dlifhal eq 1 and halb2 eq 1 then
      oahalb2 = min(g42bhal,g43bhal,g44bhal); else oahalb2=999;
   if dlifhal eq 1 and halb3 eq 1 then
      oahalb3 = g46bhal; else oahalb3=999;
   if dlifhal eq 1 and halb4 eq 1 then
      oahalb4= min(g30bhal,g31bhal,g34bhal); else oahalb4=999;
   if dlifhal eq 1 and halb5 eq 1 then
      oahalb5 = g52bhal; else oahalb5=999;
   if dlifhal eq 1 and halb6 eq 1 then
      oahalb6 = min(g32bhal,g33bhal,g36bhal,g37bhal,g38bhal,g41bhal);
                 else oahalb6=999;
   if dlifhal eq 1 and halb7 eq 1 then
      oahalb7 = g49bhal;  else oahalb7=999;
   if dlifhal eq 1 and halb8 eq 1 then
      oahalb8 = g50bhal; else oahalb8=999;

   hala3rd=ordinal(3, oahala1, oahala2, oahala3, oahala4, oahala5,
      oahala6, oahala7, oahala8);
   hala2nd=ordinal(2, oahala1, oahala2, oahala3, oahala4, oahala5,
      oahala6, oahala7, oahala8);
   hala1st=ordinal(1, oahala1, oahala2, oahala3, oahala4, oahala5,
      oahala6, oahala7, oahala8);
   halb2nd=ordinal(2, oahalb1, oahalb2, oahalb3, oahalb4, oahalb5,
      oahalb6, oahalb7, oahalb8);
   halb1st=ordinal(1, oahalb1, oahalb2, oahalb3, oahalb4, oahalb5,
      oahalb6, oahalb7, oahalb8);

   array miss9(*) hala3rd hala2nd hala1st halb2nd halb1st;
      do i=1 to dim(miss9);
      if miss9(i)=999 then miss9(i)=.; end; drop i;

    dloahal=max(hala3rd,hala2nd,hala1st,halb2nd,halb1st);
```

```
*-------------------------------------------------------------------*
|                              HEROIN                               |
*-------------------------------------------------------------------*;

* A Criteria Ages;

     if dlifher eq 1 and hera1 eq 1 then
           oahera1 = min(g47bher,g48bher); else oahera1=999;
     if dlifher eq 1 and hera2 eq 1 then
           oahera2 = min(g42bher,g43bher,g44bher); else oahera2=999;
     if dlifher eq 1 and hera3 eq 1 then
           oahera3 = g46bher; else oahera3=999;
     if dlifher eq 1 and hera4 eq 1 then
           oahera4= min(g30bher,g31bher,g34bher); else oahera4=999;
     if dlifher eq 1 and hera5 eq 1 then
           oahera5 = g52bher; else oahera5=999;
     if dlifher eq 1 and hera6 eq 1 then
           oahera6 = min(g32bher,g33bher,g36bher,g37bher,g38bher,g41bher);
                      else oahera6=999;
     if dlifher eq 1 and hera7 eq 1 then
           oahera7 = g49bher; else oahera7=999;
     if dlifher eq 1 and hera8 eq 1 then
           oahera8 = g50bher; else oahera8=999;
         /*  there is no g51bher so cannot make oahera9  */

* B criteria ages;

     if dlifher eq 1 and herb1 eq 1 then
           oaherb1 = min(g47bher,g48bher); else oaherb1=999;
     if dlifher eq 1 and herb2 eq 1 then
           oaherb2 = min(g42bher,g43bher,g44bher); else oaherb2=999;
     if dlifher eq 1 and herb3 eq 1 then
           oaherb3 = g46bher; else oaherb3=999;
     if dlifher eq 1 and herb4 eq 1 then
           oaherb4= min(g30bher,g31bher,g34bher); else oaherb4=999;
     if dlifher eq 1 and herb5 eq 1 then
           oaherb5 = g52bher; else oaherb5=999;
     if dlifher eq 1 and herb6 eq 1 then
           oaherb6 = min(g32bher,g33bher,g36bher,g37bher,g38bher,g41bher);
                      else oaherb6=999;
     if dlifher eq 1 and herb7 eq 1 then
           oaherb7 = g49bher;  else oaherb7=999;
     if dlifher eq 1 and herb8 eq 1 then
           oaherb8 = g50bher; else oaherb8=999;

     hera3rd=ordinal(3, oahera1, oahera2, oahera3, oahera4, oahera5,
             oahera6, oahera7, oahera8);
     hera2nd=ordinal(2, oahera1, oahera2, oahera3, oahera4, oahera5,
             oahera6, oahera7, oahera8);
     hera1st=ordinal(1, oahera1, oahera2, oahera3, oahera4, oahera5,
             oahera6, oahera7, oahera8);
```

```
herb2nd=ordinal(2, oaherb1, oaherb2, oaherb3, oaherb4, oaherb5,
        oaherb6, oaherb7, oaherb8);
herb1st=ordinal(1, oaherb1, oaherb2, oaherb3, oaherb4, oaherb5,
        oaherb6, oaherb7, oaherb8);

array miss10(*) hera3rd hera2nd heralst herb2nd herb1st;
      do i=1 to dim(miss10);
      if miss10(i)=999 then miss10(i)=.; end; drop i;

 dloaher=max(hera3rd,hera2nd,heralst,herb2nd,herb1st);
```

```
*************************************************************;
/* 3. DRUG3.SAS
      DRUG DEPENDENCE ONSET AGE, RECENCY, RECENCY AGE, etc

     (## denotes: "Full Dependence Criteria Not Required")
  ## D1Pxxx:   Dependence ever had at least 1 problem
  ## D1POAxxx: Dependence first Problem Onset Age
  ## DPRECxxx: Dependence problem, RECENCY
  ## DPRAGxxx: Dependence problem, RECENCY AGE

     DF1Yxxx:  DEPENDENCE, FULL criteria in PAST 12 MONTHS (Y/N)
     DF1Mxxx:  DEPENDENCE, FULL criteria in PAST MONTH
*/


*-------------------------------------------------------------*
|     EVER HAD AT LEAST 1 DEPENDENCE PROBLEM?                 |
|     ##  full criteria not required                          |
|       1 = yes  0 = no                                       |
|        var names: D1Pxxx    (DTPxxx = Dep TOTAL # PROB)     |
*-------------------------------------------------------------*
;

     array pralc(*)
      g30aalc g31aalc g32aalc g33aalc g34aalc g36aalc g37aalc g38aalc
              g41aalc g42aalc g43aalc g44aalc g46aalc g47aalc g48aalc
              g49aalc g50aalc g51aalc g52aalc;
       dtpalc=0;
       do i=1 to dim(pralc);
          if  pralc(i)=1   then dtpalc=dtpalc+1;
          if  dtpalc >= 1  then d1palc=1; else d1palc=0;
          end; drop i;

     array prsed(*)
      g30ased g31ased g32ased g33ased g34ased g36ased g37ased g38ased
              g41ased g42ased g43ased g44ased g46ased g47ased g48ased
              g49ased g50ased g51ased g52ased;
       dtpsed=0;
       do i=1 to dim(prsed);
          if  prsed(i)=1   then dtpsed=dtpsed+1;
          if  dtpsed >= 1  then d1psed=1; else d1psed=0;
          end; drop i;

     array prtrq(*)
      g30atrq g31atrq g32atrq g33atrq g34atrq g36atrq g37atrq g38atrq
              g41atrq g42atrq g43atrq g44atrq g46atrq g47atrq g48atrq
              g49atrq g50atrq g51atrq g52atrq;
       dtptrq=0;
       do i=1 to dim(prtrq);
          if  prtrq(i)=1   then dtptrq=dtptrq+1;
          if  dtptrq >= 1  then d1ptrq=1; else d1ptrq=0;
          end; drop i;
```

```
array prsti(*)
 g30asti g31lasti g32asti g33asti g34asti g36asti g37asti g38asti
         g41lasti g42asti g43asti g44asti g46asti g47asti g48asti
         g49asti g50asti g51lasti g52asti;
  dtpsti=0;
  do i=1 to dim(prsti);
     if  prsti(i)=1   then dtpsti=dtpsti+1;
     if  dtpsti >= 1  then dlpsti=1; else dlpsti=0;
     end; drop i;

array prags(*)
 g30aags g31laags g32aags g33aags g34aags g36aags g37aags g38aags
         g41laags g42aags g43aags g44aags g46aags g47aags g48aags
         g49aags g50aags g51laags g52aags;
  dtpags=0;
  do i=1 to dim(prags);
     if  prags(i)=1   then dtpags=dtpags+1;
     if  dtpags >= 1  then dlpags=1; else dlpags=0;
     end; drop i;

array prinh(*)
 g30ainh g31lainh g32ainh g33ainh g34ainh g36ainh g37ainh g38ainh
         g41lainh g42ainh g43ainh g44ainh g46ainh g47ainh g48ainh
         g49ainh g50ainh g51lainh g52ainh;
  dtpinh=0;
  do i=1 to dim(prinh);
     if  prinh(i)=1   then dtpinh=dtpinh+1;
     if  dtpinh >= 1  then dlpinh=1; else dlpinh=0;
     end; drop i;

array prmar(*)
 g30amar g31lamar g32amar g33amar g34amar g36amar g37amar g38amar
         g41lamar g42amar g43amar g44amar g46amar g47amar g48amar
         g49amar g50amar g51lamar g52amar;
  dtpmar=0;
  do i=1 to dim(prmar);
     if  prmar(i)=1   then dtpmar=dtpmar+1;
     if  dtpmar >= 1  then dlpmar=1; else dlpmar=0;
     end; drop i;

array prcoc(*)
 g30acoc g31lacoc g32acoc g33acoc g34acoc g36acoc g37acoc g38acoc
         g41lacoc g42acoc g43acoc g44acoc g46acoc g47acoc g48acoc
         g49acoc g50acoc g51lacoc g52acoc;
  dtpcoc=0;
  do i=1 to dim(prcoc);
     if  prcoc(i)=1   then dtpcoc=dtpcoc+1;
     if  dtpcoc >= 1  then dlpcoc=1; else dlpcoc=0;
     end; drop i;

array prhal(*)
 g30ahal g31lahal g32ahal g33ahal g34ahal g36ahal g37ahal g38ahal
```

```
            g41ahal g42ahal g43ahal g44ahal g46ahal g47ahal g48ahal
            g49ahal g50ahal g51ahal g52ahal;
      dtphal=0;
      do i=1 to dim(prhal);
         if  prhal(i)=1   then dtphal=dtphal+1;
         if  dtphal >= 1  then d1phal=1; else d1phal=0;
         end; drop i;

   array prher(*)
    g30aher g31aher g32aher g33aher g34aher g36aher g37aher g38aher
            g41aher g42aher g43aher g44aher g46aher g47aher g48aher
            g49aher g50aher g51aher g52aher;
      dtpher=0;
      do i=1 to dim(prhal);
         if  prher(i)=1   then dtpher=dtpher+1;
         if  dtpher >= 1  then d1pher=1; else d1pher=0;
         end; drop i;

*-------------------------------------------------------------*
|    DEPENDENCE PROBLEM, ONSET AGE                            |
|      ## full criteria not required ***                      |
|        missing and not applicable age codes are set to 999  |
|        minimum function will select lowest age 1-55 or 999  |
|        var names: D1POAxxx      note no g51b                |
*-------------------------------------------------------------*;


D1POAALC=min(g30balc,g31balc,g32balc,g33balc,g34balc,g36balc,g37balc,
             g38balc,g41balc,g42balc,g43balc,g44balc,g46balc,g47balc,
             g48balc,g49balc,g50balc,g52balc);
     if d1poaalc eq 999 then d1poaalc=.;

D1POASED=min(g30bsed,g31bsed,g32bsed,g33bsed,g34bsed,g36bsed,g37bsed,
             g38bsed,g41bsed,g42bsed,g43bsed,g44bsed,g46bsed,g47bsed,
             g48bsed,g49bsed,g50bsed,g52bsed);
     if d1poased eq 999 then d1poased=.;

D1POATRQ=min(g30btrq,g31btrq,g32btrq,g33btrq,g34btrq,g36btrq,g37btrq,
             g38btrq,g41btrq,g42btrq,g43btrq,g44btrq,g46btrq,g47btrq,
             g48btrq,g49btrq,g50btrq,g52btrq);
     if d1poatrq eq 999 then d1poatrq=.;

D1POASTI=min(g30bsti,g31bsti,g32bsti,g33bsti,g34bsti,g36bsti,g37bsti,
             g38bsti,g41bsti,g42bsti,g43bsti,g44bsti,g46bsti,g47bsti,
             g48bsti,g49bsti,g50bsti,g52bsti);
     if d1poasti eq 999 then d1poasti=.;

D1POAAGS=min(g30bags,g31bags,g32bags,g33bags,g34bags,g36bags,g37bags,
             g38bags,g41bags,g42bags,g43bags,g44bags,g46bags,g47bags,
             g48bags,g49bags,g50bags,g52bags);
     if d1poaags eq 999 then d1poaags=.;
```

```
D1POAINH=min(g30binh,g31binh,g32binh,g33binh,g34binh,g36binh,g37binh,
             g38binh,g41binh,g42binh,g43binh,g44binh,g46binh,g47binh,
             g48binh,g49binh,g50binh,g52binh);
     if d1poainh eq 999 then d1poainh=.;

D1POAMAR=min(g30bmar,g31bmar,g32bmar,g33bmar,g34bmar,g36bmar,g37bmar,
             g38bmar,g41bmar,g42bmar,g43bmar,g44bmar,g46bmar,g47bmar,
             g48bmar,g49bmar,g50bmar,g52bmar);
     if d1poamar eq 999 then d1poamar=.;

D1POACOC=min(g30bcoc,g31bcoc,g32bcoc,g33bcoc,g34bcoc,g36bcoc,g37bcoc,
             g38bcoc,g41bcoc,g42bcoc,g43bcoc,g44bcoc,g46bcoc,g47bcoc,
             g48bcoc,g49bcoc,g50bcoc,g52bcoc);
     if d1poacoc eq 999 then d1poacoc=.;

D1POAHAL=min(g30bhal,g31bhal,g32bhal,g33bhal,g34bhal,g36bhal,g37bhal,
             g38bhal,g41bhal,g42bhal,g43bhal,g44bhal,g46bhal,g47bhal,
             g48bhal,g49bhal,g50bhal,g52bhal);
     if d1poahal eq 999 then d1poahal=.;

D1POAHER=min(g30bher,g31bher,g32bher,g33bher,g34bher,g36bher,g37bher,
             g38bher,g41bher,g42bher,g43bher,g44bher,g46bher,g47bher,
             g48bher,g49bher,g50bher,g52bher);
     if d1poaher eq 999 then d1poaher=.;

*------------------------------------------------------------*
|    DEPENDENCE PROBLEM, RECENCY (minimum valid code)        |
|      ## full criteria not required                         |
|    1 =past month 2=past 6 months 3=past yr 4=more than a yr|
|       var names: DPRECxxx         (note no g36c)           |
*------------------------------------------------------------*
;

array missc(*)
             g30calc g31calc g32calc g33calc g34calc g37calc g38calc
             g41calc g42calc g43calc g44calc g46calc g47calc g48calc
             g49calc g50calc g52calc
             g30csed g31csed g32csed g33csed g34csed g37csed g38csed
             g41csed g42csed g43csed g44csed g46csed g47csed g48csed
             g49csed g50csed g52csed
             g30ctrq g31ctrq g32ctrq g33ctrq g34ctrq g37ctrq g38ctrq
             g41ctrq g42ctrq g43ctrq g44ctrq g46ctrq g47ctrq g48ctrq
             g49ctrq g50ctrq g52ctrq
             g30csti g31csti g32csti g33csti g34csti g37csti g38csti
             g41csti g42csti g43csti g44csti g46csti g47csti g48csti
             g49csti g50csti g52csti
             g30cags g31cags g32cags g33cags g34cags g37cags g38cags
             g41cags g42cags g43cags g44cags g46cags g47cags g48cags
             g49cags g50cags g52cags
             g30cinh g31cinh g32cinh g33cinh g34cinh g37cinh g38cinh
             g41cinh g42cinh g43cinh g44cinh g46cinh g47cinh g48cinh
             g49cinh g50cinh g52cinh
```

```
            g30cmar g31cmar g32cmar g33cmar g34cmar g37cmar g38cmar
            g41cmar g42cmar g43cmar g44cmar g46cmar g47cmar g48cmar
            g49cmar g50cmar g52cmar
            g30ccoc g31ccoc g32ccoc g33ccoc g34ccoc g37ccoc g38ccoc
            g41ccoc g42ccoc g43ccoc g44ccoc g46ccoc g47ccoc g48ccoc
            g49ccoc g50ccoc g52ccoc
            g30chal g31chal g32chal g33chal g34chal g37chal g38chal
            g41chal g42chal g43chal g44chal g46chal g47chal g48chal
            g49chal g50chal g52chal
            g30cher g31cher g32cher g33cher g34cher g37cher g38cher
            g41cher g42cher g43cher g44cher g46cher g47cher g48cher
            g49cher g50cher g52cher;
     do i=1 to dim(missc);
        if missc(i)>= 8 or missc(i)=. or missc(i)=0 then missc(i)=9;
     end;
     drop i;

DPRECALC=min(g30calc,g31calc,g32calc,g33calc,g34calc,g37calc,

g38calc,g41calc,g42calc,g43calc,g44calc,g46calc,g47calc,
            g48calc,g49calc,g50calc,g52calc);

DPRECSED=min(g30csed,g31csed,g32csed,g33csed,g34csed,g37csed,

g38csed,g41csed,g42csed,g43csed,g44csed,g46csed,g47csed,
            g48csed,g49csed,g50csed,g52csed);

DPRECTRQ=min(g30ctrq,g31ctrq,g32ctrq,g33ctrq,g34ctrq,g37ctrq,

g38ctrq,g41ctrq,g42ctrq,g43ctrq,g44ctrq,g46ctrq,g47ctrq,
            g48ctrq,g49ctrq,g50ctrq,g52ctrq);

DPRECSTI=min(g30csti,g31csti,g32csti,g33csti,g34csti,g37csti,

g38csti,g41csti,g42csti,g43csti,g44csti,g46csti,g47csti,
            g48csti,g49csti,g50csti,g52csti);

DPRECAGS=min(g30cags,g31cags,g32cags,g33cags,g34cags,g37cags,

g38cags,g41cags,g42cags,g43cags,g44cags,g46cags,g47cags,
            g48cags,g49cags,g50cags,g52cags);

DPRECINH=min(g30cinh,g31cinh,g32cinh,g33cinh,g34cinh,g37cinh,

g38cinh,g41cinh,g42cinh,g43cinh,g44cinh,g46cinh,g47cinh,
            g48cinh,g49cinh,g50cinh,g52cinh);

DPRECMAR=min(g30cmar,g31cmar,g32cmar,g33cmar,g34cmar,g37cmar,

g38cmar,g41cmar,g42cmar,g43cmar,g44cmar,g46cmar,g47cmar,
            g48cmar,g49cmar,g50cmar,g52cmar);
```

```
DPRECCOC=min(g30ccoc,g31ccoc,g32ccoc,g33ccoc,g34ccoc,g37ccoc,

g38ccoc,g41ccoc,g42ccoc,g43ccoc,g44ccoc,g46ccoc,g47ccoc,
             g48ccoc,g49ccoc,g50ccoc,g52ccoc);

DPRECHAL=min(g30chal,g31chal,g32chal,g33chal,g34chal,g37chal,

g38chal,g41chal,g42chal,g43chal,g44chal,g46chal,g47chal,
             g48chal,g49chal,g50chal,g52chal);

DPRECHER=min(g30cher,g31cher,g32cher,g33cher,g34cher,g37cher,

g38cher,g41cher,g42cher,g43cher,g44cher,g46cher,g47cher,
             g48cher,g49cher,g50cher,g52cher);
```

```
*-------------------------------------------------------------------*
|  DEPENDENCE PROBLEM, RECENCY AGE     (full criteria not required) |
|       maximum of valid age codes 1-55 among the 'd' items         |
|       missing ages set to . which is smaller than valid ages      |
|       variable names: DPRAGxxx                                    |
*-------------------------------------------------------------------*;

     array missd(*)
             g30dalc g31dalc g32dalc g33dalc g34dalc g37dalc g38dalc
             g41dalc g42dalc g43dalc g44dalc g46dalc g47dalc g48dalc
             g49dalc g50dalc g52dalc
             g30dsed g31dsed g32dsed g33dsed g34dsed g37dsed g38dsed
             g41dsed g42dsed g43dsed g44dsed g46dsed g47dsed g48dsed
             g49dsed g50dsed g52dsed
             g30dtrq g31dtrq g32dtrq g33dtrq g34dtrq g37dtrq g38dtrq
             g41dtrq g42dtrq g43dtrq g44dtrq g46dtrq g47dtrq g48dtrq
             g49dtrq g50dtrq g52dtrq
             g30dsti g31dsti g32dsti g33dsti g34dsti g37dsti g38dsti
             g41dsti g42dsti g43dsti g44dsti g46dsti g47dsti g48dsti
             g49dsti g50dsti g52dsti
             g30dags g31dags g32dags g33dags g34dags g37dags g38dags
             g41dags g42dags g43dags g44dags g46dags g47dags g48dags
             g49dags g50dags g52dags
             g30dinh g31dinh g32dinh g33dinh g34dinh g37dinh g38dinh
             g41dinh g42dinh g43dinh g44dinh g46dinh g47dinh g48dinh
             g49dinh g50dinh g52dinh
             g30dmar g31dmar g32dmar g33dmar g34dmar g37dmar g38dmar
             g41dmar g42dmar g43dmar g44dmar g46dmar g47dmar g48dmar
             g49dmar g50dmar g52dmar
             g30dcoc g31dcoc g32dcoc g33dcoc g34dcoc g37dcoc g38dcoc
             g41dcoc g42dcoc g43dcoc g44dcoc g46dcoc g47dcoc g48dcoc
             g49dcoc g50dcoc g52dcoc
             g30dhal g31dhal g32dhal g33dhal g34dhal g37dhal g38dhal
             g41dhal g42dhal g43dhal g44dhal g46dhal g47dhal g48dhal
             g49dhal g50dhal g52dhal
             g30dher g31dher g32dher g33dher g34dher g37dher g38dher
             g41dher g42dher g43dher g44dher g46dher g47dher g48dher
             g49dher g50dher g52dher;
     do i=1 to dim(missd);
        if missd(i)= 999 then missd(i)=.;
     end;
     drop i;
    if dprecalc eq 4 then DPRAGALC=

max(g30dalc,g31dalc,g32dalc,g33dalc,g34dalc,g37dalc,g38dalc,

g41dalc,g42dalc,g43dalc,g44dalc,g46dalc,g47dalc,g48dalc,
             g49dalc,g50dalc,g52dalc);
          if 1 <= dprecalc <=3 then DPRAGALC=crtage;
          if dpragalc=999 then dpragalc=.;
    if dprecsed eq 4 then DPRAGSED=
```

```
max(g30dsed,g31dsed,g32dsed,g33dsed,g34dsed,g37dsed,g38dsed,

g41dsed,g42dsed,g43dsed,g44dsed,g46dsed,g47dsed,g48dsed,
             g49dsed,g50dsed,g52dsed);
          if 1 <= dprecsed <=3 then DPRAGSED=crtage;
          if dpragsed=999 then dpragsed=.;
    if dprectrq eq 4 then DPRAGTRQ=

max(g30dtrq,g31dtrq,g32dtrq,g33dtrq,g34dtrq,g37dtrq,g38dtrq,

g41dtrq,g42dtrq,g43dtrq,g44dtrq,g46dtrq,g47dtrq,g48dtrq,
             g49dtrq,g50dtrq,g52dtrq);
          if 1 <= dprectrq <=3 then DPRAGTRQ=crtage;
          if dpragtrq=999 then dpragtrq=.;
    if dprecsti eq 4 then DPRAGSTI=

max(g30dsti,g31dsti,g32dsti,g33dsti,g34dsti,g37dsti,g38dsti,

g41dsti,g42dsti,g43dsti,g44dsti,g46dsti,g47dsti,g48dsti,
             g49dsti,g50dsti,g52dsti);
          if 1 <= dprecsti <=3 then DPRAGSTI=crtage;
          if dpragsti=999 then dpragsti=.;
    if dprecags eq 4 then DPRAGAGS=

max(g30dags,g31dags,g32dags,g33dags,g34dags,g37dags,g38dags,

g41dags,g42dags,g43dags,g44dags,g46dags,g47dags,g48dags,
             g49dags,g50dags,g52dags);
          if 1 <= dprecags <=3 then DPRAGAGS=crtage;
          if dpragags=999 then dpragags=.;
    if dprecinh eq 4 then DPRAGINH=

max(g30dinh,g31dinh,g32dinh,g33dinh,g34dinh,g37dinh,g38dinh,

g41dinh,g42dinh,g43dinh,g44dinh,g46dinh,g47dinh,g48dinh,
             g49dinh,g50dinh,g52dinh);
          if 1 <= dprecinh <=3 then DPRAGINH=crtage;
          if dpraginh=999 then dpraginh=.;
    if dprecmar eq 4 then DPRAGMAR=

max(g30dmar,g31dmar,g32dmar,g33dmar,g34dmar,g37dmar,g38dmar,

g41dmar,g42dmar,g43dmar,g44dmar,g46dmar,g47dmar,g48dmar,
             g49dmar,g50dmar,g52dmar);
          if 1 <= dprecmar <=3 then DPRAGMAR=crtage;
          if dpragmar=999 then dpragmar=.;
    if dpreccoc eq 4 then DPRAGCOC=

max(g30dcoc,g31dcoc,g32dcoc,g33dcoc,g34dcoc,g37dcoc,g38dcoc,

g41dcoc,g42dcoc,g43dcoc,g44dcoc,g46dcoc,g47dcoc,g48dcoc,
             g49dcoc,g50dcoc,g52dcoc);
```

```
          if 1 <= dpreccoc <=3 then DPRAGCOC=crtage;
          if dpragcoc=999 then dpragcoc=.;
     if dprechal eq 4 then DPRAGHAL=

max(g30dhal,g31dhal,g32dhal,g33dhal,g34dhal,g37dhal,g38dhal,

g41dhal,g42dhal,g43dhal,g44dhal,g46dhal,g47dhal,g48dhal,
              g49dhal,g50dhal,g52dhal);
          if 1 <= dprechal <=3 then DPRAGHAL=crtage;
          if dpraghal=999 then dprag=.;
     if dprecher eq 4 then DPRAGHER=

max(g30dher,g31dher,g32dher,g33dher,g34dher,g37dher,g38dher,

g41dher,g42dher,g43dher,g44dher,g46dher,g47dher,g48dher,
              g49dher,g50dher,g52dher);
          if 1 <= dprecher <=3 then DPRAGHER=crtage;
          if dpragher=999 then dpragher=.;
```

```
*-----------------------------------------------------------------*
|          DEPENDENCE FULL CRITERIA DURING PAST 12 MONTHS         |
|         had 3 A and 2 B criteria all within the past year.      |
|         note difference from lifetime criteria: only 8 A criteria |
|           available (no g51cxxx0)  also no g36c, no g36d        |
|         1=yes 0=no                                              |
|         VAR NAMES:  DF1Yxx                                      |
*-----------------------------------------------------------------*;

*   ALCOHOL full dependence during past 12 months;
     if alca1=1 and
           (1 <= g47calc <=3) or (1 <= g48calc <= 3)   then pyalca1=1;
     if alca2=1 and
           (1 <= g42calc <=3) or  (1 <= g43calc <=3)
       or  (1 <= g44calc <=3)                          then pyalca2=1;
     if alca3=1 and
           (1 <= g46calc <=3)                          then pyalca3=1;
     if alca4=1 and
          ((1 <= g30calc <=3) or (1 <= g31calc <= 3))
        or (1 <= g34calc <= 3)                         then pyalca4=1;
     if alca5=1 and
           (1 <= g52calc <=3)                          then pyalca5=1;
     if alca6=1 and
          ((1 <= g32calc <= 3) and (crtage > g32balc or g32ealc=1))
       or ((1 <= g33calc <= 3) and (crtage > g33balc))
       or ((1 <= g37calc <= 3) and (crtage > g37balc))
       or ((1 <= g38calc <= 3) and (crtage > g38balc)) then pyalca6=1;
     if g41aalc eq 1 and (1 <= g41calc <=3)            then pyalca6=1;
     if drk12pyr eq 1 and
          ((g32aalc eq 1) and (crtage > g32balc or g32ealc=1))
       or ((g33aalc eq 1) and (crtage > g33balc))
       or ((g37aalc eq 1) and (crtage > g37balc))
       or ((g38aalc eq 1) and (crtage > g38balc))      then pyalca6=1;
     if alca7=1 and (1 <= g49calc <= 3)                then pyalca7=1;
     if alca8=1 and (1 <= g50calc <= 3)                then pyalca8=1;
     if pyalca1=1                                      then pyalcb1=1;
     if pyalca2=1 and
          ((g42aalc=1) & (1 <= g42calc <= 3) & (crtage > g42balc))
       or ((g43aalc=1) & (1 <= g43calc <= 3) & (crtage > g43balc))
       or ((g44aalc=1) & (1 <= g44calc <= 3) & (crtage > g44balc))
                                                       then pyalcb2=1;
     if pyalca3=1                                      then pyalcb3=1;
     if pyalca4=1                                      then pyalcb4=1;
     if pyalca5=1 and
          ((g52aalc=1) & (1 <= g52calc <= 3) & (crtage > g52balc))
                                                       then pyalcb5=1;
     if pyalca6=1                                      then pyalcb6=1;
     if pyalca7=1 and
          ((g49aalc=1) & (1 <= g49calc <= 3) & (crtage > g49balc))
                                                       then pyalcb7=1;
     if pyalca8=1 and
          ((g50aalc=1) & (1 <= g50calc <= 3) & (crtage > g50balc))
```

```
                                                        then pyalcb8=1;
     pyalcat=sum(of pyalca1-pyalca8);
     pyalcbt=sum(of pyalcb1-pyalcb8);

   if pyalcat >= 3 and pyalcbt >= 2 then dflyalc=1; else dflyalc=0;


*-------------------------------------------------------------*
|       SEDATIVES full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if seda1=1 and
           (1 <= g47csed <=3) or (1 <= g48csed <= 3)   then pyseda1=1;
     if seda2=1 and
           (1 <= g42csed <=3) or  (1 <= g43csed <=3)
       or  (1 <= g44csed <=3)                          then pyseda2=1;
     if seda3=1 and
           (1 <= g46csed <=3)                          then pyseda3=1;
     if seda4=1 and
          ((1 <= g30csed <=3) or (1 <= g31csed <= 3))
        or (1 <= g34csed <= 3)                         then pyseda4=1;
     if seda5=1 and
           (1 <= g52csed <=3)                          then pyseda5=1;
     if seda6=1 and
          ((1 <= g32csed <= 3) and (crtage > g32bsed or g32esed=1))
       or ((1 <= g33csed <= 3) and (crtage > g33bsed))
       or ((1 <= g37csed <= 3) and (crtage > g37bsed))
       or ((1 <= g38csed <= 3) and (crtage > g38bsed))
       or ((1 <= rcusesed <= 3) &  (crtage > g32bsed or g32esed=1))
       or ((1 <= rcusesed <= 3) &  (crtage > g33bsed))
       or ((1 <= rcusesed <= 3) &  (crtage > g37bsed))
       or ((1 <= rcusesed <= 3) &  (crtage > g38bsed)) then pyseda6=1;
     if g41ased eq 1 and (1 <= g41csed <=3)            then pyseda6=1;

     if seda7=1 and (1 <= g49csed <= 3)                then pyseda7=1;
     if seda8=1 and (1 <= g50csed <= 3)                then pyseda8=1;

     if pyseda1=1                                      then pysedb1=1;
     if pyseda2=1 and
          ((g42ased=1) & (1 <= g42csed <= 3) & (crtage > g42bsed))
       or ((g43ased=1) & (1 <= g43csed <= 3) & (crtage > g43bsed))
       or ((g44ased=1) & (1 <= g44csed <= 3) & (crtage > g44bsed))
                                                       then pysedb2=1;
     if pyseda3=1                                      then pysedb3=1;
     if pyseda4=1                                      then pysedb4=1;
     if pyseda5=1 and
          ((g52ased=1) & (1 <= g52csed <= 3) & (crtage > g52bsed))
                                                       then pysedb5=1;
     if pyseda6=1                                      then pysedb6=1;
     if pyseda7=1 and
          ((g49ased=1) & (1 <= g49csed <= 3) & (crtage > g49bsed))
```

```
                                                        then pysedb7=1;
     if pyseda8=1 and
          ((g50ased=1) & (1 <= g50csed <= 3) & (crtage > g50bsed))
                                                        then pysedb8=1;
     pysedat=sum(of pyseda1-pyseda8);
     pysedbt=sum(of pysedb1-pysedb8);

   if pysedat >= 3 and pysedbt >= 2 then dflysed=1; else dflysed=0;

*-------------------------------------------------------------*
|   TRANQUILIZERS full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if trqa1=1 and
           (1 <= g47ctrq <=3) or (1 <= g48ctrq <= 3)   then pytrqa1=1;
     if trqa2=1 and
           (1 <= g42ctrq <=3) or  (1 <= g43ctrq <=3)
       or  (1 <= g44ctrq <=3)                          then pytrqa2=1;
     if trqa3=1 and
           (1 <= g46ctrq <=3)                          then pytrqa3=1;
     if trqa4=1 and
          ((1 <= g30ctrq <=3) or (1 <= g31ctrq <= 3))
        or (1 <= g34ctrq <= 3)                         then pytrqa4=1;
     if trqa5=1 and
           (1 <= g52ctrq <=3)                          then pytrqa5=1;
     if trqa6=1 and
          ((1 <= g32ctrq <= 3) and (crtage > g32btrq or g32etrq=1))
       or ((1 <= g33ctrq <= 3) and (crtage > g33btrq))
       or ((1 <= g37ctrq <= 3) and (crtage > g37btrq))
       or ((1 <= g38ctrq <= 3) and (crtage > g38btrq))
       or ((1 <= rcusetrq <= 3) &  (crtage > g32btrq or g32etrq=1))
       or ((1 <= rcusetrq <= 3) &  (crtage > g33btrq))
       or ((1 <= rcusetrq <= 3) &  (crtage > g37btrq))
       or ((1 <= rcusetrq <= 3) &  (crtage > g38btrq)) then pytrqa6=1;
     if g41atrq eq 1 and (1 <= g41ctrq <=3)            then pytrqa6=1;

     if trqa7=1 and (1 <= g49ctrq <= 3)                then pytrqa7=1;
     if trqa8=1 and (1 <= g50ctrq <= 3)                then pytrqa8=1;

     if pytrqa1=1                                      then pytrqb1=1;
     if pytrqa2=1 and
          ((g42atrq=1) & (1 <= g42ctrq <= 3) & (crtage > g42btrq))
       or ((g43atrq=1) & (1 <= g43ctrq <= 3) & (crtage > g43btrq))
       or ((g44atrq=1) & (1 <= g44ctrq <= 3) & (crtage > g44btrq))
                                                       then pytrqb2=1;
     if pytrqa3=1                                      then pytrqb3=1;
     if pytrqa4=1                                      then pytrqb4=1;
     if pytrqa5=1 and
          ((g52atrq=1) & (1 <= g52ctrq <= 3) & (crtage > g52btrq))
                                                       then pytrqb5=1;
     if pytrqa6=1                                      then pytrqb6=1;
```

```
     if pytrqa7=1 and
          ((g49atrq=1) & (1 <= g49ctrq <= 3) & (crtage > g49btrq))
                                                        then pytrqb7=1;
     if pytrqa8=1 and
          ((g50atrq=1) & (1 <= g50ctrq <= 3) & (crtage > g50btrq))
                                                        then pytrqb8=1;
     pytrqat=sum(of pytrqa1-pytrqa8);
     pytrqbt=sum(of pytrqb1-pytrqb8);

   if pytrqat >= 3 and pytrqbt >= 2 then dflytrq=1; else dflytrq=0;

*-------------------------------------------------------------*
|    STIMULANTS   full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if stia1=1 and
           (1 <= g47csti <=3) or (1 <= g48csti <= 3)    then pystia1=1;
     if stia2=1 and
           (1 <= g42csti <=3) or  (1 <= g43csti <=3)
       or  (1 <= g44csti <=3)                           then pystia2=1;
     if stia3=1 and
           (1 <= g46csti <=3)                           then pystia3=1;
     if stia4=1 and
          ((1 <= g30csti <=3) or (1 <= g31csti <= 3))
        or (1 <= g34csti <= 3)                          then pystia4=1;
     if stia5=1 and
           (1 <= g52csti <=3)                           then pystia5=1;
     if stia6=1 and
          ((1 <= g32csti <= 3) and (crtage > g32bsti or g32esti=1))
       or ((1 <= g33csti <= 3) and (crtage > g33bsti))
       or ((1 <= g37csti <= 3) and (crtage > g37bsti))
       or ((1 <= g38csti <= 3) and (crtage > g38bsti))
       or ((1 <= rcusesti <= 3) &  (crtage > g32bsti or g32esti=1))
       or ((1 <= rcusesti <= 3) &  (crtage > g33bsti))
       or ((1 <= rcusesti <= 3) &  (crtage > g37bsti))
       or ((1 <= rcusesti <= 3) &  (crtage > g38bsti)) then pystia6=1;
     if g41asti eq 1 and (1 <= g41csti <=3)             then pystia6=1;

     if stia7=1 and (1 <= g49csti <= 3)                 then pystia7=1;
     if stia8=1 and (1 <= g50csti <= 3)                 then pystia8=1;

     if pystia1=1                                       then pystib1=1;
     if pystia2=1 and
          ((g42asti=1) & (1 <= g42csti <= 3) & (crtage > g42bsti))
       or ((g43asti=1) & (1 <= g43csti <= 3) & (crtage > g43bsti))
       or ((g44asti=1) & (1 <= g44csti <= 3) & (crtage > g44bsti))
                                                        then pystib2=1;
     if pystia3=1                                       then pystib3=1;
     if pystia4=1                                       then pystib4=1;
     if pystia5=1 and
          ((g52asti=1) & (1 <= g52csti <= 3) & (crtage > g52bsti))
```

```
                                                        then pystib5=1;
     if pystia6=1                                       then pystib6=1;
     if pystia7=1 and
          ((g49asti=1) & (1 <= g49csti <= 3) & (crtage > g49bsti))
                                                        then pystib7=1;
     if pystia8=1 and
          ((g50asti=1) & (1 <= g50csti <= 3) & (crtage > g50bsti))
                                                        then pystib8=1;
     pystiat=sum(of pystia1-pystia8);
     pystibt=sum(of pystib1-pystib8);

   if pystiat >= 3 and pystibt >= 2 then dflysti=1; else dflysti=0;

*-------------------------------------------------------------*
|   ANALGESICS    full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if agsa1=1 and
          (1 <= g47cags <=3) or (1 <= g48cags <= 3)   then pyagsa1=1;
     if agsa2=1 and
          (1 <= g42cags <=3) or  (1 <= g43cags <=3)
       or  (1 <= g44cags <=3)                         then pyagsa2=1;
     if agsa3=1 and
          (1 <= g46cags <=3)                         then pyagsa3=1;
     if agsa4=1 and
          ((1 <= g30cags <=3) or (1 <= g31cags <= 3))
       or (1 <= g34cags <= 3)                        then pyagsa4=1;
     if agsa5=1 and
          (1 <= g52cags <=3)                         then pyagsa5=1;
     if agsa6=1 and
          ((1 <= g32cags <= 3) and (crtage > g32bags or g32eags=1))
       or ((1 <= g33cags <= 3) and (crtage > g33bags))
       or ((1 <= g37cags <= 3) and (crtage > g37bags))
       or ((1 <= g38cags <= 3) and (crtage > g38bags))
       or ((1 <= rcuseags <= 3) &  (crtage > g32bags or g32eags=1))
       or ((1 <= rcuseags <= 3) &  (crtage > g33bags))
       or ((1 <= rcuseags <= 3) &  (crtage > g37bags))
       or ((1 <= rcuseags <= 3) &  (crtage > g38bags)) then pyagsa6=1;
     if g41aags eq 1 and (1 <= g41cags <=3)            then pyagsa6=1;

     if agsa7=1 and (1 <= g49cags <= 3)                then pyagsa7=1;
     if agsa8=1 and (1 <= g50cags <= 3)                then pyagsa8=1;

     if pyagsa1=1                                      then pyagsb1=1;
     if pyagsa2=1 and
          ((g42aags=1) & (1 <= g42cags <= 3) & (crtage > g42bags))
       or ((g43aags=1) & (1 <= g43cags <= 3) & (crtage > g43bags))
       or ((g44aags=1) & (1 <= g44cags <= 3) & (crtage > g44bags))
                                                        then pyagsb2=1;
     if pyagsa3=1                                       then pyagsb3=1;
     if pyagsa4=1                                       then pyagsb4=1;
```

```
     if pyagsa5=1 and
          ((g52aags=1) & (1 <= g52cags <= 3) & (crtage > g52bags))
                                                    then pyagsb5=1;
     if pyagsa6=1                                   then pyagsb6=1;
     if pyagsa7=1 and
          ((g49aags=1) & (1 <= g49cags <= 3) & (crtage > g49bags))
                                                    then pyagsb7=1;
     if pyagsa8=1 and
          ((g50aags=1) & (1 <= g50cags <= 3) & (crtage > g50bags))
                                                    then pyagsb8=1;
     pyagsat=sum(of pyagsa1-pyagsa8);
     pyagsbt=sum(of pyagsb1-pyagsb8);

   if pyagsat >= 3 and pyagsbt >= 2 then dflyags=1; else dflyags=0;

*-------------------------------------------------------------*
|   INHALANTS     full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if inha1=1 and
           (1 <= g47cinh <=3) or (1 <= g48cinh <= 3)   then pyinha1=1;
     if inha2=1 and
           (1 <= g42cinh <=3) or  (1 <= g43cinh <=3)
       or  (1 <= g44cinh <=3)                         then pyinha2=1;
     if inha3=1 and
           (1 <= g46cinh <=3)                         then pyinha3=1;
     if inha4=1 and
           (1 <= g30cinh <=3) or (1 <= g31cinh <= 3)
        or (1 <= g34cinh <= 3)                        then pyinha4=1;
     if inha5=1 and
           (1 <= g52cinh <=3)                         then pyinha5=1;
     if inha6=1 and
          ((1 <= g32cinh <= 3) and (crtage > g32binh or g32einh=1))
       or ((1 <= g33cinh <= 3) and (crtage > g33binh))
       or ((1 <= g37cinh <= 3) and (crtage > g37binh))
       or ((1 <= g38cinh <= 3) and (crtage > g38binh))
       or ((1 <= rcuseinh <= 3) &  (crtage > g32binh or g32einh=1))
       or ((1 <= rcuseinh <= 3) &  (crtage > g33binh))
       or ((1 <= rcuseinh <= 3) &  (crtage > g37binh))
       or ((1 <= rcuseinh <= 3) &  (crtage > g38binh)) then pyinha6=1;
     if g41ainh eq 1 and (1 <= g41cinh <=3)            then pyinha6=1;

     if inha7=1 and (1 <= g49cinh <= 3)                then pyinha7=1;
     if inha8=1 and (1 <= g50cinh <= 3)                then pyinha8=1;

     if pyinha1=1                                      then pyinhb1=1;
     if pyinha2=1 and
          ((g42ainh=1) & (1 <= g42cinh <= 3) & (crtage > g42binh))
       or ((g43ainh=1) & (1 <= g43cinh <= 3) & (crtage > g43binh))
       or ((g44ainh=1) & (1 <= g44cinh <= 3) & (crtage > g44binh))
                                                       then pyinhb2=1;
```

```
     if pyinha3=1                                              then pyinhb3=1;
     if pyinha4=1                                              then pyinhb4=1;
     if pyinha5=1 and
          ((g52ainh=1) & (1 <= g52cinh <= 3) & (crtage > g52binh))
                                                               then pyinhb5=1;
     if pyinha6=1                                              then pyinhb6=1;
     if pyinha7=1 and
          ((g49ainh=1) & (1 <= g49cinh <= 3) & (crtage > g49binh))
                                                               then pyinhb7=1;
     if pyinha8=1 and
          ((g50ainh=1) & (1 <= g50cinh <= 3) & (crtage > g50binh))
                                                               then pyinhb8=1;
     pyinhat=sum(of pyinha1-pyinha8);
     pyinhbt=sum(of pyinhb1-pyinhb8);

   if pyinhat >= 3 and pyinhbt >= 2 then dflyinh=1; else dflyinh=0;

*-------------------------------------------------------------*
|   MARIJUANA     full dependence during past 12 months       |
*-------------------------------------------------------------*
;

     if mara1=1 and
          (1 <= g47cmar <=3) or (1 <= g48cmar <= 3)   then pymara1=1;
     if mara2=1 and
          (1 <= g42cmar <=3) or  (1 <= g43cmar <=3)
       or  (1 <= g44cmar <=3)                                  then pymara2=1;
     if mara3=1 and
          (1 <= g46cmar <=3)                                   then pymara3=1;
     if mara4=1 and
          (1 <= g30cmar <=3) or (1 <= g31cmar <= 3)
        or (1 <= g34cmar <= 3)                                 then pymara4=1;
     if mara5=1 and
          (1 <= g52cmar <=3)                                   then pymara5=1;
     if mara6=1 and
          ((1 <= g32cmar <= 3) and (crtage > g32bmar or g32emar=1))
       or ((1 <= g33cmar <= 3) and (crtage > g33bmar))
       or ((1 <= g37cmar <= 3) and (crtage > g37bmar))
       or ((1 <= g38cmar <= 3) and (crtage > g38bmar))
       or ((1 <= rcusemar <= 3) &  (crtage > g32bmar or g32emar=1))
       or ((1 <= rcusemar <= 3) &  (crtage > g33bmar))
       or ((1 <= rcusemar <= 3) &  (crtage > g37bmar))
       or ((1 <= rcusemar <= 3) &  (crtage > g38bmar)) then pymara6=1;
     if g41amar eq 1 and (1 <= g41cmar <=3)                    then pymara6=1;

     if mara7=1 and (1 <= g49cmar <= 3)                        then pymara7=1;
     if mara8=1 and (1 <= g50cmar <= 3)                        then pymara8=1;

     if pymara1=1                                              then pymarb1=1;
     if pymara2=1 and
          ((g42amar=1) & (1 <= g42cmar <= 3) & (crtage > g42bmar))
       or ((g43amar=1) & (1 <= g43cmar <= 3) & (crtage > g43bmar))
```

```
      or ((g44amar=1) & (1 <= g44cmar <= 3) & (crtage > g44bmar))
                                                    then pymarb2=1;
    if pymara3=1                                    then pymarb3=1;
    if pymara4=1                                    then pymarb4=1;
    if pymara5=1 and
         ((g52amar=1) & (1 <= g52cmar <= 3) & (crtage > g52bmar))
                                                    then pymarb5=1;
    if pymara6=1                                    then pymarb6=1;
    if pymara7=1 and
         ((g49amar=1) & (1 <= g49cmar <= 3) & (crtage > g49bmar))
                                                    then pymarb7=1;
    if pymara8=1 and
         ((g50amar=1) & (1 <= g50cmar <= 3) & (crtage > g50bmar))
                                                    then pymarb8=1;
    pymarat=sum(of pymara1-pymara8);
    pymarbt=sum(of pymarb1-pymarb8);

  if pymarat >= 3 and pymarbt >= 2 then dflymar=1; else dflymar=0;

*-------------------------------------------------------------*
|   COCAINE       full dependence during past 12 months       |
*-------------------------------------------------------------*
;

    if coca1=1 and
          (1 <= g47ccoc <=3) or (1 <= g48ccoc <= 3)   then pycoca1=1;
    if coca2=1 and
          (1 <= g42ccoc <=3) or  (1 <= g43ccoc <=3)
      or  (1 <= g44ccoc <=3)                          then pycoca2=1;
    if coca3=1 and
          (1 <= g46ccoc <=3)                          then pycoca3=1;
    if coca4=1 and
          (1 <= g30ccoc <=3) or (1 <= g31ccoc <= 3)
       or (1 <= g34ccoc <= 3)                         then pycoca4=1;
    if coca5=1 and
          (1 <= g52ccoc <=3)                          then pycoca5=1;
    if coca6=1 and
         ((1 <= g32ccoc <= 3) and (crtage > g32bcoc or g32bcoc=1))
      or ((1 <= g33ccoc <= 3) and (crtage > g33bcoc))
      or ((1 <= g37ccoc <= 3) and (crtage > g37bcoc))
      or ((1 <= g38ccoc <= 3) and (crtage > g38bcoc))
      or ((1 <= rcusecoc <= 3) &  (crtage > g32bcoc or g32ecoc=1))
      or ((1 <= rcusecoc <= 3) &  (crtage > g33bcoc))
      or ((1 <= rcusecoc <= 3) &  (crtage > g37bcoc))
      or ((1 <= rcusecoc <= 3) &  (crtage > g38bcoc)) then pycoca6=1;
    if g41acoc eq 1 and (1 <= g41ccoc <=3)            then pycoca6=1;

    if coca7=1 and (1 <= g49ccoc <= 3)                then pycoca7=1;
    if coca8=1 and (1 <= g50ccoc <= 3)                then pycoca8=1;

    if pycoca1=1                                      then pycocb1=1;
    if pycoca2=1 and
```

```
        ((g42acoc=1) & (1 <= g42ccoc <= 3) & (crtage > g42bcoc))
      or ((g43acoc=1) & (1 <= g43ccoc <= 3) & (crtage > g43bcoc))
      or ((g44acoc=1) & (1 <= g44ccoc <= 3) & (crtage > g44bcoc))
                                                    then pycocb2=1;
    if pycoca3=1                                    then pycocb3=1;
    if pycoca4=1                                    then pycocb4=1;
    if pycoca5=1 and
        ((g52acoc=1) & (1 <= g52ccoc <= 3) & (crtage > g52bcoc))
                                                    then pycocb5=1;
    if pycoca6=1                                    then pycocb6=1;
    if pycoca7=1 and
        ((g49acoc=1) & (1 <= g49ccoc <= 3) & (crtage > g49bcoc))
                                                    then pycocb7=1;
    if pycoca8=1 and
        ((g50acoc=1) & (1 <= g50ccoc <= 3) & (crtage > g50bcoc))
                                                    then pycocb8=1;
    pycocat=sum(of pycoca1-pycoca8);
    pycocbt=sum(of pycocb1-pycocb8);

  if pycocat >= 3 and pycocbt >= 2 then dflycoc=1; else dflycoc=0;

*-------------------------------------------------------------*
|  HALLUCINOGENS  full dependence during past 12 months       |
*-------------------------------------------------------------*
;

    if hala1=1 and
          (1 <= g47chal <=3) or (1 <= g48chal <= 3)   then pyhala1=1;
    if hala2=1 and
          (1 <= g42chal <=3) or  (1 <= g43chal <=3)
      or  (1 <= g44chal <=3)                          then pyhala2=1;
    if hala3=1 and
          (1 <= g46chal <=3)                          then pyhala3=1;
    if hala4=1 and
          (1 <= g30chal <=3) or (1 <= g31chal <= 3)
       or (1 <= g34chal <= 3)                         then pyhala4=1;
    if hala5=1 and
          (1 <= g52chal <=3)                          then pyhala5=1;
    if hala6=1 and
         ((1 <= g32chal <= 3) and (crtage > g32bhal or g32ehal=1))
      or ((1 <= g33chal <= 3) and (crtage > g33bhal))
      or ((1 <= g37chal <= 3) and (crtage > g37bhal))
      or ((1 <= g38chal <= 3) and (crtage > g38bhal))
      or ((1 <= rcusehal <= 3) &  (crtage > g32bhal or g32ehal=1))
      or ((1 <= rcusehal <= 3) &  (crtage > g33bhal))
      or ((1 <= rcusehal <= 3) &  (crtage > g37bhal))
      or ((1 <= rcusehal <= 3) &  (crtage > g38bhal)) then pyhala6=1;
    if g41ahal eq 1 and (1 <= g41chal <=3)            then pyhala6=1;

    if hala7=1 and (1 <= g49chal <= 3)                then pyhala7=1;
    if hala8=1 and (1 <= g50chal <= 3)                then pyhala8=1;
```

```
     if pyhala1=1                                              then pyhalb1=1;
     if pyhala2=1 and
          ((g42ahal=1) & (1 <= g42chal <= 3) & (crtage > g42bhal))
       or ((g43ahal=1) & (1 <= g43chal <= 3) & (crtage > g43bhal))
       or ((g44ahal=1) & (1 <= g44chal <= 3) & (crtage > g44bhal))
                                                               then pyhalb2=1;
     if pyhala3=1                                              then pyhalb3=1;
     if pyhala4=1                                              then pyhalb4=1;
     if pyhala5=1 and
          ((g52ahal=1) & (1 <= g52chal <= 3) & (crtage > g52bhal))
                                                               then pyhalb5=1;
     if pyhala6=1                                              then pyhalb6=1;
     if pyhala7=1 and
          ((g49ahal=1) & (1 <= g49chal <= 3) & (crtage > g49bhal))
                                                               then pyhalb7=1;
     if pyhala8=1 and
          ((g50ahal=1) & (1 <= g50chal <= 3) & (crtage > g50bhal))
                                                               then pyhalb8=1;
     pyhalat=sum(of pyhala1-pyhala8);
     pyhalbt=sum(of pyhalb1-pyhalb8);

   if pyhalat >= 3 and pyhalbt >= 2 then dflyhal=1; else dflyhal=0;

*-------------------------------------------------------------*
|  HEROIN          full dependence during past 12 months      |
*-------------------------------------------------------------*
;

     if hera1=1 and
          (1 <= g47cher <=3) or (1 <= g48cher <= 3)    then pyhera1=1;
     if hera2=1 and
          (1 <= g42cher <=3) or  (1 <= g43cher <=3)
       or  (1 <= g44cher <=3)                                  then pyhera2=1;
     if hera3=1 and
          (1 <= g46cher <=3)                                   then pyhera3=1;
     if hera4=1 and
          (1 <= g30cher <=3) or (1 <= g31cher <= 3)
        or (1 <= g34cher <= 3)                                 then pyhera4=1;
     if hera5=1 and
          (1 <= g52cher <=3)                                   then pyhera5=1;
     if hera6=1 and
          ((1 <= g32cher <= 3) and (crtage > g32bher or g32eher=1))
       or ((1 <= g33cher <= 3) and (crtage > g33bher))
       or ((1 <= g37cher <= 3) and (crtage > g37bher))
       or ((1 <= g38cher <= 3) and (crtage > g38bher))
       or ((1 <= rcuseher <= 3) &  (crtage > g32bher or g32eher=1))
       or ((1 <= rcuseher <= 3) &  (crtage > g33bher))
       or ((1 <= rcuseher <= 3) &  (crtage > g37bher))
       or ((1 <= rcuseher <= 3) &  (crtage > g38bher)) then pyhera6=1;
     if g41aher eq 1 and (1 <= g41cher <=3)                  then pyhera6=1;

     if hera7=1 and (1 <= g49cher <= 3)                      then pyhera7=1;
```

```
  if hera8=1 and (1 <= g50cher <= 3)                then pyhera8=1;

  if pyhera1=1                                      then pyherb1=1;
  if pyhera2=1 and
       ((g42aher=1) & (1 <= g42cher <= 3) & (crtage > g42bher))
     or ((g43aher=1) & (1 <= g43cher <= 3) & (crtage > g43bher))
     or ((g44aher=1) & (1 <= g44cher <= 3) & (crtage > g44bher))
                                                    then pyherb2=1;
  if pyhera3=1                                      then pyherb3=1;
  if pyhera4=1                                      then pyherb4=1;
  if pyhera5=1 and
       ((g52aher=1) & (1 <= g52cher <= 3) & (crtage > g52bher))
                                                    then pyherb5=1;
  if pyhera6=1                                      then pyherb6=1;
  if pyhera7=1 and
       ((g49aher=1) & (1 <= g49cher <= 3) & (crtage > g49bher))
                                                    then pyherb7=1;
  if pyhera8=1 and
       ((g50aher=1) & (1 <= g50cher <= 3) & (crtage > g50bher))
                                                    then pyherb8=1;
  pyherat=sum(of pyhera1-pyhera8);
  pyherbt=sum(of pyherb1-pyherb8);

if pyherat >= 3 and pyherbt >= 2 then dflyher=1; else dflyher=0;
```

```
*-------------------------------------------------------------*
|            DEPENDENCE FULL CRITERIA DURING PAST MONTH       |
|        had 3 A and 2 B criteria all within the past month.  |
|        note difference from lifetime criteria: only 8 A criteria
|          available (no g51cxxx0)  also no g36c, no g36d      |
|        1=yes 0=no                                           |
|        VAR NAMES:  DF1Mxxx                                  |
*-------------------------------------------------------------*;

     if alcal=1 and
            g47calc=1 or  g48calc=1   then pmalcal=1;
     if alca2=1 and
            g42calc=1 or  g43calc=1
       or   g44calc=1                          then pmalca2=1;
     if alca3=1 and
            g46calc=1                          then pmalca3=1;
     if alca4=1 and
          ( g30calc=1 or  g31calc=1)
        or  g34calc=1                          then pmalca4=1;
     if alca5=1 and
            g52calc=1                          then pmalca5=1;
     if alca6=1 and
          ( g32calc=1 and (crtage > g32balc or g32ealc=1))
       or ( g33calc=1 and (crtage > g33balc))
       or ( g37calc=1 and (crtage > g37balc))
       or ( g38calc=1 and (crtage > g38balc))  then pmalca6=1;
     if g41aalc eq 1 and  g41calc=1            then pmalca6=1;
     if drk12pyr eq 1 and
          ((g32aalc eq 1) and (crtage > g32balc or g32ealc=1))
       or ((g33aalc eq 1) and (crtage > g33balc))
       or ((g37aalc eq 1) and (crtage > g37balc))
       or ((g38aalc eq 1) and (crtage > g38balc))      then pmalca6=1;
     if alca7=1 and  g49calc=1                 then pmalca7=1;
     if alca8=1 and  g50calc=1                 then pmalca8=1;

     if pmalcal=1                                      then pmalcb1=1;
     if pmalca2=1 and
          ((g42aalc=1) &  g42calc=1 & (crtage > g42balc))
       or ((g43aalc=1) &  g43calc=1 & (crtage > g43balc))
       or ((g44aalc=1) &  g44calc=1 & (crtage > g44balc))
                                                 then pmalcb2=1;
     if pmalca3=1                                      then pmalcb3=1;
     if pmalca4=1                                      then pmalcb4=1;
     if pmalca5=1 and
          ((g52aalc=1) &  g52calc=1 & (crtage > g52balc))
                                                 then pmalcb5=1;
     if pmalca6=1                                      then pmalcb6=1;
     if pmalca7=1 and
          ((g49aalc=1) &  g49calc=1 & (crtage > g49balc))
                                                 then pmalcb7=1;
     if pmalca8=1 and
          ((g50aalc=1) &  g50calc=1 & (crtage > g50balc))
```

```
                                                        then pmalcb8=1;
     pmalcat=sum(of pmalca1-pmalca8);
     pmalcbt=sum(of pmalcb1-pmalcb8);

   if pmalcat >= 3 and pmalcbt >= 2 then dflmalc=1; else dflmalc=0;

*------------------------------------------------------------*
|          SEDATIVES full dependence during past month       |
*------------------------------------------------------------*
;

     if seda1=1 and
            g47csed=1 or  g48csed=1            then pmseda1=1;
     if seda2=1 and
            g42csed=1 or   g43csed=1
       or   g44csed=1                          then pmseda2=1;
     if seda3=1 and
            g46csed=1                          then pmseda3=1;
     if seda4=1 and
          ( g30csed=1 or  g31csed=1)
        or  g34csed=1                          then pmseda4=1;
     if seda5=1 and
            g52csed=1                          then pmseda5=1;
     if seda6=1 and
          ( g32csed=1 and (crtage > g32bsed or g32esed=1))
       or ( g33csed=1 and (crtage > g33bsed))
       or ( g37csed=1 and (crtage > g37bsed))
       or ( g38csed=1 and (crtage > g38bsed))
       or ( rcusesed=1 &  (crtage > g32bsed or g32esed=1))
       or ( rcusesed=1 &  (crtage > g33bsed))
       or ( rcusesed=1 &  (crtage > g37bsed))
       or ( rcusesed=1 &  (crtage > g38bsed))  then pmseda6=1;
     if g41ased eq 1 and  g41csed=1            then pmseda6=1;

     if seda7=1 and  g49csed=1                 then pmseda7=1;
     if seda8=1 and  g50csed=1                 then pmseda8=1;

     if pmseda1=1                              then pmsedb1=1;
     if pmseda2=1 and
          ((g42ased=1) &  g42csed=1 & (crtage > g42bsed))
       or ((g43ased=1) &  g43csed=1 & (crtage > g43bsed))
       or ((g44ased=1) &  g44csed=1 & (crtage > g44bsed))
                                               then pmsedb2=1;
     if pmseda3=1                              then pmsedb3=1;
     if pmseda4=1                              then pmsedb4=1;
     if pmseda5=1 and
          ((g52ased=1) &  g52csed=1 & (crtage > g52bsed))
                                               then pmsedb5=1;
     if pmseda6=1                              then pmsedb6=1;
     if pmseda7=1 and
          ((g49ased=1) &  g49csed=1 & (crtage > g49bsed))
                                               then pmsedb7=1;
```

```
     if pmseda8=1 and
          ((g50ased=1) &  g50csed=1 & (crtage > g50bsed))

                                                  then pmsedb8=1;
     pmsedat=sum(of pmseda1-pmseda8);
     pmsedbt=sum(of pmsedb1-pmsedb8);

   if pmsedat >= 3 and pmsedbt >= 2 then dflmsed=1; else dflmsed=0;

*-------------------------------------------------------------*
|       TRANQUILIZERS full dependence during past month       |
*-------------------------------------------------------------*
;

     if trqa1=1 and
            g47ctrq=1 or  g48ctrq=1            then pmtrqa1=1;
     if trqa2=1 and
            g42ctrq=1 or   g43ctrq=1
       or   g44ctrq=1                          then pmtrqa2=1;
     if trqa3=1 and
            g46ctrq=1                          then pmtrqa3=1;
     if trqa4=1 and
          ( g30ctrq=1 or  g31ctrq=1)
       or  g34ctrq=1                           then pmtrqa4=1;
     if trqa5=1 and
            g52ctrq=1                          then pmtrqa5=1;
     if trqa6=1 and
          ( g32ctrq=1 and (crtage > g32btrq or g32etrq=1))
       or ( g33ctrq=1 and (crtage > g33btrq))
       or ( g37ctrq=1 and (crtage > g37btrq))
       or ( g38ctrq=1 and (crtage > g38btrq))
       or ( rcusetrq=1 &  (crtage > g32btrq or g32etrq=1))
       or ( rcusetrq=1 &  (crtage > g33btrq))
       or ( rcusetrq=1 &  (crtage > g37btrq))
       or ( rcusetrq=1 &  (crtage > g38btrq))  then pmtrqa6=1;
     if g41atrq eq 1 and  g41ctrq=1            then pmtrqa6=1;

     if trqa7=1 and  g49ctrq=1                 then pmtrqa7=1;
     if trqa8=1 and  g50ctrq=1                 then pmtrqa8=1;

     if pmtrqa1=1                              then pmtrqb1=1;
     if pmtrqa2=1 and
          ((g42atrq=1) &  g42ctrq=1 & (crtage > g42btrq))
       or ((g43atrq=1) &  g43ctrq=1 & (crtage > g43btrq))
       or ((g44atrq=1) &  g44ctrq=1 & (crtage > g44btrq))
                                               then pmtrqb2=1;
     if pmtrqa3=1                              then pmtrqb3=1;
     if pmtrqa4=1                              then pmtrqb4=1;
     if pmtrqa5=1 and
          ((g52atrq=1) &  g52ctrq=1 & (crtage > g52btrq))
                                               then pmtrqb5=1;
     if pmtrqa6=1                              then pmtrqb6=1;
```

```
     if pmtrqa7=1 and
          ((g49atrq=1) &  g49ctrq=1 & (crtage > g49btrq))
                                                  then pmtrqb7=1;
     if pmtrqa8=1 and
          ((g50atrq=1) &  g50ctrq=1 & (crtage > g50btrq))

                                                  then pmtrqb8=1;
     pmtrqat=sum(of pmtrqa1-pmtrqa8);
     pmtrqbt=sum(of pmtrqb1-pmtrqb8);

   if pmtrqat >= 3 and pmtrqbt >= 2 then df1mtrq=1; else df1mtrq=0;

*-------------------------------------------------------------*
|    STIMULANTS   full dependence during past month           |
*-------------------------------------------------------------*
;

     if stia1=1 and
            g47csti=1 or  g48csti=1            then pmstia1=1;
     if stia2=1 and
            g42csti=1 or   g43csti=1
       or   g44csti=1                          then pmstia2=1;
     if stia3=1 and
            g46csti=1                          then pmstia3=1;
     if stia4=1 and
          ( g30csti=1 or  g31csti=1)
       or  g34csti=1                           then pmstia4=1;
     if stia5=1 and
            g52csti=1                          then pmstia5=1;
     if stia6=1 and
          ( g32csti=1 and (crtage > g32bsti or g32esti=1))
       or ( g33csti=1 and (crtage > g33bsti))
       or ( g37csti=1 and (crtage > g37bsti))
       or ( g38csti=1 and (crtage > g38bsti))
       or ( rcusesti=1 &  (crtage > g32bsti or g32esti=1))
       or ( rcusesti=1 &  (crtage > g33bsti))
       or ( rcusesti=1 &  (crtage > g37bsti))
       or ( rcusesti=1 &  (crtage > g38bsti))  then pmstia6=1;
     if g4lasti eq 1 and  g4lcsti=1            then pmstia6=1;

     if stia7=1 and  g49csti=1                 then pmstia7=1;
     if stia8=1 and  g50csti=1                 then pmstia8=1;

     if pmstia1=1                              then pmstib1=1;
     if pmstia2=1 and
          ((g42asti=1) &  g42csti=1 & (crtage > g42bsti))
       or ((g43asti=1) &  g43csti=1 & (crtage > g43bsti))
       or ((g44asti=1) &  g44csti=1 & (crtage > g44bsti))
                                               then pmstib2=1;
     if pmstia3=1                              then pmstib3=1;
     if pmstia4=1                              then pmstib4=1;
     if pmstia5=1 and
```

```
        ((g52asti=1) &  g52csti=1 & (crtage > g52bsti))
                                                then pmstib5=1;
    if pmstia6=1                                then pmstib6=1;
    if pmstia7=1 and
        ((g49asti=1) &  g49csti=1 & (crtage > g49bsti))
                                                then pmstib7=1;
    if pmstia8=1 and
        ((g50asti=1) &  g50csti=1 & (crtage > g50bsti))

                                                then pmstib8=1;
    pmstiat=sum(of pmstia1-pmstia8);
    pmstibt=sum(of pmstib1-pmstib8);

  if pmstiat >= 3 and pmstibt >= 2 then df1msti=1; else df1msti=0;


*-------------------------------------------------------------*
|       ANALGESICS    full dependence during past month       |
*-------------------------------------------------------------*
;

    if agsa1=1 and
          g47cags=1 or  g48cags=1           then pmagsa1=1;
    if agsa2=1 and
          g42cags=1 or   g43cags=1
      or  g44cags=1                         then pmagsa2=1;
    if agsa3=1 and
          g46cags=1                         then pmagsa3=1;
    if agsa4=1 and
        ( g30cags=1 or  g31cags=1)
      or  g34cags=1                         then pmagsa4=1;
    if agsa5=1 and
          g52cags=1                         then pmagsa5=1;
    if agsa6=1 and
        ( g32cags=1 and (crtage > g32bags or g32eags=1))
      or ( g33cags=1 and (crtage > g33bags))
      or ( g37cags=1 and (crtage > g37bags))
      or ( g38cags=1 and (crtage > g38bags))
      or ( rcuseags=1 &  (crtage > g32bags or g32eags=1))
      or ( rcuseags=1 &  (crtage > g33bags))
      or ( rcuseags=1 &  (crtage > g37bags))
      or ( rcuseags=1 &  (crtage > g38bags))  then pmagsa6=1;
    if g41aags eq 1 and  g41cags=1          then pmagsa6=1;

    if agsa7=1 and  g49cags=1               then pmagsa7=1;
    if agsa8=1 and  g50cags=1               then pmagsa8=1;

    if pmagsa1=1                            then pmagsb1=1;
    if pmagsa2=1 and
        ((g42aags=1) &  g42cags=1 & (crtage > g42bags))
      or ((g43aags=1) &  g43cags=1 & (crtage > g43bags))
      or ((g44aags=1) &  g44cags=1 & (crtage > g44bags))
```

```
                                                then pmagsb2=1;
     if pmagsa3=1                               then pmagsb3=1;
     if pmagsa4=1                               then pmagsb4=1;
     if pmagsa5=1 and
          ((g52aags=1) &  g52cags=1 & (crtage > g52bags))
                                                then pmagsb5=1;
     if pmagsa6=1                               then pmagsb6=1;
     if pmagsa7=1 and
          ((g49aags=1) &  g49cags=1 & (crtage > g49bags))
                                                then pmagsb7=1;
     if pmagsa8=1 and
          ((g50aags=1) &  g50cags=1 & (crtage > g50bags))
                                                then pmagsb8=1;
     pmagsat=sum(of pmagsa1-pmagsa8);
     pmagsbt=sum(of pmagsb1-pmagsb8);

   if pmagsat >= 3 and pmagsbt >= 2 then dflmags=1; else dflmags=0;


*-------------------------------------------------------------*
|   INHALANTS     full dependence during past month           |
*-------------------------------------------------------------*
;

     if inha1=1 and
            g47cinh=1 or  g48cinh=1             then pminha1=1;
     if inha2=1 and
            g42cinh=1 or   g43cinh=1
       or   g44cinh=1                           then pminha2=1;
     if inha3=1 and
            g46cinh=1                           then pminha3=1;
     if inha4=1 and
            g30cinh=1 or  g31cinh=1
        or  g34cinh=1                           then pminha4=1;
     if inha5=1 and
            g52cinh=1                           then pminha5=1;
     if inha6=1 and
          ( g32cinh=1 and (crtage > g32binh or g32einh=1))
       or ( g33cinh=1 and (crtage > g33binh))
       or ( g37cinh=1 and (crtage > g37binh))
       or ( g38cinh=1 and (crtage > g38binh))
       or ( rcuseinh=1 &  (crtage > g32binh or g32einh=1))
       or ( rcuseinh=1 &  (crtage > g33binh))
       or ( rcuseinh=1 &  (crtage > g37binh))
       or ( rcuseinh=1 &  (crtage > g38binh))  then pminha6=1;
     if g41ainh eq 1 and  g41cinh=1             then pminha6=1;

     if inha7=1 and  g49cinh=1                  then pminha7=1;
     if inha8=1 and  g50cinh=1                  then pminha8=1;

     if pminha1=1                               then pminhb1=1;
     if pminha2=1 and
```

```
        ((g42ainh=1) &  g42cinh=1 & (crtage > g42binh))
      or ((g43ainh=1) &  g43cinh=1 & (crtage > g43binh))
      or ((g44ainh=1) &  g44cinh=1 & (crtage > g44binh))
                                              then pminhb2=1;
    if pminha3=1                              then pminhb3=1;
    if pminha4=1                              then pminhb4=1;
    if pminha5=1 and
        ((g52ainh=1) &  g52cinh=1 & (crtage > g52binh))
                                              then pminhb5=1;
    if pminha6=1                              then pminhb6=1;
    if pminha7=1 and
        ((g49ainh=1) &  g49cinh=1 & (crtage > g49binh))
                                              then pminhb7=1;
    if pminha8=1 and
        ((g50ainh=1) &  g50cinh=1 & (crtage > g50binh))
                                              then pminhb8=1;
    pminhat=sum(of pminha1-pminha8);
    pminhbt=sum(of pminhb1-pminhb8);

  if pminhat >= 3 and pminhbt >= 2 then df1minh=1; else df1minh=0;


*-------------------------------------------------------------*
|  MARIJUANA     full dependence during past month            |
*-------------------------------------------------------------*
;

    if mara1=1 and
          g47cmar=1 or  g48cmar=1             then pmmara1=1;
    if mara2=1 and
          g42cmar=1 or   g43cmar=1
      or  g44cmar=1                           then pmmara2=1;
    if mara3=1 and
          g46cmar=1                           then pmmara3=1;
    if mara4=1 and
          g30cmar=1 or  g31cmar=1
     or   g34cmar=1                           then pmmara4=1;
    if mara5=1 and
          g52cmar=1                           then pmmara5=1;
    if mara6=1 and
        ( g32cmar=1 and (crtage > g32bmar or g32emar=1))
      or ( g33cmar=1 and (crtage > g33bmar))
      or ( g37cmar=1 and (crtage > g37bmar))
      or ( g38cmar=1 and (crtage > g38bmar))
      or ( rcusemar=1 &  (crtage > g32bmar or g32emar=1))
      or ( rcusemar=1 &  (crtage > g33bmar))
      or ( rcusemar=1 &  (crtage > g37bmar))
      or ( rcusemar=1 &  (crtage > g38bmar))  then pmmara6=1;
    if g41amar eq 1 and  g41cmar=1            then pmmara6=1;

    if mara7=1 and  g49cmar=1                 then pmmara7=1;
    if mara8=1 and  g50cmar=1                 then pmmara8=1;
```

```
     if pmmara1=1                                    then pmmarb1=1;
     if pmmara2=1 and
          ((g42amar=1) &  g42cmar=1 & (crtage > g42bmar))
        or ((g43amar=1) &  g43cmar=1 & (crtage > g43bmar))
        or ((g44amar=1) &  g44cmar=1 & (crtage > g44bmar))
                                                     then pmmarb2=1;
     if pmmara3=1                                    then pmmarb3=1;
     if pmmara4=1                                    then pmmarb4=1;
     if pmmara5=1 and
          ((g52amar=1) &  g52cmar=1 & (crtage > g52bmar))
                                                     then pmmarb5=1;
     if pmmara6=1                                    then pmmarb6=1;
     if pmmara7=1 and
          ((g49amar=1) &  g49cmar=1 & (crtage > g49bmar))
                                                     then pmmarb7=1;
     if pmmara8=1 and
          ((g50amar=1) &  g50cmar=1 & (crtage > g50bmar))
                                                      then pmmarb8=1;
     pmmarat=sum(of pmmara1-pmmara8);
     pmmarbt=sum(of pmmarb1-pmmarb8);

   if pmmarat >= 3 and pmmarbt >= 2 then df1mmar=1; else df1mmar=0;


*-------------------------------------------------------------*
|       COCAINE       full dependence during past month       |
*-------------------------------------------------------------*
;

     if coca1=1 and
            g47ccoc=1 or  g48ccoc=1                  then pmcoca1=1;
     if coca2=1 and
            g42ccoc=1 or   g43ccoc=1
       or   g44ccoc=1                                then pmcoca2=1;
     if coca3=1 and
            g46ccoc=1                                then pmcoca3=1;
     if coca4=1 and
            g30ccoc=1 or  g31ccoc=1
        or  g34ccoc=1                                then pmcoca4=1;
     if coca5=1 and
            g52ccoc=1                                then pmcoca5=1;
     if coca6=1 and
          ( g32ccoc=1 and (crtage > g32bcoc or g32bcoc=1))
        or ( g33ccoc=1 and (crtage > g33bcoc))
        or ( g37ccoc=1 and (crtage > g37bcoc))
        or ( g38ccoc=1 and (crtage > g38bcoc))
        or ( rcusecoc=1 &  (crtage > g32bcoc or g32ecoc=1))
        or ( rcusecoc=1 &  (crtage > g33bcoc))
        or ( rcusecoc=1 &  (crtage > g37bcoc))
        or ( rcusecoc=1 &  (crtage > g38bcoc))  then pmcoca6=1;
     if g41acoc eq 1 and  g41ccoc=1              then pmcoca6=1;
```

```
     if coca7=1 and  g49ccoc=1                    then pmcoca7=1;
     if coca8=1 and  g50ccoc=1                    then pmcoca8=1;

     if pmcoca1=1                                 then pmcocb1=1;
     if pmcoca2=1 and
          ((g42acoc=1) &  g42ccoc=1 & (crtage > g42bcoc))
       or ((g43acoc=1) &  g43ccoc=1 & (crtage > g43bcoc))
       or ((g44acoc=1) &  g44ccoc=1 & (crtage > g44bcoc))
                                                  then pmcocb2=1;
     if pmcoca3=1                                 then pmcocb3=1;
     if pmcoca4=1                                 then pmcocb4=1;
     if pmcoca5=1 and
          ((g52acoc=1) &  g52ccoc=1 & (crtage > g52bcoc))
                                                  then pmcocb5=1;
     if pmcoca6=1                                 then pmcocb6=1;
     if pmcoca7=1 and
          ((g49acoc=1) &  g49ccoc=1 & (crtage > g49bcoc))
                                                  then pmcocb7=1;
     if pmcoca8=1 and
          ((g50acoc=1) &  g50ccoc=1 & (crtage > g50bcoc))
                                                  then pmcocb8=1;
     pmcocat=sum(of pmcoca1-pmcoca8);
     pmcocbt=sum(of pmcocb1-pmcocb8);

   if pmcocat >= 3 and pmcocbt >= 2 then df1mcoc=1; else df1mcoc=0;


*-------------------------------------------------------------*
|      HALLUCINOGENS  full dependence during past month       |
*-------------------------------------------------------------*
;

     if hala1=1 and
            g47chal=1 or  g48chal=1               then pmhala1=1;
     if hala2=1 and
            g42chal=1 or   g43chal=1
       or   g44chal=1                             then pmhala2=1;
     if hala3=1 and
            g46chal=1                             then pmhala3=1;
     if hala4=1 and
            g30chal=1 or  g31chal=1
        or  g34chal=1                             then pmhala4=1;
     if hala5=1 and
            g52chal=1                             then pmhala5=1;
     if hala6=1 and
          ( g32chal=1 and (crtage > g32bhal or g32ehal=1))
       or ( g33chal=1 and (crtage > g33bhal))
       or ( g37chal=1 and (crtage > g37bhal))
       or ( g38chal=1 and (crtage > g38bhal))
       or ( rcusehal=1 &  (crtage > g32bhal or g32ehal=1))
       or ( rcusehal=1 &  (crtage > g33bhal))
       or ( rcusehal=1 &  (crtage > g37bhal))
```

```
      or ( rcusehal=1 &  (crtage > g38bhal))  then pmhala6=1;
    if g41ahal eq 1 and  g41chal=1            then pmhala6=1;

    if hala7=1 and  g49chal=1                 then pmhala7=1;
    if hala8=1 and  g50chal=1                 then pmhala8=1;

    if pmhala1=1                              then pmhalb1=1;
    if pmhala2=1 and
         ((g42ahal=1) &  g42chal=1 & (crtage > g42bhal))
      or ((g43ahal=1) &  g43chal=1 & (crtage > g43bhal))
      or ((g44ahal=1) &  g44chal=1 & (crtage > g44bhal))
                                              then pmhalb2=1;
    if pmhala3=1                              then pmhalb3=1;
    if pmhala4=1                              then pmhalb4=1;
    if pmhala5=1 and
         ((g52ahal=1) &  g52chal=1 & (crtage > g52bhal))
                                                    then pmhalb5=1;
    if pmhala6=1                                    then pmhalb6=1;
    if pmhala7=1 and
         ((g49ahal=1) &  g49chal=1 & (crtage > g49bhal))
                                                    then pmhalb7=1;
    if pmhala8=1 and
         ((g50ahal=1) &  g50chal=1 & (crtage > g50bhal))
                                                    then pmhalb8=1;
    pmhalat=sum(of pmhala1-pmhala8);
    pmhalbt=sum(of pmhalb1-pmhalb8);

  if pmhalat >= 3 and pmhalbt >= 2 then df1mhal=1; else df1mhal=0;


*-------------------------------------------------------------*
|      HEROIN          full dependence during past month      |
*-------------------------------------------------------------*
;

    if hera1=1 and
          g47cher=1 or  g48cher=1             then pmhera1=1;
    if hera2=1 and
          g42cher=1 or   g43cher=1
      or  g44cher=1                           then pmhera2=1;
    if hera3=1 and
          g46cher=1                           then pmhera3=1;
    if hera4=1 and
          g30cher=1 or  g31cher=1
      or  g34cher=1                           then pmhera4=1;
    if hera5=1 and
          g52cher=1                           then pmhera5=1;
    if hera6=1 and
         ( g32cher=1 and (crtage > g32bher or g32eher=1))
      or ( g33cher=1 and (crtage > g33bher))
      or ( g37cher=1 and (crtage > g37bher))
      or ( g38cher=1 and (crtage > g38bher))
```

```
    or ( rcuseher=1 &  (crtage > g32bher or g32eher=1))
    or ( rcuseher=1 &  (crtage > g33bher))
    or ( rcuseher=1 &  (crtage > g37bher))
    or ( rcuseher=1 &  (crtage > g38bher))  then pmhera6=1;
  if g41aher eq 1 and  g41cher=1            then pmhera6=1;

  if hera7=1 and  g49cher=1                 then pmhera7=1;
  if hera8=1 and  g50cher=1                 then pmhera8=1;

  if pmhera1=1                              then pmherb1=1;
  if pmhera2=1 and
       ((g42aher=1) &  g42cher=1 & (crtage > g42bher))
    or ((g43aher=1) &  g43cher=1 & (crtage > g43bher))
    or ((g44aher=1) &  g44cher=1 & (crtage > g44bher))
                                            then pmherb2=1;
  if pmhera3=1                              then pmherb3=1;
  if pmhera4=1                              then pmherb4=1;
  if pmhera5=1 and
       ((g52aher=1) &  g52cher=1 & (crtage > g52bher))
                                            then pmherb5=1;
  if pmhera6=1                              then pmherb6=1;
  if pmhera7=1 and
       ((g49aher=1) &  g49cher=1 & (crtage > g49bher))
                                            then pmherb7=1;
  if pmhera8=1 and
       ((g50aher=1) &  g50cher=1 & (crtage > g50bher))
                                            then pmherb8=1;
  pmherat=sum(of pmhera1-pmhera8);
  pmherbt=sum(of pmherb1-pmherb8);

if pmherat >= 3 and pmherbt >= 2 then df1mher=1; else df1mher=0;
```

```
*****************************************************************
*                                                               *
*                        Substance Abuse                        *
*                                                               *
*****************************************************************;

/* 4.   DRUG4.SAS

                Create abuse variables for each of 10 drug categories

     AGERxxx:   age most recent USE
     RCUSExxx:  RECENCY OF USE (sed thru heroin);

     ALIFxxx:   abuse LIFETIME criteria met (Y/N)

     ALOAxxx:   abuse LIFETIME ONSET AGE

     APRECxxx:  abuse PROBLEM recency (past month/6months/past yr/yr+)
     APRAGxxx:  abuse PROBLEM most recent age

                symptom=had problem and continued to use
     ASRECxxx:  abuse SYMPTOM recency (past month/6months/past yr/yr+)
     ASRAGxxx:  abuse SYMPTOM most recent age

     AF1Yxxx:  ABUSE FULL criteria met in past YEAR? (Y/N)
     AF1Mxxx:  ABUSE FULL criteria met in past MONTH? (Y/N)
*/

*****************************************************************;

*     former codes of 0, . or >= 96 set to 999;

*   age most recent use (AGERxxx) alcohol treated separately;

    if 1 <= g1d <= 3 then agersed=crtage; else agersed=g1f;
    if 1 <= g2d <= 3 then agertrq=crtage; else agertrq=g2f;
    if 1 <= g3d <= 3 then agersti=crtage; else agersti=g3f;
    if 1 <= g4d <= 3 then agerags=crtage; else agerags=g4f;
    if 1 <= g5d <= 3 then agerinh=crtage; else agering=g5f;
    if 1 <= g6d <= 3 then agermar=crtage; else agermar=g6f;
    if 1 <= g7d <= 3 then agercoc=crtage; else agercoc=g7f;
    if 1 <= g8d <= 3 then agerhal=crtage; else agerhal=g8f;
    if 1 <= g9d <= 3 then agerher=crtage; else agerher=g9f;

*   RECENCY OF USE (sed thru heroin);
    rcusesed=g1d; rcusetrq=g2d; rcusesti=g3d;
    rcuseags=g4d; rcuseinh=g5d; rcusemar=g6d;
    rcusecoc=g7d; rcusehal=g8d; rcuseher=g9d;

/* Abuse Criteria

     1. Continued use knowing the negative effects or
```

recurrent use in hazardous situations with duration of one month or more or repeated use for a long period of time.

= YES in any of problems G32a,G33a,G34a,G36a,G37a,G38a,G41a

2. Use of substance is repeated and of long duration (continued use).

There are several ways to meet criterion for continued use. These are listed in (a) thru (d) below:

(a) Of the 7 problems listed in 1. above, continued use is met automatically by YES at 3 of the 7--
G34a (often under effects in risky situations)
G36a (continued to use drug after an accident)
G41a (continued to use when taking med or health problem)

(b) 3 of the remaining 4 problems are treated as follows in order to ascertain "continued use" which is not asked directly:

G33 (work/school problems)
G37 (health problems)
G38 (emotional/psychological problems)

IF
(1) Most recent use is within past year and current age is greater age 1st had prob. (Gxxc=1-3 and current age > Gxxb)
OR
(2) Most recent use is more than a year ago and age of recency of problem is larger than age of onset (Gxxc =4 and Gxxd > Gxxb)

then criteria for continued use are met.

(c) The remaining problem is filtered the same as G33,G37,G38 with an additional option for meeting criteria:

G32 (problems with family, friends...police)

If G32e (continued to used)) is YES criteria are met.

(d) All drugs are filtered by comparing age of most recent use with age of first use as indicated in the beginning of Section G (e.g. for sedatives, Ga1,G1d,and G1f are used)). This filter is separate from the filtering of the 7 problems.

If recent use is indicated as within past year, and age of first use is less than current age (which in this instance is the same

```
            as age of most recent use) then criterion for "continued use" is met.
            OR
            If recent use is "more than a year ago", and age of first use is
            less than age of most recent use, then the criterion for "continued
            use" is met.

       (e)  Alcohol is treated differently than the other drugs
            see alcohol section

*/

************************** ALCOHOL *********************************;


* Item F11= age first began heavy drinking (V1812);
* test problem g32 for continued use;

    if g32aalc eq 1 and
        ((1 <= g32calc <=3)  and (crtage > g32balc))
     or ((g32calc eq 4) and (1 <=db32alc <=54)) then sx32alc=1;
    if g32aalc eq 1 and
       ((drk12pyr eq 1) and (crtage > g32balc)) then sx32alc=2;
    if g32aalc eq 1 and
       ((drk12pyr eq 0) and (1 <=lb32alc <=54)) then sx32alc=3;
    if g32aalc eq 1 and (g32ealc eq 1)          then sx32alc=4;
    if 1 <= sx32alc <= 4                        then as32alc=1;

* test problem g33 for continued use;
    if g33aalc eq 1 and
        ((1 <= g33calc <=3)  and (crtage > g33balc))
     or ((g33calc eq 4) and (1 <= db33alc <=54)) then sx33alc=1;
    if g33aalc eq 1 and
       ((drk12pyr eq 1) and (crtage > g33balc))  then sx33alc=2;
    if g33aalc eq 1 and
       ((drk12pyr eq 0) and (1 <= lb33alc <=54)) then sx33alc=3;

    if 1 <= sx33alc <= 3                         then as33alc=1;

* problem g34 automatically meets continued use;
    if g34aalc eq 1 then                                 as34alc=1;

* problem g36 automatically meets continued use;
    if g36aalc eq 1 then                                 as36alc=1;

* test problem g37 for continued use;
    if g37aalc eq 1 and
        ((1 <= g37calc <=3)  and (crtage > g37balc))
     or ((g37calc eq 4) and (1 <= db37alc <=54)) then sx37alc=1;
    if g37aalc eq 1 and
       ((drk12pyr eq 1) and (crtage > g37balc))  then sx37alc=2;
    if g37aalc eq 1 and
       ((drk12pyr eq 0) and (1 <= lb37alc <=54)) then sx37alc=3;
```

```
    if 1 <= sx37alc <= 3                              then as37alc=1;

* test problem g38 for continued use;
    if g38aalc eq 1 and
        ((1 <= g38calc <=3)  and (crtage > g38balc))
     or ((g38calc eq 4) and (1 <= db38alc <=54)) then sx38alc=1;
    if g38aalc eq 1 and
       ((drkl2pyr eq 1) and (crtage > g38balc))  then sx38alc=2;
    if g38aalc eq 1 and
       ((drkl2pyr eq 0) and (1 <= lb38alc <=54)) then sx38alc=3;
    if 1 <= sx38alc <= 3                              then as38alc=1;

* problem g41 automatically meets continued use;
    if g41aalc eq 1                                   then as41alc=1;


aalctot=sum(as32alc,as33alc,as34alc,as36alc,as37alc,as38alc,as41alc);
    if aalctot >= 1 then alifalc=1; else alifalc=0;


************************** SEDATIVES ****************************;

    if g32ased eq 1 and
        ((1 <= g32csed <=3) and (crtage > g32bsed))
     or ((g32csed eq 4) and (1 <= db32sed <= 54))  then sx32sed=1;
    if g32ased eq 1 and
        ((1 <= rcusesed <=3) and (crtage > g32bsed))
     or ((rcusesed eq 4) and (1 <= lb32sed <= 54)) then sx32sed=2;
    if g32ased eq 1 and (g32esed eq 1)              then sx32sed=3;
    if 1 <= sx32sed <= 3                            then as32sed=1;
    if g33ased eq 1 and
        ((1 <= g33csed <=3) and (crtage > g33bsed))
     or ((g33csed eq 4) and (1 <= db33sed <= 54))  then sx33sed=1;
    if g33ased eq 1 and
        ((1 <= rcusesed <=3) and (crtage > g33bsed))
     or ((rcusesed eq 4) and (1 <= lb33sed <=54))  then sx33sed=2;
    if 1 <= sx33sed <= 2                            then as33sed=1;
    if g34ased eq 1                                 then as34sed=1;
    if g36ased eq 1                                 then as36sed=1;
    if g37ased eq 1 and
        ((1 <= g37csed <=3) and (crtage > g37bsed))
     or ((g37csed eq 4) and (1 <= db37sed <= 54))  then sx37sed=1;
    if g37ased eq 1 and
        ((1 <= rcusesed <=3) and (crtage > g37bsed))
     or ((rcusesed eq 4) and (1 <= lb37sed <= 54)) then sx37sed=2;
    if 1 <= sx37sed <= 2                            then as37sed=1;
    if g38ased eq 1 and
        ((1 <= g38csed <=3) and (crtage > g38bsed))

     or ((g38csed eq 4) and (1 <= db38sed <= 54))  then sx38sed=1;
    if g38ased eq 1 and
        ((1 <= rcusesed <=3) and (crtage > g38bsed))
```

```
     or ((rcusesed eq 4) and (1 <= lb38sed <= 54)) then sx38sed=2;
    if 1 <= sx38sed <= 2                           then as38sed=1;
    if g41ased eq 1                                then as41sed=1;

asedtot=sum(as32sed,as33sed,as34sed,as36sed,as37sed,as38sed,as41sed);
    if asedtot ge 1 then alifsed=1; else alifsed=0;


************************* TRANQUILIZERS ********************;

    if g32atrq eq 1 and
        ((1 <= g32ctrq <=3) and (crtage > g32btrq))
     or ((g32ctrq eq 4) and (1 <= db32trq <= 54))  then sx32trq=1;
    if g32atrq eq 1 and
        ((1 <= rcusetrq <=3) and (crtage > g32btrq))
     or ((rcusetrq eq 4) and (1 <= lb32trq <= 54)) then sx32trq=2;
    if g32atrq eq 1 and (g32etrq eq 1)             then sx32trq=3;
    if 1 <= sx32trq <= 3                           then as32trq=1;
    if g33atrq eq 1 and
        ((1 <= g33ctrq <=3) and (crtage > g33btrq))
     or ((g33ctrq eq 4) and (1 <= db33trq <= 54))  then sx33trq=1;
    if g33atrq eq 1 and
        ((1 <= rcusetrq <=3) and (crtage > g33btrq))
     or ((rcusetrq eq 4) and (1 <= lb33trq <=54))  then sx33trq=2;
    if 1 <= sx33trq <= 2                           then as33trq=1;
    if g34atrq eq 1                                then as34trq=1;
    if g36atrq eq 1                                then as36trq=1;
    if g37atrq eq 1 and
        ((1 <= g37ctrq <=3) and (crtage > g37btrq))
     or ((g37ctrq eq 4) and (1 <= db37trq <= 54))  then sx37trq=1;
    if g37atrq eq 1 and
        ((1 <= rcusetrq <=3) and (crtage > g37btrq))
     or ((rcusetrq eq 4) and (1 <= lb37trq <= 54)) then sx37trq=2;
    if 1 <= sx37trq <= 2                           then as37trq=1;
    if g38atrq eq 1 and
        ((1 <= g38ctrq <=3) and (crtage > g38btrq))

     or ((g38ctrq eq 4) and (1 <= db38trq <= 54))  then sx38trq=1;
    if g38atrq eq 1 and
        ((1 <= rcusetrq <=3) and (crtage > g38btrq))
     or ((rcusetrq eq 4) and (1 <= lb38trq <= 54)) then sx38trq=2;
    if 1 <= sx38trq <= 2                           then as38trq=1;
    if g41atrq eq 1                                then as41trq=1;

atrqtot=sum(as32trq,as33trq,as34trq,as36trq,as37trq,as38trq,as41trq);
    if atrqtot ge 1 then aliftrq=1; else aliftrq=0;


************************* STIMULANTS ***********************;

    if g32asti eq 1 and
        ((1 <= g32csti <=3) and (crtage > g32bsti))
```

```
     or ((g32csti eq 4) and (1 <= db32sti <= 54))  then sx32sti=1;
    if g32asti eq 1 and
        ((1 <= rcusesti <=3) and (crtage > g32bsti))
     or ((rcusesti eq 4) and (1 <= lb32sti <= 54)) then sx32sti=2;
    if g32asti eq 1 and (g32esti eq 1)             then sx32sti=3;
    if 1 <= sx32sti <= 3                           then as32sti=1;
    if g33asti eq 1 and
        ((1 <= g33csti <=3) and (crtage > g33bsti))
     or ((g33csti eq 4) and (1 <= db33sti <= 54))  then sx33sti=1;
    if g33asti eq 1 and
        ((1 <= rcusesti <=3) and (crtage > g33bsti))
     or ((rcusesti eq 4) and (1 <= lb33sti <=54))  then sx33sti=2;
    if 1 <= sx33sti <= 2                           then as33sti=1;
    if g34asti eq 1                                then as34sti=1;
    if g36asti eq 1                                then as36sti=1;
    if g37asti eq 1 and
        ((1 <= g37csti <=3) and (crtage > g37bsti))
     or ((g37csti eq 4) and (1 <= db37sti <= 54))  then sx37sti=1;
    if g37asti eq 1 and
        ((1 <= rcusesti <=3) and (crtage > g37bsti))
     or ((rcusesti eq 4) and (1 <= lb37sti <= 54)) then sx37sti=2;
    if 1 <= sx37sti <= 2                           then as37sti=1;
    if g38asti eq 1 and
        ((1 <= g38csti <=3) and (crtage > g38bsti))

     or ((g38csti eq 4) and (1 <= db38sti <= 54))  then sx38sti=1;
    if g38asti eq 1 and
        ((1 <= rcusesti <=3) and (crtage > g38bsti))
     or ((rcusesti eq 4) and (1 <= lb38sti <= 54)) then sx38sti=2;
    if 1 <= sx38sti <= 2                           then as38sti=1;
    if g41asti eq 1                                then as41sti=1;

astitot=sum(as32sti,as33sti,as34sti,as36sti,as37sti,as38sti,as41sti);
    if astitot ge 1 then alifsti=1; else alifsti=0;


************************** ANALGESICS ***********************;

    if g32aags eq 1 and
        ((1 <= g32cags <=3) and (crtage > g32bags))
     or ((g32cags eq 4) and (1 <= db32ags <= 54))  then sx32ags=1;
    if g32aags eq 1 and
        ((1 <= rcuseags <=3) and (crtage > g32bags))
     or ((rcuseags eq 4) and (1 <= lb32ags <= 54)) then sx32ags=2;
    if g32aags eq 1 and (g32eags eq 1)             then sx32ags=3;
    if 1 <= sx32ags <= 3                           then as32ags=1;
    if g33aags eq 1 and
        ((1 <= g33cags <=3) and (crtage > g33bags))
     or ((g33cags eq 4) and (1 <= db33ags <= 54))  then sx33ags=1;
    if g33aags eq 1 and
        ((1 <= rcuseags <=3) and (crtage > g33bags))
     or ((rcuseags eq 4) and (1 <= lb33ags <=54))  then sx33ags=2;
```

```
    if 1 <= sx33ags <= 2                              then as33ags=1;
    if g34aags eq 1                                   then as34ags=1;
    if g36aags eq 1                                   then as36ags=1;
    if g37aags eq 1 and
        ((1 <= g37cags <=3) and (crtage > g37bags))
     or ((g37cags eq 4) and (1 <= db37ags <= 54))     then sx37ags=1;
    if g37aags eq 1 and
        ((1 <= rcuseags <=3) and (crtage > g37bags))
     or ((rcuseags eq 4) and (1 <= lb37ags <= 54))    then sx37ags=2;
    if 1 <= sx37ags <= 2                              then as37ags=1;
    if g38aags eq 1 and
        ((1 <= g38cags <=3) and (crtage > g38bags))

     or ((g38cags eq 4) and (1 <= db38ags <= 54))     then sx38ags=1;
    if g38aags eq 1 and
        ((1 <= rcuseags <=3) and (crtage > g38bags))
     or ((rcuseags eq 4) and (1 <= lb38ags <= 54))    then sx38ags=2;
    if 1 <= sx38ags <= 2                              then as38ags=1;
    if g41aags eq 1                                   then as41ags=1;

aagstot=sum(as32ags,as33ags,as34ags,as36ags,as37ags,as38ags,as41ags);
    if aagstot ge 1 then alifags=1; else alifags=0;


************************** INHALANTS  ***********************;

    if g32ainh eq 1 and
        ((1 <= g32cinh <=3) and (crtage > g32binh))
     or ((g32cinh eq 4) and (1 <= db32inh <= 54))     then sx32inh=1;
    if g32ainh eq 1 and
        ((1 <= rcuseinh <=3) and (crtage > g32binh))
     or ((rcuseinh eq 4) and (1 <= lb32inh <= 54))    then sx32inh=2;
    if g32ainh eq 1 and (g32einh eq 1)                then sx32inh=3;
    if 1 <= sx32inh <= 3                              then as32inh=1;
    if g33ainh eq 1 and
        ((1 <= g33cinh <=3) and (crtage > g33binh))
     or ((g33cinh eq 4) and (1 <= db33inh <= 54))     then sx33inh=1;
    if g33ainh eq 1 and
        ((1 <= rcuseinh <=3) and (crtage > g33binh))
     or ((rcuseinh eq 4) and (1 <= lb33inh <=54))     then sx33inh=2;
    if 1 <= sx33inh <= 2                              then as33inh=1;
    if g34ainh eq 1                                   then as34inh=1;
    if g36ainh eq 1                                   then as36inh=1;
    if g37ainh eq 1 and
        ((1 <= g37cinh <=3) and (crtage > g37binh))
     or ((g37cinh eq 4) and (1 <= db37inh <= 54))     then sx37inh=1;
    if g37ainh eq 1 and
        ((1 <= rcuseinh <=3) and (crtage > g37binh))
     or ((rcuseinh eq 4) and (1 <= lb37inh <= 54))    then sx37inh=2;
    if 1 <= sx37inh <= 2                              then as37inh=1;
    if g38ainh eq 1 and
        ((1 <= g38cinh <=3) and (crtage > g38binh))
```

```
     or ((g38cinh eq 4) and (1 <= db38inh <= 54))  then sx38inh=1;
    if g38ainh eq 1 and
        ((1 <= rcuseinh <=3) and (crtage > g38binh))
     or ((rcuseinh eq 4) and (1 <= lb38inh <= 54)) then sx38inh=2;
    if 1 <= sx38inh <= 2                           then as38inh=1;
    if g41ainh eq 1                                then as41inh=1;

ainhtot=sum(as32inh,as33inh,as34inh,as36inh,as37inh,as38inh,as41inh);
    if ainhtot ge 1 then alifinh=1; else alifinh=0;


************************** MARIJUANA ************************;

    if g32amar eq 1 and
        ((1 <= g32cmar <=3) and (crtage > g32bmar))
     or ((g32cmar eq 4) and (1 <= db32mar <= 54))  then sx32mar=1;
    if g32amar eq 1 and
        ((1 <= rcusemar <=3) and (crtage > g32bmar))
     or ((rcusemar eq 4) and (1 <= lb32mar <= 54)) then sx32mar=2;
    if g32amar eq 1 and (g32emar eq 1)             then sx32mar=3;
    if 1 <= sx32mar <= 3                           then as32mar=1;
    if g33amar eq 1 and
        ((1 <= g33cmar <=3) and (crtage > g33bmar))
     or ((g33cmar eq 4) and (1 <= db33mar <= 54))  then sx33mar=1;
    if g33amar eq 1 and
        ((1 <= rcusemar <=3) and (crtage > g33bmar))
     or ((rcusemar eq 4) and (1 <= lb33mar <=54))  then sx33mar=2;
    if 1 <= sx33mar <= 2                           then as33mar=1;
    if g34amar eq 1                                then as34mar=1;
    if g36amar eq 1                                then as36mar=1;
    if g37amar eq 1 and
        ((1 <= g37cmar <=3) and (crtage > g37bmar))
     or ((g37cmar eq 4) and (1 <= db37mar <= 54))  then sx37mar=1;
    if g37amar eq 1 and
        ((1 <= rcusemar <=3) and (crtage > g37bmar))
     or ((rcusemar eq 4) and (1 <= lb37mar <= 54)) then sx37mar=2;
    if 1 <= sx37mar <= 2                           then as37mar=1;
    if g38amar eq 1 and
        ((1 <= g38cmar <=3) and (crtage > g38bmar))

     or ((g38cmar eq 4) and (1 <= db38mar <= 54))  then sx38mar=1;
    if g38amar eq 1 and
        ((1 <= rcusemar <=3) and (crtage > g38bmar))
     or ((rcusemar eq 4) and (1 <= lb38mar <= 54)) then sx38mar=2;
    if 1 <= sx38mar <= 2                           then as38mar=1;
    if g41amar eq 1                                then as41mar=1;

amartot=sum(as32mar,as33mar,as34mar,as36mar,as37mar,as38mar,as41mar);
    if amartot ge 1 then alifmar=1; else alifmar=0;
```

```
************************** COCAINE **************************;

    if g32acoc eq 1 and
        ((1 <= g32ccoc <=3) and (crtage > g32bcoc))
     or ((g32ccoc eq 4) and (1 <= db32coc <= 54))  then sx32coc=1;
    if g32acoc eq 1 and
        ((1 <= rcusecoc <=3) and (crtage > g32bcoc))
     or ((rcusecoc eq 4) and (1 <= lb32coc <= 54)) then sx32coc=2;
    if g32acoc eq 1 and (g32ecoc eq 1)             then sx32coc=3;
    if 1 <= sx32coc <= 3                           then as32coc=1;
    if g33acoc eq 1 and
        ((1 <= g33ccoc <=3) and (crtage > g33bcoc))
     or ((g33ccoc eq 4) and (1 <= db33coc <= 54))  then sx33coc=1;
    if g33acoc eq 1 and
        ((1 <= rcusecoc <=3) and (crtage > g33bcoc))
     or ((rcusecoc eq 4) and (1 <= lb33coc <=54))  then sx33coc=2;
    if 1 <= sx33coc <= 2                           then as33coc=1;
    if g34acoc eq 1                                then as34coc=1;
    if g36acoc eq 1                                then as36coc=1;
    if g37acoc eq 1 and
        ((1 <= g37ccoc <=3) and (crtage > g37bcoc))
     or ((g37ccoc eq 4) and (1 <= db37coc <= 54))  then sx37coc=1;
    if g37acoc eq 1 and
        ((1 <= rcusecoc <=3) and (crtage > g37bcoc))
     or ((rcusecoc eq 4) and (1 <= lb37coc <= 54)) then sx37coc=2;
    if 1 <= sx37coc <= 2                           then as37coc=1;
    if g38acoc eq 1 and
        ((1 <= g38ccoc <=3) and (crtage > g38bcoc))

     or ((g38ccoc eq 4) and (1 <= db38coc <= 54))  then sx38coc=1;
    if g38acoc eq 1 and
        ((1 <= rcusecoc <=3) and (crtage > g38bcoc))
     or ((rcusecoc eq 4) and (1 <= lb38coc <= 54)) then sx38coc=2;
    if 1 <= sx38coc <= 2                           then as38coc=1;
    if g41acoc eq 1                                then as41coc=1;

acoctot=sum(as32coc,as33coc,as34coc,as36coc,as37coc,as38coc,as41coc);
    if acoctot ge 1 then alifcoc=1; else alifcoc=0;


************************** HALLUCINOGENS ********************;

    if g32ahal eq 1 and
        ((1 <= g32chal <=3) and (crtage > g32bhal))
     or ((g32chal eq 4) and (1 <= db32hal <= 54))  then sx32hal=1;
    if g32ahal eq 1 and
        ((1 <= rcusehal <=3) and (crtage > g32bhal))
     or ((rcusehal eq 4) and (1 <= lb32hal <= 54)) then sx32hal=2;
    if g32ahal eq 1 and (g32ehal eq 1)             then sx32hal=3;
    if 1 <= sx32hal <= 3                           then as32hal=1;
    if g33ahal eq 1 and
        ((1 <= g33chal <=3) and (crtage > g33bhal))
```

```
     or ((g33chal eq 4) and (1 <= db33hal <= 54))  then sx33hal=1;
    if g33ahal eq 1 and
        ((1 <= rcusehal <=3) and (crtage > g33bhal))
     or ((rcusehal eq 4) and (1 <= lb33hal <=54))  then sx33hal=2;
    if 1 <= sx33hal <= 2                           then as33hal=1;
    if g34ahal eq 1                                then as34hal=1;
    if g36ahal eq 1                                then as36hal=1;
    if g37ahal eq 1 and
        ((1 <= g37chal <=3) and (crtage > g37bhal))
     or ((g37chal eq 4) and (1 <= db37hal <= 54))  then sx37hal=1;
    if g37ahal eq 1 and
        ((1 <= rcusehal <=3) and (crtage > g37bhal))
     or ((rcusehal eq 4) and (1 <= lb37hal <= 54)) then sx37hal=2;
    if 1 <= sx37hal <= 2                           then as37hal=1;
    if g38ahal eq 1 and
        ((1 <= g38chal <=3) and (crtage > g38bhal))

     or ((g38chal eq 4) and (1 <= db38hal <= 54))  then sx38hal=1;
    if g38ahal eq 1 and
        ((1 <= rcusehal <=3) and (crtage > g38bhal))
     or ((rcusehal eq 4) and (1 <= lb38hal <= 54)) then sx38hal=2;
    if 1 <= sx38hal <= 2                           then as38hal=1;
    if g41ahal eq 1                                then as41hal=1;

ahaltot=sum(as32hal,as33hal,as34hal,as36hal,as37hal,as38hal,as41hal);
    if ahaltot ge 1 then alifhal=1; else alifhal=0;


************************** HEROIN ***************************;

    if g32aher eq 1 and
        ((1 <= g32cher <=3) and (crtage > g32bher))
     or ((g32cher eq 4) and (1 <= db32her <= 54))  then sx32her=1;
    if g32aher eq 1 and
        ((1 <= rcuseher <=3) and (crtage > g32bher))
     or ((rcuseher eq 4) and (1 <= lb32her <= 54)) then sx32her=2;
    if g32aher eq 1 and (g32eher eq 1)             then sx32her=3;
    if 1 <= sx32her <= 3                           then as32her=1;
    if g33aher eq 1 and
        ((1 <= g33cher <=3) and (crtage > g33bher))
     or ((g33cher eq 4) and (1 <= db33her <= 54))  then sx33her=1;
    if g33aher eq 1 and
        ((1 <= rcuseher <=3) and (crtage > g33bher))
     or ((rcuseher eq 4) and (1 <= lb33her <=54))  then sx33her=2;
    if 1 <= sx33her <= 2                           then as33her=1;
    if g34aher eq 1                                then as34her=1;
    if g36aher eq 1                                then as36her=1;
    if g37aher eq 1 and
        ((1 <= g37cher <=3) and (crtage > g37bher))
     or ((g37cher eq 4) and (1 <= db37her <= 54))  then sx37her=1;
    if g37aher eq 1 and
        ((1 <= rcuseher <=3) and (crtage > g37bher))
```

```
     or ((rcuseher eq 4) and (1 <= lb37her <= 54)) then sx37her=2;
    if 1 <= sx37her <= 2                           then as37her=1;
    if g38aher eq 1 and
       ((1 <= g38cher <=3) and (crtage > g38bher))

     or ((g38cher eq 4) and (1 <= db38her <= 54))  then sx38her=1;
    if g38aher eq 1 and
       ((1 <= rcuseher <=3) and (crtage > g38bher))
     or ((rcuseher eq 4) and (1 <= lb38her <= 54)) then sx38her=2;
    if 1 <= sx38her <= 2                           then as38her=1;
    if g41aher eq 1                                then as41her=1;

ahertot=sum(as32her,as33her,as34her,as36her,as37her,as38her,as41her);
    if ahertot ge 1 then alifher=1; else alifher=0;


*-----------------------------------------------------------------*
|               ABUSE LIFETIME ONSET AGE (ALOAxxx)                |
|                                                                 |
*-----------------------------------------------------------------*;

*     Select minimum age only from among items which met criteria;
*     (Using minimum Gxxb);
    if as32alc eq 1 then g32alcoa=g32balc; else g32alcoa=999;
    if as33alc eq 1 then g33alcoa=g33balc; else g33alcoa=999;
    if as34alc eq 1 then g34alcoa=g34balc; else g34alcoa=999;
    if as36alc eq 1 then g36alcoa=g36balc; else g36alcoa=999;
    if as37alc eq 1 then g37alcoa=g37balc; else g37alcoa=999;
    if as38alc eq 1 then g38alcoa=g38balc; else g38alcoa=999;
    if as41alc eq 1 then g41alcoa=g41balc; else g41alcoa=999;

aloaalc=min(g32alcoa,g33alcoa,g34alcoa,g36alcoa,g37alcoa,g38alcoa,g41alcoa);
      if aloaalc=999 then aloaalc=.;
    if as32sed eq 1 then g32sedoa=g32bsed; else g32sedoa=999;
    if as33sed eq 1 then g33sedoa=g33bsed; else g33sedoa=999;
    if as34sed eq 1 then g34sedoa=g34bsed; else g34sedoa=999;
    if as36sed eq 1 then g36sedoa=g36bsed; else g36sedoa=999;
    if as37sed eq 1 then g37sedoa=g37bsed; else g37sedoa=999;
    if as38sed eq 1 then g38sedoa=g38bsed; else g38sedoa=999;
    if as41sed eq 1 then g41sedoa=g41bsed; else g41sedoa=999;

aloased=min(g32sedoa,g33sedoa,g34sedoa,g36sedoa,g37sedoa,g38sedoa,g41sedoa);
      if aloased=999 then aloased=.;
    if as32trq eq 1 then g32trqoa=g32btrq; else g32trqoa=999;
    if as33trq eq 1 then g33trqoa=g33btrq; else g33trqoa=999;
    if as34trq eq 1 then g34trqoa=g34btrq; else g34trqoa=999;
    if as36trq eq 1 then g36trqoa=g36btrq; else g36trqoa=999;
    if as37trq eq 1 then g37trqoa=g37btrq; else g37trqoa=999;
    if as38trq eq 1 then g38trqoa=g38btrq; else g38trqoa=999;
    if as41trq eq 1 then g41trqoa=g41btrq; else g41trqoa=999;

aloatrq=min(g32trqoa,g33trqoa,g34trqoa,g36trqoa,g37trqoa,g38trqoa,g41trqoa);
```

```
      if aloatrq=999 then aloatrq=.;
    if as32sti eq 1 then g32stioa=g32bsti; else g32stioa=999;
    if as33sti eq 1 then g33stioa=g33bsti; else g33stioa=999;
    if as34sti eq 1 then g34stioa=g34bsti; else g34stioa=999;
    if as36sti eq 1 then g36stioa=g36bsti; else g36stioa=999;
    if as37sti eq 1 then g37stioa=g37bsti; else g37stioa=999;
    if as38sti eq 1 then g38stioa=g38bsti; else g38stioa=999;
    if as41sti eq 1 then g41stioa=g41bsti; else g41stioa=999;

aloasti=min(g32stioa,g33stioa,g34stioa,g36stioa,g37stioa,g38stioa,g41stioa);
      if aloasti=999 then aloasti=.;
    if as32ags eq 1 then g32agsoa=g32bags; else g32agsoa=999;
    if as33ags eq 1 then g33agsoa=g33bags; else g33agsoa=999;
    if as34ags eq 1 then g34agsoa=g34bags; else g34agsoa=999;
    if as36ags eq 1 then g36agsoa=g36bags; else g36agsoa=999;
    if as37ags eq 1 then g37agsoa=g37bags; else g37agsoa=999;
    if as38ags eq 1 then g38agsoa=g38bags; else g38agsoa=999;
    if as41ags eq 1 then g41agsoa=g41bags; else g41agsoa=999;

aloaags=min(g32agsoa,g33agsoa,g34agsoa,g36agsoa,g37agsoa,g38agsoa,g41agsoa);
      if aloaags=999 then aloaags=.;
    if as32inh eq 1 then g32inhoa=g32binh; else g32inhoa=999;
    if as33inh eq 1 then g33inhoa=g33binh; else g33inhoa=999;
    if as34inh eq 1 then g34inhoa=g34binh; else g34inhoa=999;
    if as36inh eq 1 then g36inhoa=g36binh; else g36inhoa=999;
    if as37inh eq 1 then g37inhoa=g37binh; else g37inhoa=999;
    if as38inh eq 1 then g38inhoa=g38binh; else g38inhoa=999;
    if as41inh eq 1 then g41inhoa=g41binh; else g41inhoa=999;

aloainh=min(g32inhoa,g33inhoa,g34inhoa,g36inhoa,g37inhoa,g38inhoa,g41inhoa);
      if aloainh=999 then aloainh=.;
    if as32mar eq 1 then g32maroa=g32bmar; else g32maroa=999;
    if as33mar eq 1 then g33maroa=g33bmar; else g33maroa=999;
    if as34mar eq 1 then g34maroa=g34bmar; else g34maroa=999;
    if as36mar eq 1 then g36maroa=g36bmar; else g36maroa=999;
    if as37mar eq 1 then g37maroa=g37bmar; else g37maroa=999;
    if as38mar eq 1 then g38maroa=g38bmar; else g38maroa=999;
    if as41mar eq 1 then g41maroa=g41bmar; else g41maroa=999;

aloamar=min(g32maroa,g33maroa,g34maroa,g36maroa,g37maroa,g38maroa,g41maroa);
      if aloamar=999 then aloamar=.;
    if as32coc eq 1 then g32cocoa=g32bcoc; else g32cocoa=999;
    if as33coc eq 1 then g33cocoa=g33bcoc; else g33cocoa=999;
    if as34coc eq 1 then g34cocoa=g34bcoc; else g34cocoa=999;
    if as36coc eq 1 then g36cocoa=g36bcoc; else g36cocoa=999;
    if as37coc eq 1 then g37cocoa=g37bcoc; else g37cocoa=999;
    if as38coc eq 1 then g38cocoa=g38bcoc; else g38cocoa=999;
    if as41coc eq 1 then g41cocoa=g41bcoc; else g41cocoa=999;

aloacoc=min(g32cocoa,g33cocoa,g34cocoa,g36cocoa,g37cocoa,g38cocoa,g41cocoa);
      if aloacoc=999 then aloacoc=.;
    if as32hal eq 1 then g32haloa=g32bhal; else g32haloa=999;
```

```
    if as33hal eq 1 then g33haloa=g33bhal; else g33haloa=999;
    if as34hal eq 1 then g34haloa=g34bhal; else g34haloa=999;
    if as36hal eq 1 then g36haloa=g36bhal; else g36haloa=999;
    if as37hal eq 1 then g37haloa=g37bhal; else g37haloa=999;
    if as38hal eq 1 then g38haloa=g38bhal; else g38haloa=999;
    if as41hal eq 1 then g41haloa=g41bhal; else g41haloa=999;

aloahal=min(g32haloa,g33haloa,g34haloa,g36haloa,g37haloa,g38haloa,g41haloa);
       if aloahal=999 then aloahal=.;
    if as32her eq 1 then g32heroa=g32bher; else g32heroa=999;
    if as33her eq 1 then g33heroa=g33bher; else g33heroa=999;
    if as34her eq 1 then g34heroa=g34bher; else g34heroa=999;
    if as36her eq 1 then g36heroa=g36bher; else g36heroa=999;
    if as37her eq 1 then g37heroa=g37bher; else g37heroa=999;
    if as38her eq 1 then g38heroa=g38bher; else g38heroa=999;
    if as41her eq 1 then g41heroa=g41bher; else g41heroa=999;

aloaher=min(g32heroa,g33heroa,g34heroa,g36heroa,g37heroa,g38heroa,g41heroa);
       if aloaher=999 then aloaher=.;

*-------------------------------------------------------------------*
|    ABUSE PROBLEM, RECENCY   (APRECxxx)                            |
|                1=past month 2=past 6 months                       |
|                3=past year  4=more than a year;                   |
|       (MINIMUM OF VALID CODES 1-4)                                |
|       (problem only, continued use not considered)                |
*-------------------------------------------------------------------*;

array missf(*) g32calc g33calc g34calc g37calc g38calc g41calc
               g32csed g33csed g34csed g37csed g38csed g41csed
               g32ctrq g33ctrq g34ctrq g37ctrq g38ctrq g41ctrq
               g32csti g33csti g34csti g37csti g38csti g41csti
               g32cags g33cags g34cags g37cags g38cags g41cags
               g32cinh g33cinh g34cinh g37cinh g38cinh g41cinh
               g32cmar g33cmar g34cmar g37cmar g38cmar g41cmar
               g32ccoc g33ccoc g34ccoc g37ccoc g38ccoc g41ccoc
               g32chal g33chal g34chal g37chal g38chal g41chal
               g32cher g33cher g34cher g37cher g38cher g41cher;
     do i=1 to dim(missf);
        if missf(i)>= 8 or missf(i)=. or missf(i)=0 then missf(i)=9;
     end;
     drop i;
aprecalc=min(g32calc,g33calc,g34calc,g37calc,g38calc,g41calc);
aprecsed=min(g32csed,g33csed,g34csed,g37csed,g38csed,g41csed);
aprectrq=min(g32ctrq,g33ctrq,g34ctrq,g37ctrq,g38ctrq,g41ctrq);
aprecsti=min(g32csti,g33csti,g34csti,g37csti,g38csti,g41csti);
aprecags=min(g32cags,g33cags,g34cags,g37cags,g38cags,g41cags);
aprecinh=min(g32cinh,g33cinh,g34cinh,g37cinh,g38cinh,g41cinh);
aprecmar=min(g32cmar,g33cmar,g34cmar,g37cmar,g38cmar,g41cmar);
apreccoc=min(g32ccoc,g33ccoc,g34ccoc,g37ccoc,g38ccoc,g41ccoc);
aprechal=min(g32chal,g33chal,g34chal,g37chal,g38chal,g41chal);
aprecher=min(g32cher,g33cher,g34cher,g37cher,g38cher,g41cher);
```

```
*-------------------------------------------------------------------*
|                ABUSE PROBLEM RECENCY AGE  (APRAGxxx)              |
|                   maximum of valid age codes 1-55                 |
|         missing ages set to . which is smaller than valid ages    |
|                                                                   |
*-------------------------------------------------------------------*;

array missh(*) g32dalc g33dalc g34dalc g37dalc g38dalc g41dalc
               g32dsed g33dsed g34dsed g37dsed g38dsed g41dsed
               g32dtrq g33dtrq g34dtrq g37dtrq g38dtrq g41dtrq
               g32dsti g33dsti g34dsti g37dsti g38dsti g41dsti
               g32dags g33dags g34dags g37dags g38dags g41dags
               g32dinh g33dinh g34dinh g37dinh g38dinh g41dinh
               g32dmar g33dmar g34dmar g37dmar g38dmar g41dmar
               g32dcoc g33dcoc g34dcoc g37dcoc g38dcoc g41dcoc
               g32dhal g33dhal g34dhal g37dhal g38dhal g41dhal
               g32dher g33dher g34dher g37dher g38dher g41dher;
     do i=1 to dim(missh);
        if missh(i)= 999 then missh(i)=.;
     end;
     drop i;
    if aprecalc eq 4 then

apragalc=max(g32dalc,g33dalc,g34dalc,g37dalc,g38dalc,g41dalc);
     if 1 <= aprecalc <=3 then apragalc=crtage;
    if aprecsed eq 4 then

apragsed=max(g32dsed,g33dsed,g34dsed,g37dsed,g38dsed,g41dsed);
    if aprectrq eq 4 then

apragtrq=max(g32dtrq,g33dtrq,g34dtrq,g37dtrq,g38dtrq,g41dtrq);
     if 1 <= aprectrq <=3 then apragtrq=crtage;
    if aprecsti eq 4 then

apragsti=max(g32dsti,g33dsti,g34dsti,g37dsti,g38dsti,g41dsti);
     if 1 <= aprecsti <=3 then apragsti=crtage;
    if aprecags eq 4 then

apragags=max(g32dags,g33dags,g34dags,g37dags,g38dags,g41dags);
    if 1 <= aprecags <=3 then apragags=crtage;
    if aprecinh eq 4 then

apraginh=max(g32dinh,g33dinh,g34dinh,g37dinh,g38dinh,g41dinh);
    if 1 <= aprecinh <=3 then apraginh=crtage;
    if aprecmar eq 4 then

apragmar=max(g32dmar,g33dmar,g34dmar,g37dmar,g38dmar,g41dmar);
    if 1 <= aprecmar <=3 then apragmar=crtage;
    if apreccoc eq 4 then

apragcoc=max(g32dcoc,g33dcoc,g34dcoc,g37dcoc,g38dcoc,g41dcoc);
    if 1 <= apreccoc <=3 then apragcoc=crtage;
```

```
    if aprechal eq 4 then

apraghal=max(g32dhal,g33dhal,g34dhal,g37dhal,g38dhal,g41dhal);
    if 1 <= aprechal <=3 then apraghal=crtage;
    if aprecher eq 4 then

apragher=max(g32dher,g33dher,g34dher,g37dher,g38dher,g41dher);
    if 1 <= aprecher <=3 then apragher=crtage;
/* note: non-valid ages in 'd' are now set to . */


*-------------------------------------------------------------------*
|  ABUSE SYMPTOM RECENCY (ASRECxxx) (had problem with continueduse) |
|  (recency not available for problem 36)                           |
|   select min recency only from among valid symptoms               |
|                                                                   |
*-------------------------------------------------------------------*;

    if as32alc=1 then asr32alc=g32calc;
    if as33alc=1 then asr33alc=g33calc;
    if as34alc=1 then asr34alc=g34calc;
    if as37alc=1 then asr37alc=g37calc;
    if as38alc=1 then asr38alc=g38calc;
    if as41alc=1 then asr41alc=g41calc;

asrecalc=min(asr32alc,asr33alc,asr34alc,asr37alc,asr38alc,asr41alc);
    if as32sed=1 then asr32sed=g32csed;
    if as33sed=1 then asr33sed=g33csed;
    if as34sed=1 then asr34sed=g34csed;
    if as37sed=1 then asr37sed=g37csed;
    if as38sed=1 then asr38sed=g38csed;
    if as41sed=1 then asr41sed=g41csed;

asrecsed=min(asr32sed,asr33sed,asr34sed,asr37sed,asr38sed,asr41sed);
    if as32trq=1 then asr32trq=g32ctrq;
    if as33trq=1 then asr33trq=g33ctrq;
    if as34trq=1 then asr34trq=g34ctrq;
    if as37trq=1 then asr37trq=g37ctrq;
    if as38trq=1 then asr38trq=g38ctrq;
    if as41trq=1 then asr41trq=g41ctrq;

asrectrq=min(asr32trq,asr33trq,asr34trq,asr37trq,asr38trq,asr41trq);
    if as32sti=1 then asr32sti=g32csti;
    if as33sti=1 then asr33sti=g33csti;
    if as34sti=1 then asr34sti=g34csti;
    if as37sti=1 then asr37sti=g37csti;
    if as38sti=1 then asr38sti=g38csti;
    if as41sti=1 then asr41sti=g41csti;

asrecsti=min(asr32sti,asr33sti,asr34sti,asr37sti,asr38sti,asr41sti);
    if as32ags=1 then asr32ags=g32cags;
    if as33ags=1 then asr33ags=g33cags;
```

```
    if as34ags=1 then asr34ags=g34cags;
    if as37ags=1 then asr37ags=g37cags;
    if as38ags=1 then asr38ags=g38cags;
    if as41ags=1 then asr41ags=g41cags;

asrecags=min(asr32ags,asr33ags,asr34ags,asr37ags,asr38ags,asr41ags);
    if as32inh=1 then asr32inh=g32cinh;
    if as33inh=1 then asr33inh=g33cinh;
    if as34inh=1 then asr34inh=g34cinh;
    if as37inh=1 then asr37inh=g37cinh;
    if as38inh=1 then asr38inh=g38cinh;
    if as41inh=1 then asr41inh=g41cinh;

asrecinh=min(asr32inh,asr33inh,asr34inh,asr37inh,asr38inh,asr41inh);
    if as32mar=1 then asr32mar=g32cmar;
    if as33mar=1 then asr33mar=g33cmar;
    if as34mar=1 then asr34mar=g34cmar;
    if as37mar=1 then asr37mar=g37cmar;
    if as38mar=1 then asr38mar=g38cmar;
    if as41mar=1 then asr41mar=g41cmar;

asrecmar=min(asr32mar,asr33mar,asr34mar,asr37mar,asr38mar,asr41mar);
    if as32coc=1 then asr32coc=g32ccoc;
    if as33coc=1 then asr33coc=g33ccoc;
    if as34coc=1 then asr34coc=g34ccoc;
    if as37coc=1 then asr37coc=g37ccoc;
    if as38coc=1 then asr38coc=g38ccoc;
    if as41coc=1 then asr41coc=g41ccoc;

asreccoc=min(asr32coc,asr33coc,asr34coc,asr37coc,asr38coc,asr41coc);
    if as32hal=1 then asr32hal=g32chal;
    if as33hal=1 then asr33hal=g33chal;
    if as34hal=1 then asr34hal=g34chal;
    if as37hal=1 then asr37hal=g37chal;
    if as38hal=1 then asr38hal=g38chal;
    if as41hal=1 then asr41hal=g41chal;

asrechal=min(asr32hal,asr33hal,asr34hal,asr37hal,asr38hal,asr41hal);
    if as32her=1 then asr32her=g32cher;
    if as33her=1 then asr33her=g33cher;
    if as34her=1 then asr34her=g34cher;
    if as37her=1 then asr37her=g37cher;
    if as38her=1 then asr38her=g38cher;
    if as41her=1 then asr41her=g41cher;

asrecher=min(asr32her,asr33her,asr34her,asr37her,asr38her,asr41her);
```

```
*-------------------------------------------------------------------*
|            ABUSE SYMPTOM RECENCY AGE  (ASRAGxxx)                  |
|                maximum of valid age codes 1-55                    |
|        selecting only from symtoms rather than from problems      |
|        (asa= abuse symptom age for a specific item #)             |
|                                                                   |
*-------------------------------------------------------------------*;

    if as32alc=1 then asa32alc=g32dalc;
    if as33alc=1 then asa33alc=g33dalc;
    if as34alc=1 then asa34alc=g34dalc;
    if as37alc=1 then asa37alc=g37dalc;
    if as38alc=1 then asa38alc=g38dalc;
    if as41alc=1 then asa41alc=g41dalc;
   if asrecalc eq 4 then

asragalc=max(asa32alc,asa33alc,asa34alc,asa37alc,asa38alc,asa41alc);
    if 1 <= asrecalc <=3 then asragalc=crtage;

    if as32sed=1 then asa32sed=g32dsed;
    if as33sed=1 then asa33sed=g33dsed;
    if as34sed=1 then asa34sed=g34dsed;
    if as37sed=1 then asa37sed=g37dsed;
    if as38sed=1 then asa38sed=g38dsed;
    if as41sed=1 then asa41sed=g41dsed;
   if asrecsed eq 4 then

asragsed=max(asa32sed,asa33sed,asa34sed,asa37sed,asa38sed,asa41sed);
    if 1 <= asrecsed <=3 then asragsed=crtage;

    if as32trq=1 then asa32trq=g32dtrq;
    if as33trq=1 then asa33trq=g33dtrq;
    if as34trq=1 then asa34trq=g34dtrq;
    if as37trq=1 then asa37trq=g37dtrq;
    if as38trq=1 then asa38trq=g38dtrq;
    if as41trq=1 then asa41trq=g41dtrq;
   if asrectrq eq 4 then

asragtrq=max(asa32trq,asa33trq,asa34trq,asa37trq,asa38trq,asa41trq);
    if 1 <= asrectrq <=3 then asragtrq=crtage;

    if as32sti=1 then asa32sti=g32dsti;
    if as33sti=1 then asa33sti=g33dsti;
    if as34sti=1 then asa34sti=g34dsti;
    if as37sti=1 then asa37sti=g37dsti;
    if as38sti=1 then asa38sti=g38dsti;
    if as41sti=1 then asa41sti=g41dsti;
   if asrecsti eq 4 then

asragsti=max(asa32sti,asa33sti,asa34sti,asa37sti,asa38sti,asa41sti);
    if 1 <= asrecsti <=3 then asragsti=crtage;
```

```
    if as32ags=1 then asa32ags=g32dags;
    if as33ags=1 then asa33ags=g33dags;
    if as34ags=1 then asa34ags=g34dags;
    if as37ags=1 then asa37ags=g37dags;
    if as38ags=1 then asa38ags=g38dags;
    if as41ags=1 then asa41ags=g41dags;
   if asrecags eq 4 then

asragags=max(asa32ags,asa33ags,asa34ags,asa37ags,asa38ags,asa41ags);
    if 1 <= asrecags <=3 then asragags=crtage;

    if as32inh=1 then asa32inh=g32dinh;
    if as33inh=1 then asa33inh=g33dinh;
    if as34inh=1 then asa34inh=g34dinh;
    if as37inh=1 then asa37inh=g37dinh;
    if as38inh=1 then asa38inh=g38dinh;
    if as41inh=1 then asa41inh=g41dinh;
   if asrecinh eq 4 then

asraginh=max(asa32inh,asa33inh,asa34inh,asa37inh,asa38inh,asa41inh);
    if 1 <= asrecinh <=3 then asraginh=crtage;

    if as32mar=1 then asa32mar=g32dmar;
    if as33mar=1 then asa33mar=g33dmar;
    if as34mar=1 then asa34mar=g34dmar;
    if as37mar=1 then asa37mar=g37dmar;
    if as38mar=1 then asa38mar=g38dmar;
    if as41mar=1 then asa41mar=g41dmar;
   if asrecmar eq 4 then

asragmar=max(asa32mar,asa33mar,asa34mar,asa37mar,asa38mar,asa41mar);
    if 1 <= asrecmar <=3 then asragmar=crtage;

    if as32coc=1 then asa32coc=g32dcoc;
    if as33coc=1 then asa33coc=g33dcoc;
    if as34coc=1 then asa34coc=g34dcoc;
    if as37coc=1 then asa37coc=g37dcoc;
    if as38coc=1 then asa38coc=g38dcoc;
    if as41coc=1 then asa41coc=g41dcoc;
   if asreccoc eq 4 then

asragcoc=max(asa32coc,asa33coc,asa34coc,asa37coc,asa38coc,asa41coc);
    if 1 <= asreccoc <=3 then asragcoc=crtage;

    if as32hal=1 then asa32hal=g32dhal;
    if as33hal=1 then asa33hal=g33dhal;
    if as34hal=1 then asa34hal=g34dhal;
    if as37hal=1 then asa37hal=g37dhal;
    if as38hal=1 then asa38hal=g38dhal;
    if as41hal=1 then asa41hal=g41dhal;
   if asrechal eq 4 then
```

```
asraghal=max(asa32hal,asa33hal,asa34hal,asa37hal,asa38hal,asa41hal);
    if 1 <= asrechal <=3 then asraghal=crtage;

    if as32her=1 then asa32her=g32dher;
    if as33her=1 then asa33her=g33dher;
    if as34her=1 then asa34her=g34dher;
    if as37her=1 then asa37her=g37dher;
    if as38her=1 then asa38her=g38dher;
    if as41her=1 then asa41her=g41dher;
   if asrecher eq 4 then

asragher=max(asa32her,asa33her,asa34her,asa37her,asa38her,asa41her);
    if 1 <= asrecher <=3 then asragher=crtage;
```

```
*-------------------------------------------------------------*
|     ABUSE FULL CRITERIA WITHIN PAST 12 MONTHS (AF12xxx)     |
|       --recency of at least one abuse symptoms was code 1-3 |
|         within past year, past 6 months, or past month      |
*-------------------------------------------------------------*;


if alifalc=1 and 1 <= asrecalc <= 3 then aflyalc=1 ; else aflyalc=0;
if alifsed=1 and 1 <= asrecsed <= 3 then aflysed=1 ; else aflysed=0;
if aliftrq=1 and 1 <= asrectrq <= 3 then aflytrq=1 ; else aflytrq=0;
if alifsti=1 and 1 <= asrecsti <= 3 then aflysti=1 ; else aflysti=0;
if alifags=1 and 1 <= asrecags <= 3 then aflyags=1 ; else aflyags=0;
if alifinh=1 and 1 <= asrecinh <= 3 then aflyinh=1 ; else aflyinh=0;
if alifmar=1 and 1 <= asrecmar <= 3 then aflymar=1 ; else aflymar=0;
if alifcoc=1 and 1 <= asreccoc <= 3 then aflycoc=1 ; else aflycoc=0;
if alifhal=1 and 1 <= asrechal <= 3 then aflyhal=1 ; else aflyhal=0;
if alifher=1 and 1 <= asrecher <= 3 then aflyher=1 ; else aflyher=0;
```

```
*-------------------------------------------------------------------*
|          ABUSE FULL CRITERIA IN PAST MONTH (AF1Mxxx)              |
|       --recency of at least one abuse symptom  was code 1         |
*-------------------------------------------------------------------*;

if alifalc=1 and asrecalc =1 then af1malc=1; else af1malc=0;
if alifsed=1 and asrecsed =1 then af1msed=1; else af1msed=0;
if aliftrq=1 and asrectrq =1 then af1mtrq=1; else af1mtrq=0;
if alifsti=1 and asrecsti =1 then af1msti=1; else af1msti=0;
if alifags=1 and asrecags =1 then af1mags=1; else af1mags=0;
if alifinh=1 and asrecinh =1 then af1minh=1; else af1minh=0;
if alifmar=1 and asrecmar =1 then af1mmar=1; else af1mmar=0;
if alifcoc=1 and asreccoc =1 then af1mcoc=1; else af1mcoc=0;
if alifhal=1 and asrechal =1 then af1mhal=1; else af1mhal=0;
if alifher=1 and asrecher =1 then af1mher=1; else af1mher=0;
```

```
*********************************************************************;

/* 5.  TOBACCO.SAS

   Tobacco supplement was given to 4414 of the 8098 NSHS respondents.
  (Therefore the denominator must be adjusted.)

    # indicates var not created/ full information not available
   RCUSETOB: recency of use, tobacco (1=past month 2=6mo 3=past year
                                      4=more than a year)
   DLIFTOB:  dependence lifetime tobacco (no/yes)
   DLOATOB:  dependence lifetime ONSET AGE

   D1PTOB:   ever had at least 1 problem with tobacco (no/yes)
 # D1POATOB: dependence first problem ONSET AGE
             cannot create (only have age first time for cases
             who had at least 2 problems). Use DLOATOB.
   DPRECTOB: dependence problem RECENCY
             Using recency in CC18, asked only of cases who
             had at least ONE problem.
 # DPRAGTOB: dependence problem RECENCY AGE

 # DF1YTOB:  dependence full criteria in past year (no/yes)
 # DF1MTOB:  dependence full criteria in past 1 month (no/yes)
*/
*********************************************************************;


/* making permanent tobacco dataset n=4414 tobacco respondents */

     cc1a=v7403;  cc1b=v7408;  cc1c=v7413;  cc1d=v7418;
     cc2a=v7404;  cc2b=v7409;  cc2c=v7414;  cc2d=v7419;
     cc3a=v7405;  cc3b=v7410;  cc3c=v7415;  cc3d=v7420;
     cc4a=v7406;  cc4b=v7411;  cc4c=v7416;  cc4d=v7421;
     cc5a=v7407;  cc5b=v7412;  cc5c=v7417;  cc5d=v7422;
     cc6=v7423;   cc7=v7424;   cc8=v7425;   cc8a=v7426;
     cc8b=v7427;  cc8c=v7428;  cc9=v7429;   cc10=v7430;
     cc10a=v7431; cc11=v7432;  cc11a=v7433; cc12=v7434;
     cc12a=v7435; cc13=v7436;  cc14=v7437;  cc15=v7438;
     cc15a=v7439; cc16=v7440;  cc17=v7441;  cc18=v7442;

*-------------------------------------------------------------*
| RCUSETOB: Recency of tobacco use                            |
*-------------------------------------------------------------*;

     array missr(*) cc4a cc4b cc4c cc4d;
         do i=1 to dim(missr);
            if missr(i)=0 or missr(i)=. then missr(i)=9;
         end;
         drop i;
     RCUSETOB=min(cc4a,cc4b,cc4c,cc4d);
```

```
        if rcusetob=9 then rcusetob=.;

*-----------------------------------------------------*
| DLIFTOB: Dependence Lifetime Tobacco (0=no 1=yes)  |
*-----------------------------------------------------*;

/*   CRITERIA FOR TOBACCO DEPENDENCE, LIFETIME

     A criteria:  At least 3 yes of 6 problems:
     (DSM requires 3 of 9 problems. We did not ask 3 of them
      in the tobacco supplement.  Assume 'NO' to these 3 unasked


     A1. often take larger amounts than intended ... CC13=yes
     A2. persistent desire or efforts to cut down .. CC12=yes
                                                  or CC14=yes
     A5. activities given up ....................... CC15=yes
     A6. continued use despite negative effects .... CC10=yes
                                                  or CC11=yes
                                                  or  CC9=yes
     A8. withdrawal symptoms .......................  CC8=yes
     A9. taken to relieve withdrawal symptoms ...... CC8c=yes

     B criteria:  At least 2 of 6 conditions indicating
                  symptoms persisted or repeated

     B1. automatically YES if CC13 is YES  ("often")
     B2.      CC12 is yes and CC12a is yes
         or   CC14 is yes and CC7 >=2
     B5.      CC15a is yes
     B6.      CC10 is yes and CC10a is yes
         or   CC11 is yes and CC11a is yes
         or   CC9 is yes and CC7 >=2
     B8.      CC8 is yes and:
                 (CC8a >=30 or CC8b is yes)
     B9.      CC8c is yes and CC7 <=2

     Summary of criteria: Tobacco dependence is diagnosed if
     ever used any of four tobacco substances (cigarettes,
     cigars, pipes, chewing tobacco or snuff) and had 3 or more
     of 6 possible A criteria and 2 or more of 6 possible B criteria.
*/
*    A Criteria;
     if cc13=1                      then toba1=1;
     if cc12=1 or cc14=1            then toba2=1;
     if cc15=1                      then toba5=1;
     if cc10=1 or cc11=1 or cc9=1 then toba6=1;
     if cc8=1                       then toba8=1;
     if cc8c=1                      then toba9=1;
     tobatot=sum(toba1,toba2,toba5,toba6,toba8,toba9);
     if tobatot >= 3                then tobcrita=1;
```

```
*    B Criteria;

     if toba1=1                                  then tobb1=1;

     if toba2=1 and (cc12a=1
        or (cc14=1 and cc7 >= 2))                then tobb2=1;

     if toba5=1 and cc15a=1                      then tobb5=1;

     if (cc10=1 and cc10a=1) or
        (cc11=1 and cc11a=1) or
        (cc9=1 and cc7 >= 2)                     then tobb6=1;

     if toba8=1 and (cc8a >= 30 or cc8b=1) then tobb8=1;

     if toba9=1 and cc7 >= 2                     then tobb9=1;
     tobbtot=sum(tobb1,tobb2,tobb5,tobb6,tobb8,tobb9);
     if tobbtot >= 2                 then tobcritb=1;
     if tobcrita=1 and tobcritb=1 then DLIFTOB=1;
        else dliftob=0;

*-----------------------------------------------------*
| DLOATOB: Dependence Lifetime Onset Age Tobacco      |
|   using CC17 age, only if lifetime dep critera met  |
*-----------------------------------------------------*;

     if cc17=0 or cc17 >= 98 then cc17=.;
     if dliftob=1 then DLOATOB=cc17; else dloatob=.;

*-----------------------------------------------------*
| D1PTOB: Dependence EVER AT LEAST 1 PROBLEM          |
*-----------------------------------------------------*;

     if cc13=1 or cc12=1 or cc14=1 or cc15=1 or cc10=1
     or cc11=1 or cc9=1 or cc8=1 or cc8c=1       then D1PTOB=1;
          else d1ptob=0;

*-----------------------------------------------------*
| DPRECTOB: dependence problem RECENCY                |
*-----------------------------------------------------*;

     if 1<=cc18<=4 then DPRECTOB=cc18; else DPRECTOB=.;

*-----------------------------------------------------*
| DPRAGTOB: dependence problem RECENCY AGE            |
*-----------------------------------------------------*;
/*
    Not asked
*/
```

```
*-------------------------------------------------*
| DF1YTOB: Dependence Full criteria in past year  |
*-------------------------------------------------*;
/*
   We did not ask recency of specific problems,
   only "last time you had any of those problems".
*/

*-------------------------------------------------*
| DF1MTOB: Dependence Full criteria in past month |
*-------------------------------------------------*;
/*
   We did not ask recency of specific problems,
   only "last time you had any of those problems".
*/



*********************************************************************;
*********************************************************************;
/* DRUG6.SAS    */

*   DLIFCON (Dependence, Lifetime, any controlled substance);

     if dlifsed=1 or dliftrq=1 or dlifsti=1 or dlifags=1 or dlifinh=1 or
        dlifmar=1 or dlifcoc=1 or dlifhal=1 or dlifher=1 then dlifCON=1;
     else dlifCON=0;

*   DLOACON (Dependence, Lifetime Onset Age, any controlled substance);


     array dloa{*} dloased dloatrq dloasti dloaags dloainh
                   dloamar dloacoc dloahal dloaher;
           do i=1 to dim(dloa);
           if dloa{i}=. then dloa{i}=999;
           end; drop i;
     dloaCON=min(dloased,dloatrq,dloasti,dloaags,dloainh,
                   dloamar,dloacoc,dloahal,dloaher);
       if dloaCON=999 then dloaCON=.;

*   D1POACON (Dependence, 1st Problem, Onset age, any controlled substance);

     array dpoa{*}  dlpoased dlpoatrq dlpoasti dlpoaags dlpoainh
                    dlpoamar dlpoacoc dlpoahal dlpoaher;
          do i=1 to dim(dpoa);
          if dpoa{i}=. then dpoa{i}=999;
          end; drop i;
     dlpoacon=min(dlpoased,dlpoatrq,dlpoasti,dlpoaags,dlpoainh,
                    dlpoamar,dlpoacoc,dlpoahal,dlpoaher);
     if dlpoacon=999 then dlpoacon=.;
```

```
*   DPRECCON (Dependence Problem RECENCY, any controlled substance);

     array drec(*)   dprecsed dprectrq dprecsti dprecags dprecinh
                     dprecmar dpreccoc dprechal dprecher;
           do i=1 to dim(drec);
           if drec(i)=. then drec(i)=9;
           end; drop i;

     dpreccon=min(dprecsed,dprectrq,dprecsti,dprecags,dprecinh,
                  dprecmar,dpreccoc,dprechal,dprecher);
           if dprecCON=9 then dprecCON=.;

*   DPRAGCON (Dependence Problem RECENCY AGE, any controlled substance);

     array drag(*)   dpragsed dpragtrq dpragsti dpragags dpraginh
                     dpragmar dpragcoc dpraghal dpragher;
           do i=1 to dim(drag);
           if drag(i)=999 then drag(i)=.;
           end; drop i;
     dpragcon=max(dpragsed,dpragtrq,dpragsti,dpragags,dpraginh,
                  dpragmar,dpragcoc,dpraghal,dpragher);

*   DF1YCON (Dependence Full Criteria in Past Year, any controlled substance);

     if dflysed=1 or dflytrq=1 or dflysti=1 or dflyags=1 or dflyinh=1 or
        dflymar=1 or dflycoc=1 or dflyhal=1 or dflyher=1 then dflycon=1;
     else dflycon=0;

*  ALIFCON (Abuse, Lifetime, any controlled substance);

     if alifsed=1 or aliftrq=1 or alifsti=1 or alifags=1 or alifinh=1 or
        alifmar=1 or alifcoc=1 or alifhal=1 or alifher=1 then alifcon=1;
     else alifCON=0;

*  ALOACON (Abuse, Lifetime Onset Age, any controlled substance);

     array Aloa(*) aloased aloatrq aloasti aloaags aloainh
                   aloamar aloacoc aloahal aloaher;
           do i=1 to dim(aloa);
           if aloa(i)=. then aloa(i)=999;
           end; drop i;
     aloaCON=min(aloased,aloatrq,aloasti,aloaags,aloainh,
                 aloamar,aloacoc,aloahal,aloaher);
       if aloacon=999 then aloacon=.;


*   ASRECCON (Abuse SYMPTOM RECENCY, any controlled substance);

     array asrec(*)   asrecsed asrectrq asrecsti asrecags asrecinh
                      asrecmar asreccoc asrechal asrecher;
           do i=1 to dim(asrec);
           if asrec(i)=. then asrec(i)=9;    end; drop i;
```

```
     asreccon=min(asrecsed,asrectrq,asrecsti,asrecags,asrecinh,
                  asrecmar,asreccoc,asrechal,asrecher);
     if asreccon=9 then asreccon=.;

*    ASRAGCON (Abuse SYMPTOM RECENCY AGE, any controlled substance);

     array asrag(*)   asragsed asragtrq asragsti asragags asraginh
                      asragmar asragcoc asraghal asragher;
           do i=1 to dim(asrag);
           if asrag(i)=999 then asrag(i)=.;    end; drop i;

     asragcon=max(asragsed,asragtrq,asragsti,asragags,asraginh,
                  asragmar,asragcoc,asraghal,asragher);

*    AFlYCON (Abuse Full Criteria in Past Year, any controlled substance);

     if aflysed=1 or aflytrq=1 or aflysti=1 or aflyags=1 or aflyinh=1 or
        aflymar=1 or aflycoc=1 or aflyhal=1 or aflyher=1 then aflycon=1;
     else aflycon=0;

*    DALIFCON (Dependence or Abuse, Life, any controlled substance);

     if dlifcon=1 or alifcon=1 then dalifcon=1; else dalifcon=0;

*    DALIFALC (Dependence or Abuse, Life, alcohol);

     if dlifalc=1 or alifalc=1 then dalifalc=1; else dalifalc=0;

array missx(*)
      aprecalc aprecsed aprectrq aprecsti aprecags aprecinh
      aprecmar apreccoc aprechal aprecher
      asrecalc asrecsed asrectrq asrecsti asrecags asrecinh
      asrecmar asreccoc asrechal asrecher
      dprecalc dprecsed dprectrq dprecsti dprecags dprecinh
      dprecmar dpreccoc dprechal dprecher;

   do i=1 to dim(missx);
   if missx(i)=9 then missx(i)=.;    end;   drop i;

array missy(*)
      dloaalc  dloased  dloatrq  dloasti  dloaags  dloainh
      dloamar  dloacoc  dloahal  dloaher
      dlpoaalc dlpoased dlpoatrq dlpoasti dlpoaags dlpoainh
      dlpoamar dlpoacoc dlpoahal dlpoaher
      aloaalc  aloased  aloatrq  aloasti  aloaags  aloainh
      aloamar  aloacoc  aloahal  aloaher;
   do i=1 to dim(missy);
   if missy(i)=999 then missy(i)=.;   end;   drop i;
```

```
*****************************************************************;
*                                                               *;
*                                                               *;
*          Diagnoses Generated by the Above Programs            *;
*                                                               *;
*                                                               *;
*****************************************************************;


*** DSM-III-R Affective and Anxiety Disorders;

* nap50;
    manl  man2  manons  manonsa  manrec  manreca
    hman        hmanons hmanonsa hmanrec hmanreca
    depl  dep2  depons  deponsa  deprec  depreca
    dysl  dys2  dysons  dysonsa  dysrec  dysreca
    gadl  gad2  gadons  gadonsa  gadrec  gadreca
    ago         agons   agonsa   agrec   agreca
    sim         simons  simonsa  simrec  simreca
    soc         socons  soconsa  socrec  socreca
    pd          ptons   ptonsa   ptrec   ptreca
    pt          pdons   pdonsa   pdrec   pdreca
    ptsd
    aspl  asp2
    aab
    cd


*** DSM-III-R Substance Abuse and Dependence Disorders;


    dlifalc  dlifsed  dliftrq  dlifsti  dlifags  dlifinh  dlifmar dlifcoc
    dlifhal  dlifher
    dloaalc  dloased  dloatrq  dloasti  dloaags  dloainh  dloamar  dloacoc
    dloahal  dloaher
    dtpalc   dtpsed   dtptrq   dtpsti   dtpags   dtpinh   dtpmar   dtpcoc
    dtphal   dtpher
    dlpalc   dlpsed   dlptrq   dlpsti   dlpags   dlpinh   dlpmar   dlpcoc
    dlphal   dlpher
    dlpoaalc dlpoased dlpoatrq dlpoasti dlpoaags dlpoainh dlpoamar dlpoacoc
    dlpoahal dlpoaher
    dprecalc dprecsed dprectrq dprecsti dprecags dprecinh dprecmar dpreccoc
    dprechal dprecher
    dpragalc dpragsed dpragtrq dpragsti dpragags dpraginh dpragmar dpragcoc
    dpraghal dpragher
    dflyalc  dflysed  dflytrq  dflysti  dflyags  dflyinh  dflymar dflycoc
    dflyhal  dflyher
    dflmalc  dflmsed  dflmtrq  dflmsti  dflmags  dflminh  dflmmar dflmcoc
    dflmhal  dflmher
    alifalc  alifsed  aliftrq  alifsti  alifags  alifinh  alifmar alifcoc
    alifhal  alifher
    aloaalc  aloased  aloatrq  aloasti  aloaags  aloainh  aloamar aloacoc
```

```
    aloahal  aloaher
    aprecalc aprecsed aprectrq aprecsti aprecags aprecinh aprecmar apreccoc
    aprechal aprecher
    apragalc apragsed apragtrq apragsti apragags apraginh apragmar apragcoc
    apraghal apragher
    asrecalc asrecsed asrectrq asrecsti asrecags asrecinh asrecmar asreccoc
    asrechal asrecher
    asragalc asragsed asragtrq asragsti asragags asraginh asragmar asragcoc
    asraghal asragher
    aflyalc  aflysed  aflytrq  aflysti  aflyags  aflyinh  aflymar  aflycoc
    aflyhal  aflyher
    aflmalc  aflmsed  aflmtrq  aflmsti  aflmags  aflminh  aflmmar  aflmcoc
    aflmhal  aflmher


    dlifcon  dloacon  dlpoacon dpreccon dpragcon dflycon
    alifcon  aloacon           asreccon asragcon aflycon
    dalifcon dalifalc

    rcusetob dliftob dloatob dlptob dprectob;

**********************************************************************;
```

Appendix B

Diagnostic Algorithms for NCS/DSM-III-R Disorders

NCS Working Paper #7

	Var. Name	Q. Number	Label
1	ID	none	case id
2	V12	none	R's age
3	V301	b1	ever frightnd/anxious
4	V302	b2	ever 1mo/more anxious
5	V303	b2a	#longst time anxious
6	V304	b2a	period time anxious
7	V305	b2b	B2a 6mo or longer
8	V306	b3	sad 2 yrs or more
9	V307	b3a	2yr sad uninterupted
10	V308	b4	sad/blue 2wks or more
11	V309	b4a	low/gloomy 2wks/more
12	V310	b5	no interest 2wks/more
13	V311	b5a	compltly no interest
14	V312	b6	manic/excitd 2dy/more
15	V313	b7	irritable severl days
16	V314	b8	frightend listA/page1
17	V315	b8a	fear crowd/in line
18	V316	b8b	fear away from home
19	V317	b8c	fear in public place
20	V318	b8d	fear in car/tran/bus
21	V319	b8e	fear crossing bridge
22	V320	b9	ckpt-1/more yes B8a-e
23	V321	b10	"dizy,sweaty,tremble"
24	V322	b11	"chest/stom hurt,chok"
25	V323	b12	afraid of collapsing
26	V324	b12a	othr embarrasng sxs
27	V325	b13	avoid situ duto fear
28	V334	b19	unable travel (fear)
29	V335	b20	unabl leavehome-fear
30	V336	b21	fear interfr w/life
31	V337	b22	avoidnc intrfr w/lif
32	V338	b23	ckpt-1/> boxs B15-22
33	V339	b24	first time had fears
34	V340	b25	exact age 1st fears
35	V341	b25a/b	how old 1st fears
36	V342	b25c	earliest age fears
37	V343	b26	last time had fears
38	V344	b26a	#yrs old last time
39	V401	b29a	fear public speakng
40	V402	b29b	fear public toilet
41	V403	b29c	fear public eating
42	V404	b29d	fear talk w/others
43	V405	b29e	fear writng-watched
44	V406	b29f	fear sm publ speakn
45	V407	b30	ckpt-1/ > yes B29a-f
46	V408	b31	fear months or years
47	V409	b31a	avoided situation
48	V417	b36	upset w/self forfear
49	V418	b37	fear interfer w/life

50	V419	b38	avoidnc intrfrw/life
51	V420	b39	ckpt-1/> yes B32-B38
52	V421	b40	1st time had fear
53	V422	b41	exact age 1st x fear
54	V423	b41a/b	age 1st x fear
55	V424	b41c	earliest had fears
56	V425	b42	last time had fears
57	V426	b42a	#yrs old last time
58	V427	b43	fear prohibit tasks
59	V428	b44	fear probib.soc.life
60	V429	b45	"nervous,panic,sweaty"
61	V430	b46	"blush,shake,embarrsd"
62	V501	b49a	fear of heights
63	V502	b49b	fear of flying
64	V503	b49c	fear closed spaces
65	V504	b49d	fear of being alone
66	V505	b49e	ckpt-1/> yes B49a-d
67	V506	b49g	"fear storm,thunder"
68	V507	b49h	"fear snakes,animals"
69	V508	b49i	"fear blood,shot"
70	V509	b49j	"fear watr,lake,pool"
71	V510	b49k	othr fear to avoid
72	V511	b50	ckpt-1/> yes B49a-k
73	V512	b51	fear months or years
74	V513	b51a	avoided situation
75	V521	b56	upset w/self 4 fears
76	V522	b57	fear interfer w/life
77	V523	b58	avoidnc intrfrw/life
78	V524	b59	ckpt-1/> boxs B52-58
79	V525	b60	1st time had fears
80	V526	b61	exact age 1st x fear
81	V527	b61a/b	age 1st x fear
82	V528	b61c	earliest age fear
83	V529	b62	last x had fear
84	V530	b62a	age last time fear
85	V531	b63	fear prohibit tasks
86	V532	b64	fear prohbt.soc.life
87	V533	b65	"nervous,panic,sweaty"
88	V534	b66	fear ever w/drug/alc
89	V535	b66a	fear always w/drugs
90	V536	b66b	fear or drugs 1st
91	V537	b67	drugs to reduce fear
92	V538	b67a	drugs made R better
93	V609	b70	anxios-no dangr/attn
94	V610	b71a	short/trbl w/breath
95	V611	b71b	heart pound
96	V612	b71c	dizzy/lightheaded
97	V613	b71d	pain chest/stomach
98	V614	b71e	feet tingle/numb
99	V615	b71f	"chokng,diff swallow"
100	V616	b71g	feel faint
101	V617	b71h	did R sweat

102	V618	b71i	tremble or shake
103	V619	b71j	hot flashes/chills
104	V620	b71k	things seem unreal
105	V621	b71l	time slow/quick
106	V622	b71m	afraid might die
107	V623	b71n	afraid act crazy
108	V624	b71o	did R have nausea
109	V625	b71p	pain stomach/belly
110	V626	b71q	feel smothering
111	V627	b71r	have dry mouth
112	V628	b72	ckpt-2/> yes B71a-r
113	V629	b73	sxs sudden &gotworse
114	V630	b74	lst x attack/frightn
115	V631	b75	exact age lstx attac
116	V632	b75a/b	age lst x attack
117	V633	b75c	earliest age attack
118	V634	b76	last x attck & 2 sxs
119	V635	b76a	age last time
120	V636	b77	#spell/attck in life
121	V637	b78	ckpt-3/< attcks B77
122	V638	b79	4/> spells w/in 4wks
123	V639	b79a	exct age 4/>attk4wk
124	V640	b79b/c	age 4/>attks 4wks
125	V641	b79d	earlst age 4/>attck
126	V642	b80	afraid another attak
127	V643	b80a	exct age lst afraid
128	V644	b80b/c	age lst x afraid
129	V645	b80d	earlst age afraid
130	V701	b82	4attks/wk in 1/> mos
131	V702	b83	tell dr about attaks
132	V703	b83a	age lst told doctor
133	V704	b84	dr prscrb med 4 attk
134	V705	b84a	age lstx dr prscrbd
135	V706	b85	dr advise m.h.profsl
136	V707	b85a	age lstx m.h.profsl
137	V708	b86	m.h.profsl 4 attacks
138	V709	b86a	age lstx m.h.profsl
139	V710	b87	othr profsl 4 attaks
140	V711	b87a	age lstx othr profl
141	V712	b88	medicatn >lx 4 attak
142	V713	b88a	age lstx took meds
143	V714	b89	attak interfr w/life
144	V715	b90	"ckpt-yes B83,86 or87"
145	V716	b91	ckpt-seeB90a;lstckpt
146	V717	b92	attak-illness/injury
147	V718	b93	attk-alwys ilns/injr
148	V719	b94	attk-alwys med/drugs
149	V732	b99a	attk evry x in situ
150	V733	b99b	attk most x in situ
151	V734	b99c	attk not in situatn
152	V803	b101	anxs-worry 4 nothng
153	V804	b101a	worry-not serious

154	V805	b102	diff worris same x
155	V806	b102a	wory-othr do/happn
156	V807	b102c	ckpt-wories B102b
157	V808	b103a	easily startled
158	V809	b103b	trembly or shake
159	V810	b103c	restlessness
160	V811	b103d	"tense,sore,aching"
161	V812	b103e	"keyed up, on edge"
162	V813	b103f	partic. irritable
163	V814	b103g	heart pound/race
164	V815	b103h	smothering
165	V816	b103i	easily tired
166	V817	b103j	cold/clammy hands
167	V818	b103k	dry mouth
168	V819	b103l	nausea or diarrhea
169	V820	b103m	diffclty concentrt
170	V821	b103n	hot flashes/chills
171	V822	b103o	troubl swallowing
172	V823	b103p	trbl stayng asleep
173	V824	b103q	pain in stomach
174	V825	b103r	trbl mind on task
175	V826	b103s	urinate too freq
176	V827	b103t	dizzy/lightheaded
177	V828	b103u	feel faint/unreal
178	V829	b103v	lose contrl/go mad
179	V830	b103w	did R sweat a lot
180	V902	b105a_01	rxn fr drug-anxios
181	V903	b105a_02	2
182	V904	b105a_03	3
183	V905	b105a_04	4
184	V906	b105a_05	5
185	V907	b105a_06	6
186	V908	b105a_07	7
187	V909	b105a_08	8
188	V910	b105a_09	9
189	V911	b105a_10	10
190	V912	b105a_11	11
191	V913	b105a_12	12
192	V914	b105a_13	13
193	V915	b105a_14	14
194	V916	b105a_15	15
195	V917	b105a_16	16
196	V918	b105a_17	17
197	V919	b105a_18	18
198	V920	b105a_19	19
199	V921	b105a_20	20
200	V922	b105a_21	21
201	V923	b105a_22	22
202	V924	b105a_23	23
203	V925	b106	lstx anx 4 6mo&rxn
204	V926	b107	exact age lst time
205	V927	b107a/b	age lst x startd

206	V928	b107c	earlst age anx 6mo
207	V929	b108	last x anx 6mo&rxns
208	V930	b108a	age lastx anx&rxns
209	V945	b116a	anx always w/drugs
210	V946	b116b	anx or drugs first
211	V1004	c1b	sad/depresd-hopeless
212	V1005	c1c	sad-not cope w/life
213	V1006	c1d	sad-life not better
214	V1007	c2	exact age-sad 2/> yrs
215	V1008	c2a/b	age sad 2yr startd
216	V1009	c2c	earlist age sad 2yrs
217	V1010	c3	deprsn constant ornot
218	V1011	c3a	#time depressn lasts
219	V1012	c3a	period depresn lasts
220	V1013	c3b	#x betwn depr perids
221	V1014	c3b	period betwn deprsns
222	V1015	c4	last x depresn 2yrs/>
223	V1016	c4a	age lastx dprs 2yr/>
224	V1101	d2	lost appetite 2wks/>
225	V1102	d3	completly no appetite
226	V1103	d4	lost wgt w/out trying
227	V1104	d5	how much weight lost
228	V1105	d6	increas appetit 2wk/>
229	V1106	d7	gained weight-2lbs/wk
230	V1107	d8	most weight evr gaind
231	V1108	d9	trbl fall asleep 2wk>
232	V1109	d10	2hr fall asleep2wk/>
233	V1110	d11	trbl stayng sleep2wk
234	V1111	d12	awake >1hr 4 2wks/>
235	V1112	d13	woke too early 2wk/>
236	V1113	d14	woke 2hr early 2wk/>
237	V1114	d15	slept too much 2wk/>
238	V1115	d16	lack enrgy/tird 2wk>
239	V1116	d17	compltly no enrgy2wk
240	V1117	d18	bad morn/bettr later
241	V1118	d19	talkd/move slower2wk
242	V1119	d20	othr noticd R slower
243	V1120	d21	moved all time-2wk/>
244	V1121	d22	respons fr B5 screen
245	V1122	d23	respns fr B5a screen
246	V1123	d24	not enjoy good thing
247	V1124	d25	less interest in sex
248	V1125	d26	complt lost sex intr
249	V1126	d27	felt worthless 2wk/>
250	V1127	d28	complt worthlss 2wk>
251	V1128	d29	felt sinful 2wks/>
252	V1129	d30	felt guilty 2wks/>
253	V1130	d31	felt inferior 2wks/>
254	V1131	d32	low self-confidance
255	V1132	d33	complt lost confidnc
256	V1133	d34	trbl concentrng 2wk>
257	V1134	d35	unabl pay atten 2wk>

258	V1135	d36	slow thoughts/mixdup
259	V1136	d37	unabl decide 4 2wk/>
260	V1137	d38	complet unabl decide
261	V1138	d39	ckpt-yes respons B3a
262	V1139	d40	ckpt-2/> sadnes boxs
263	V1140	none	consistency check variable
264	V1141	d41	thougt alot of death
265	V1142	d42	wanted to die 2wks/>
266	V1143	d43	thougt comitng suicd
267	V1144	d44	evr attempted suicid
268	V1205	d47	feeling w/problems
269	V1206	d47a	nevr feelng w/prblm
270	V1220	d55	feelng prohib.workng
271	V1221	d56	hospitalizd 4 feelng
272	V1222	d56a	age 1st hosptalized
273	V1223	d57	ckpt-1/>boxs D48-D56
274	V1224	d58	#period feel w/probl
275	V1225	d59	when period started
276	V1226	d60	exact age perd start
277	V1227	d60a/b	age period startd
278	V1228	d61	period after death
279	V1229	d61a	other causd feeling
280	V1230	d62	feel&prbl end/still
281	V1231	d62a	when feel&probl end
282	V1232	d62b	exact age feelg end
283	V1233	d62c/d	age feel/prbl end
284	V1234	d63	#time feel/prbl last
285	V1235	d63	period feel/prb last
286	V1236	d64	1x feelng&prbl 2wk/>
287	V1237	d65	exct age 1x feel/prb
288	V1238	d65a/b	age 1x feelg/prbl
289	V1239	d65c	earlst age feel 2wk
290	V1240	d66	lastx feel&prbl 2wk>
291	V1241	d66a	age lastx feel 2wk>
292	V1301	d69	btwn feelngs felt ok
293	V1302	d69a	btwn work&enjoy oth
294	V1303	d69b	normal period 6mo/>
295	V1304	d69c	normal period 2mo/>
296	V1305	d70	feeling after death
297	V1306	d70a	feel&prb aftr death
298	V1340	d74	#time longst feel&pr
299	V1341	d74	period lngst feel&pr
300	V1342	d75	ckpt-yes B3a screenr
301	V1343	d76	exct age 1x feel 2yr
302	V1344	d76a/b	age 1x feel 2yr/>
303	V1345	d76c	earlst age feel 2yr
304	V1346	d77	when lastx feel&prbl
305	V1347	d77a	age lastx feel&prbl
306	V1348	d78	age most# feelgs 2wk
307	V1349	d79	part.bad feelng 2wk>
308	V1350	d79a/b	age bad/recntfeel
309	V1401	d81a/b_01	categ#3 problm#01

310	V1402	d81a/b_02	categ#3 problm#02
311	V1403	d81a/b_03	categ#3 problm#03
312	V1404	d81a/b_04	categ#3 problm#04
313	V1405	d81a/b_05	categ#3 problm#05
314	V1406	d81a/b_06	categ#4 problm#06
315	V1407	d81a/b_07	categ#4 problm#07
316	V1408	d81a/b_08	categ#4 problm#08
317	V1409	d81a/b_09	categ#4 problm#09
318	V1410	d81a/b_10	categ#4 problm#10
319	V1411	d81a/b_11	categ#4 problm#11
320	V1412	d81a/b_12	categ#4 problm#12
321	V1413	d81a/b_13	categ#5 problm#13
322	V1414	d81a/b_14	categ#5 problm#14
323	V1415	d81a/b_15	categ#5 problm#15
324	V1416	d81a/b_16	categ#6 problm#16
325	V1417	d81a/b_17	categ#6 problm#17
326	V1418	d81a/b_18	categ#6 problm#18
327	V1419	d81a/b_19	categ#7 problm#19
328	V1420	d81a/b_20	categ#7 problm#20
329	V1421	d81a/b_21	categ#7 problm#21
330	V1422	d81a/b_22	categ#7 problm#22
331	V1423	d81a/b_23	categ#7 problm#23
332	V1424	d81a/b_24	categ#8 problm#24
333	V1425	d81a/b_25	categ#8 problm#25
334	V1426	d81a/b_26	categ#8 problm#26
335	V1427	d81a/b_27	categ#8 problm#27
336	V1428	d81a/b_28	categ#8 problm#28
337	V1429	d81a/b_29	categ#8 problm#29
338	V1430	d81a/b_30	categ#8 problm#30
339	V1431	d81a/b_31	categ#9 problm#31
340	V1432	d81a/b_32	categ#9 problm#32
341	V1433	d81a/b_33	categ#9 problm#33
342	V1434	d81a/b_34	categ#9 problm#34
343	V1435	d81a/b_35	categ#9 problm#35
344	V1436	d81a/b_36	categ#10 prblm#36
345	V1437	d81a/b_37	categ#10 prblm#37
346	V1438	d81a/b_38	categ#10 prblm#38
347	V1439	d81a/b_39	categ#10 prblm#39
348	V1440	none	consistency check variable
349	V1441	d81c	ckpt-1box/3or>categ
350	V1442	d82	ckpt-03 ckd D81a-81b
351	V1443	d82a	#1b wt lost w/feelg
352	V1444	d83	ckpt-05 ckd D81a-81b
353	V1445	d83a	#1b wt gaind w/feel
354	V1501	d84a_01	problem #01
355	V1502	d84a_02	problem #02
356	V1503	d84a_03	problem #03
357	V1504	d84a_04	problem #04
358	V1505	d84a_05	problem #05
359	V1506	d84a_06	problem #06
360	V1507	d84a_07	problem #07
361	V1508	d84a_08	problem #08

362	V1509	d84a_09	problem #09
363	V1510	d84a_10	problem #10
364	V1511	d84a_11	problem #11
365	V1512	d84a_12	problem #12
366	V1513	d84a_13	problem #13
367	V1514	d84a_14	problem #14
368	V1515	d84a_15	problem #15
369	V1516	d84a_16	problem #16
370	V1517	d84a_17	problem #17
371	V1518	d84a_18	problem #18
372	V1519	d84a_19	problem #19
373	V1520	d84a_20	problem #20
374	V1521	d84a_21	problem #21
375	V1522	d84a_22	problem #22
376	V1523	d84a_23	problem #23
377	V1524	d84a_24	problem #24
378	V1525	d84a_25	problem #25
379	V1526	d84a_26	problem #26
380	V1527	d84a_27	problem #27
381	V1528	d84a_28	problem #28
382	V1529	d84a_29	problem #29
383	V1530	d84a_30	problem #30
384	V1531	d84a_31	problem #31
385	V1532	d84a_32	problem #32
386	V1533	d84a_33	problem #33
387	V1534	d84a_34	problem #34
388	V1535	d84a_35	problem #35
389	V1536	d84a_36	problem #36
390	V1537	d84a_37	problem #37
391	V1538	d84a_38	problem #38
392	V1539	d84a_39	problem #39
393	V1540	d85	"ckpt-""one"" in D58"
394	V1541	d86	feel&prbl w/drug&alc
395	V1542	d86a	feelng or drugs 1st
396	V1543	d87	drugs to feel better
397	V1544	d87a	drugs made R better
398	V1545	d88	ckpt-B104 box checkd
399	V1546	d89	feeling w/worries
400	V1547	d89a	worry or feelng 1st
401	V1548	d89b	feel/worry away 1st
402	V1556	d94	6mo worry w/feeling
403	V1557	d94a	worry alwys w/feelg
404	V1558	d94b	worry or feelng 1st
405	V1559	d94c	wory/feelg away 1st
406	V1604	e1a	mania alwys fr drugs
407	V1605	e2	ckpt-yes B7 screener
408	V1606	e3	irritabl fr drug/alc
409	V1607	e3a	irritbl alwys frdrug
410	V1608	e4	concernd activty of R
411	V1609	e4a	active w/out tired
412	V1610	e5	not still/pacedup&dwn
413	V1611	e6	spending sprees

414	V1612	e7	sex interest stronger
415	V1613	e8	talked fast/all time
416	V1614	e9	thoughts raced
417	V1615	e10	special gift/powers
418	V1616	e10b	ckpt-exampl realstc
419	V1617	e11	lttle sleep/nottired
420	V1618	e12	easily distracted
421	V1619	e13	ckpt-2/>yesbox E4-12
422	V1620	e14	ckpt-yes B6 screener
423	V1621	e14a	ckpt-yes B7 screenr
424	V1622	e15	feeling &manic behvr
425	V1623	e15a	nevr feelw/mancbehv
426	V1624	e16	tell doctor feeling
427	V1625	e16a	age lxtold dr feelg
428	V1626	e17	dr prscrb meds-feelg
429	V1627	e17a	age lxdr prscb meds
430	V1628	e18	dr advise m.h.profsl
431	V1629	e18a	age lxdr advis mhpf
432	V1630	e19	saw m.h.prof-spells
433	V1631	e19a	age lx saw m.h.prof
434	V1632	e20	othr prof abt spells
435	V1633	e20a	age lx saw othrprof
436	V1634	e21	evr meds >lx 4 spell
437	V1635	e21a	age lx meds>lxspell
438	V1636	e22	spells intrfr w/life
439	V1637	e23	hospitalzd 4 spell
440	V1638	e23a	age lst hospitilzed
441	V1639	e24	ckpt-1/>box E16-E23
442	V1640	e25	lx spell w/manicbhvr
443	V1641	e26	exct age spel w/bhvr
444	V1642	e26a/b	age lstx spell
445	V1643	e26c	earlst age lx spell
446	V1644	e27	lastx spell 2dys/>
447	V1645	e27a	age lastx spell 2dy
448	V1646	e28	#spells w/manc behvr
449	V1651	e29	#time longest spell
450	V1652	e29	period longest spell
451	V1749	e39	spl&prbl w/drugs/alc
452	V1750	e39a	spell or drugs lst
453	V1751	e40	drugs to feel better
454	V1752	e40a	drugs made R better
455	V1753	e41	spl&prbl w/drugs/alc
456	V1754	e41a	spl&prb alwys w/drg
457	V1755	e41b	spells or drugs lst
458	V1801	f1	age lst drank alcohol
459	V1802	f2	12alc drnks w/in 1yr
460	V1803	f3	most# drinks past12mo
461	V1804	f4	ckpt-# drinks in F3
462	V1805	f5	20/> drinks past 12mo
463	V1806	f6	12-19drinks past 12mo
464	V1807	f7	5-11 drinks past 12mo
465	V1808	f8	1-4 drinks past 12mos

466	V1809	f9	20drnks not affect fx
467	V1810	f10	evermore past 12mos
468	V1811	f10a	age strt past 12mos
469	V1812	f11	age strt drinkg most
470	V1813	f12	#20/> drinks/dy-most
471	V1814	f13	12-19drinks/day-most
472	V1815	f14	5-11 drinks/day-most
473	V1816	f15	1-4 drinks/day -most
474	V1817	g1	sedative on your own
475	V1818	g1g	sedative prescribed
476	V1819	g1h	dependnt use-sedativ
477	V1820	g1a	age sedativ nonmedcl
478	V1821	g1b	#times taken sedativ
479	V1822	g1d	lastx sedativ nonmed
480	V1823	g1e	freq sedatv past12mo
481	V1824	g1f	age last x sedative
482	V1825	g2	tranquilzr on yourown
483	V1826	g2g	tranquilzr prescribd
484	V1827	g2h	depndt use-tranqulzr
485	V1828	g2a	age tranqulzr nonmed
486	V1829	g2b	#time takn tranquilz
487	V1830	g2d	lastx tranqul nonmed
488	V1831	g2e	freq tranql past12mo
489	V1832	g2f	age lastx tranquilzr
490	V1833	g3	stimulant on your own
491	V1834	g3g	stimulant prescribed
492	V1835	g3h	depndnt use-stimulnt
493	V1836	g3a	age stimulant nonmed
494	V1837	g3b	#time stimulnt nonmd
495	V1838	g3d	lastx stimulnt nonmd
496	V1839	g3e	freq stimul past12mo
497	V1840	g3f	age last x stimulant
498	V1841	g4	analgesic on your own
499	V1842	g4g	analgesic prescribed
500	V1843	g4h	dependt use-analgesc
501	V1844	g4a	age analgesic nonmed
502	V1845	g4b	#time analges nonmed
503	V1846	g4d	lastx analges nonmed
504	V1847	g4e	freq analges pst12mo
505	V1848	g4f	age last x analgesic
506	V1901	g5	inhalants/sniff/huffd
507	V1902	g5a	age lstx inhalant
508	V1903	g5b	#times used inhalant
509	V1904	g5d	last x used inhalant
510	V1905	g5e	freq inhalnt pst12mo
511	V1906	g5f	age last x inhalant
512	V1907	g6	evr marijuana/hashish
513	V1908	g6a	age lstx marijuana
514	V1909	g6b	#time used marijuana
515	V1910	g6d	lastx used marijuana
516	V1911	g6e	freq marijun pst12mo
517	V1912	g6f	age lastx marijuana

518	V1913	g7	ever used cocaine
519	V1914	g7a	age lstx cocaine
520	V1915	g7b	#times used cocaine
521	V1916	g7d	last x used cocaine
522	V1917	g7e	freq cocaine pst12mo
523	V1918	g7f	age last x cocaine
524	V1919	g8	evr used hallucinogen
525	V1920	g8a	age lstx hallucnogen
526	V1921	g8b	#time used hallucngn
527	V1922	g8d	lastx used hallucngn
528	V1923	g8e	freq hallucingn 12mo
529	V1924	g8f	age lastx hallucnogn
530	V1925	g9	ever use heroin
531	V1926	g9a	age lstx used heroin
532	V1927	g9b	#times used heroin
533	V1928	g9d	last x used heroin
534	V1929	g9e	freq heroin past12mo
535	V1930	g9f	age lastx usd heroin
536	V1931	g10	ckpt-1/>drugs circld
537	V2001	g11/30	work/child care
538	V2002	g30a	alcohol during work
539	V2003	g30b	age alcohol at work
540	V2004	g30c	lastx alcohl atwork
541	V2005	g30d	agelast alchl atwrk
542	V2006	g30a	sedativ during work
543	V2007	g30b	age sedativ at work
544	V2008	g30c	lastx sedatv atwork
545	V2009	g30d	agelast sedtv atwrk
546	V2010	g30a	tranquilizr at work
547	V2011	g30b	age tranqul at work
548	V2012	g30c	lastx tranqu atwork
549	V2013	g30d	agelast tranq atwrk
550	V2014	g30a	stimulant at work
551	V2015	g30b	age stimulnt atwork
552	V2016	g30c	lastx stimlt atwork
553	V2017	g30d	agelast stim atwork
554	V2018	g30a	analgesics at work
555	V2019	g30b	age analgesc atwork
556	V2020	g30c	lastx analgs atwork
557	V2021	g30d	agelast analg atwrk
558	V2022	g30a	inhalants at work
559	V2023	g30b	age inhalant atwork
560	V2024	g30c	lastx inhalnt atwrk
561	V2025	g30d	agelast inhal atwrk
562	V2026	g30a	marijuana at work
563	V2027	g30b	age marjuana atwork
564	V2028	g30c	lastx mariju atwork
565	V2029	g30d	agelast marij atwrk
566	V2030	g30a	cocaine at work
567	V2031	g30b	age cocaine at work
568	V2032	g30c	lastx cocain atwork
569	V2033	g30d	agelast coke atwork

570	V2034	g30a	hallucinogn at work
571	V2035	g30b	age hallcngn atwork
572	V2036	g30c	lastx halluc atwork
573	V2037	g30d	agelast hallu atwrk
574	V2038	g30a	heroin at work
575	V2039	g30b	age heroin at work
576	V2040	g30c	lastx heroin atwork
577	V2041	g30d	agelast heroin-work
578	V2101	g12/31	prohib.work/schol
579	V2102	g31a	alcohol prohib work
580	V2103	g31b	age alc prohib work
581	V2104	g31c	lastx alc stop work
582	V2105	g31d	agelst alc stopwork
583	V2106	g31a	sedativ prohib work
584	V2107	g31b	age sedtv stop work
585	V2108	g31c	lastx sedtv stopwrk
586	V2109	g31d	agelst sedv stopwrk
587	V2110	g31a	tranquilz stop work
588	V2111	g31b	age tranqu stopwork
589	V2112	g31c	lastx tranq stopwrk
590	V2113	g31d	agelst tranq stpwrk
591	V2114	g31a	stimulant stop work
592	V2115	g31b	age stimul stopwork
593	V2116	g31c	lastx stimu stopwrk
594	V2117	g31d	agelst stim stopwrk
595	V2118	g31a	analgesic stop work
596	V2119	g31b	age analges stopwrk
597	V2120	g31c	lastx analg stopwrk
598	V2121	g31d	agelst analg stpwrk
599	V2122	g31a	inhalant stop work
600	V2123	g31b	age inhaln stopwork
601	V2124	g31c	lastx inhal stopwrk
602	V2125	g31d	agelst inhal stpwrk
603	V2126	g31a	marijuana stop work
604	V2127	g31b	age mariju stopwork
605	V2128	g31c	lastx marij stopwrk
606	V2129	g31d	agelst marij stpwrk
607	V2130	g31a	cocaine stop work
608	V2131	g31b	age cocain stopwork
609	V2132	g31c	lastx cocain stpwrk
610	V2133	g31d	agelast cocain work
611	V2134	g31a	hallucingn stopwork
612	V2135	g31b	age halluc stopwork
613	V2136	g31c	lastx halluc stpwrk
614	V2137	g31d	agelast halluc work
615	V2138	g31a	heroin stop work
616	V2139	g31b	age heroin stopwork
617	V2140	g31c	lastx heroin stpwrk
618	V2141	g31d	agelast heroin-work
619	V2201	g13/32	probl family/work
620	V2202	g32a	alc prbl famly/work
621	V2203	g32b	age alc family/work

622	V2204	g32c	last alc famly/work
623	V2205	g32d	agelst alc fmly/wrk
624	V2206	g32e	contin alc fmly/wrk
625	V2207	g32a	sedtv prb famly/wrk
626	V2208	g32b	age sedtv famly/wrk
627	V2209	g32c	lastx sedtv fam/wrk
628	V2210	g32d	agelst sedtvfam/wrk
629	V2211	g32e	cont sedtv fam/work
630	V2212	g32a	tranq prbl fam/work
631	V2213	g32b	age tranqu fam/work
632	V2214	g32c	lastx tranq fam/wrk
633	V2215	g32d	agelst tranqfam/wrk
634	V2216	g32e	cont tranqu fam/wrk
635	V2217	g32a	stimlnt prb fam/wrk
636	V2218	g32b	age stimuln fam/wrk
637	V2219	g32c	lastx stiml fam/wrk
638	V2220	g32d	agelst stim fam/wrk
639	V2221	g32e	cont stimul fam/wrk
640	V2222	g32a	anlgesc prb fam/wrk
641	V2223	g32b	age anlgesc fam/wrk
642	V2224	g32c	lastx anlgs fam/wrk
643	V2225	g32d	agelst anlg fam/wrk
644	V2226	g32e	cont anlgsc fam/wrk
645	V2227	g32a	inhalnt prb fam/wrk
646	V2228	g32b	age inhalnt fam/wrk
647	V2229	g32c	lastx inhal fam/wrk
648	V2230	g32d	agelst inhal fam/wk
649	V2231	g32e	cont inhaln fam/wrk
650	V2232	g32a	marij prbl fam/work
651	V2233	g32b	age mariju fam/work
652	V2234	g32c	lastx marij fam/wrk
653	V2235	g32d	agelst marij fam/wk
654	V2236	g32e	cont marijua fam/wk
655	V2237	g32a	cocain prbl fam/wrk
656	V2238	g32b	age cocaine fam/wrk
657	V2239	g32c	lastx coke fam/work
658	V2240	g32d	agelst coke fam/wrk
659	V2241	g32e	cont cocain fam/wrk
660	V2242	g32a	hallucgn prb fam/wk
661	V2243	g32b	age hallucng fam/wk
662	V2244	g32c	lastx halluc fam/wk
663	V2245	g32d	agelst hallucfam/wk
664	V2246	g32e	cont halluc fam/wrk
665	V2247	g32a	heroin prbl fam/wrk
666	V2248	g32b	age heroin fam/work
667	V2249	g32c	lastx heroin fam/wk
668	V2250	g32d	agelst heroinfam/wk
669	V2251	g32e	cont heroin fam/wrk
670	V2301	g14/33	expelled or fired
671	V2302	g33a	alcohl expeld/fired
672	V2303	g33b	age alc expeld/fird
673	V2304	g33c	lastx alcohl expeld

674	V2305	g33d	agelast alc expelld
675	V2306	g33a	sedativ expeld/fird
676	V2307	g33b	age sedativ expelld
677	V2308	g33c	lastx sedtv expelld
678	V2309	g33d	agelast sedtvexpeld
679	V2310	g33a	tranqu expeld/fired
680	V2311	g33b	age tranqulz expeld
681	V2312	g33c	lastx tranqu expeld
682	V2313	g33d	agelast tranq expld
683	V2314	g33a	stimlnt expeld/fire
684	V2315	g33b	age stimulnt expeld
685	V2316	g33c	lastx stimln expeld
686	V2317	g33d	agelast stim expeld
687	V2318	g33a	anlgsic expeld/fird
688	V2319	g33b	age anlgesic expeld
689	V2320	g33c	lastx anlgsc expeld
690	V2321	g33d	agelast anlgsc expl
691	V2322	g33a	inhalnt expeld/fird
692	V2323	g33b	age inhalant expeld
693	V2324	g33c	lastx inhalnt expld
694	V2325	g33d	agelast inhal expld
695	V2326	g33a	marijna expeld/fird
696	V2327	g33b	age marijuna expeld
697	V2328	g33c	lastx mariju expeld
698	V2329	g33d	agelast marij expld
699	V2330	g33a	cocain expeld/fired
700	V2331	g33b	age cocaine expelld
701	V2332	g33c	lastx cocain expeld
702	V2333	g33d	agelast coke expeld
703	V2334	g33a	hallcng expeld/fird
704	V2335	g33b	age hallucng expeld
705	V2336	g33c	lastx hallcg expeld
706	V2337	g33d	agelast hallc expld
707	V2338	g33a	heroin expeld/fired
708	V2339	g33b	age heroin expeld
709	V2340	g33c	lastx heroin expeld
710	V2341	g33d	agelast heroin expl
711	V2401	g15/34	chanc gettng hurt
712	V2402	g34a	alcohol chance hurt
713	V2403	g34b	age alcohol hurt
714	V2404	g34c	lastx alcohol hurt
715	V2405	g34d	agelast alcohl hurt
716	V2406	g34a	sedativ chance hurt
717	V2407	g34b	age sedative hurt
718	V2408	g34c	lastx sedativ hurt
719	V2409	g34d	agelast sedatv hurt
720	V2410	g34a	tranqul chance hurt
721	V2411	g34b	age tranquilzr hurt
722	V2412	g34c	lastx tranqulr hurt
723	V2413	g34d	agelast tranqu hurt
724	V2414	g34a	stimlnt chance hurt
725	V2415	g34b	age stimulant hurt

726	V2416	g34c	lastx stimulnt hurt
727	V2417	g34d	agelast stimln hurt
728	V2418	g34a	analgsc chance hurt
729	V2419	g34b	age analgesic hurt
730	V2420	g34c	lastx analgesc hurt
731	V2421	g34d	agelast anlgsc hurt
732	V2422	g34a	inhalnt chance hurt
733	V2423	g34b	age inhalant hurt
734	V2424	g34c	lastx inhalant hurt
735	V2425	g34d	agelast inhaln hurt
736	V2426	g34a	marijua chance hurt
737	V2427	g34b	age marijuana hurt
738	V2428	g34c	lastx marijuan hurt
739	V2429	g34d	agelast mariju hurt
740	V2430	g34a	cocaine chance hurt
741	V2431	g34b	age cocaine hurt
742	V2432	g34c	last x cocaine hurt
743	V2433	g34d	agelast cocain hurt
744	V2434	g34a	hallucng chanc hurt
745	V2435	g34b	age hallucingn hurt
746	V2436	g34c	lastx hallucgn hurt
747	V2437	g34d	agelast hallcg hurt
748	V2438	g34a	heroin chance hurt
749	V2439	g34b	age heroin hurt
750	V2440	g34c	last x heroin hurt
751	V2441	g34d	agelast heroin hurt
752	V2500	g16/35	accidently injure
753	V2501	g36	cont subst accidinjr
754	V2502	g36a	alc cont accidinjur
755	V2503	g36b	age alc cont injure
756	V2504	g36a	sedatv contin injur
757	V2505	g36b	age sedtv continjur
758	V2506	g36a	tranqul cont injure
759	V2507	g36b	age tranq continjur
760	V2508	g36a	stimuln cont injure
761	V2509	g36b	age stim cont injur
762	V2510	g36a	anlgesc cont injure
763	V2511	g36b	age anlgs continjur
764	V2512	g36a	inhalnt cont injure
765	V2513	g36b	age inhal continjur
766	V2514	g36a	marijua cont injure
767	V2515	g36b	age marij continjur
768	V2516	g36a	cocaine cont injure
769	V2517	g36b	age coke continjure
770	V2518	g36a	hallucng cont injur
771	V2519	g36b	age hallc continjur
772	V2520	g36a	heroin cont injure
773	V2521	g36b	age heroin continjr
774	V2601	g17/37	health problems
775	V2602	g37a	alc health problems
776	V2603	g37b	age alc health prbl
777	V2604	g37c	lastx alc hlth prbl

778	V2605	g37d	agelast alc hlthprb
779	V2606	g37a	sedativ health prbl
780	V2607	g37b	age sedtv healthprb
781	V2608	g37c	lastx sedtv hlthprb
782	V2609	g37d	agelst sedtv hltprb
783	V2610	g37a	tranqul health prbl
784	V2611	g37b	age tranq hlth prbl
785	V2612	g37c	lastx tranq hltprbl
786	V2613	g37d	agelst tranq hltprb
787	V2614	g37a	stimult health prbl
788	V2615	g37b	age stim healthprbl
789	V2616	g37c	lastx stim hlthprbl
790	V2617	g37d	agelst stim hltprbl
791	V2618	g37a	anlgesic healthprbl
792	V2619	g37b	age anlgesic hltprb
793	V2620	g37c	lastx anlgsc hltprb
794	V2621	g37d	agelst anlgs hltprb
795	V2622	g37a	inhalant healthprbl
796	V2623	g37b	age inhalnt hltprbl
797	V2624	g37c	lastx inhal hltprbl
798	V2625	g37d	agelst inhal hltprb
799	V2626	g37a	marijuana healthprb
800	V2627	g37b	age marijuan hltprb
801	V2628	g37c	lastx mariju hltprb
802	V2629	g37d	agelst marij hltprb
803	V2630	g37a	cocaine health prbl
804	V2631	g37b	age coke healthprbl
805	V2632	g37c	lastx coke hlthprbl
806	V2633	g37d	agelst coke hlthprb
807	V2634	g37a	hallucn health prbl
808	V2635	g37b	age halluc hlthprbl
809	V2636	g37c	lastx halluc hltprb
810	V2637	g37d	agelst halluc hltpr
811	V2638	g37a	heroin health probl
812	V2639	g37b	age heroin hlthprbl
813	V2640	g37c	lastx heroin hltprb
814	V2641	g37d	agelst heroin hltpr
815	V2701	g18/38	psych/emot problm
816	V2702	g38a	alc psych/emot prbl
817	V2703	g38b	age alc psych prblm
818	V2704	g38c	lastx alc psych prb
819	V2705	g38d	agelst alc psychprb
820	V2706	g38a	sedativ psych probl
821	V2707	g38b	age sedtv psych prb
822	V2708	g38c	lastx sedtv psycprb
823	V2709	g38d	agelst sedtv psychl
824	V2710	g38a	tranqulz psych prbl
825	V2711	g38b	age tranq psychprbl
826	V2712	g38c	lastx tranq psychol
827	V2713	g38d	agelst tranq psychl
828	V2714	g38a	stimulnt psych prbl
829	V2715	g38b	age stiml psych prb

830	V2716	g38c	lastx stimul psychl
831	V2717	g38d	agelst stiml psychl
832	V2718	g38a	anlgesic psych prbl
833	V2719	g38b	age anlgsc psychol
834	V2720	g38c	lastx anlgsc psychl
835	V2721	g38d	agelst anlgsc psych
836	V2722	g38a	inhalant psych prbl
837	V2723	g38b	age inhal psych prb
838	V2724	g38c	lastx inhalnt psych
839	V2725	g38d	agelst inhalnt psyc
840	V2726	g38a	marijuan psych prbl
841	V2727	g38b	age marij psych prb
842	V2728	g38c	lastx marijua psych
843	V2729	g38d	agelast mariju psyc
844	V2730	g38a	cocaine psych probl
845	V2731	g38b	age cocaine psychol
846	V2732	g38c	lastx cocaine psych
847	V2733	g38d	agelast coke psychl
848	V2734	g38a	hallucgn psych prbl
849	V2735	g38b	age hallucgn psychl
850	V2736	g38c	lastx hallucgn psyc
851	V2737	g38d	agelast halluc psyc
852	V2738	g38a	heroin psych problm
853	V2739	g38b	age heroin psychprb
854	V2740	g38c	lastx heroin psychl
855	V2741	g38d	agelast heroin psyc
856	V2801	g19/41	drug mix w/meds
857	V2802	g41a	alc mix w/medicatn
858	V2803	g41b	age alc mix w/meds
859	V2804	g41c	lastx alc mix w/med
860	V2805	g41d	agelst alc mixw/med
861	V2806	g41a	sedativ mix w/medct
862	V2807	g41b	age sedatv mixw/med
863	V2808	g41c	last sedtv mixw/med
864	V2809	g41d	agelst sedtv w/meds
865	V2810	g41a	tranqulz mix w/meds
866	V2811	g41b	age tranq mix w/med
867	V2812	g41c	lastx tranq w/meds
868	V2813	g41d	agelast tranq w/med
869	V2814	g41a	stimulnt mix w/meds
870	V2815	g41b	age stimulnt w/meds
871	V2816	g41c	lastx stimul w/meds
872	V2817	g41d	agelast stiml w/med
873	V2818	g41a	anlgesic mix w/meds
874	V2819	g41b	age anlgesic w/meds
875	V2820	g41c	lastx anlgsc w/meds
876	V2821	g41d	agelast anlgs w/med
877	V2822	g41a	inhalant mix w/meds
878	V2823	g41b	age inhalant w/meds
879	V2824	g41c	lastx inhalnt w/med
880	V2825	g41d	agelast inhal w/med
881	V2826	g41a	marijuana mix w/med

882	V2827	g41b	age marijuana w/med
883	V2828	g41c	lastx marijua w/med
884	V2829	g41d	agelast marij w/med
885	V2830	g41a	cocaine mix w/meds
886	V2831	g41b	age cocaine w/meds
887	V2832	g41c	lastx coke w/meds
888	V2833	g41d	agelast coke w/meds
889	V2834	g41a	hallucgn mix w/meds
890	V2835	g41b	age hallucgn w/meds
891	V2836	g41c	lastx halluc w/meds
892	V2837	g41d	agelast halluc meds
893	V2838	g41a	heroin mix w/meds
894	V2839	g41b	age heroin w/meds
895	V2840	g41c	lastx heroin w/meds
896	V2841	g41d	agelast heroin meds
897	V2901	g20/42	desire/not resist
898	V2902	g42a	alcohol not resist
899	V2903	g42b	age alcohol desire
900	V2904	g42c	lastx alcohl desire
901	V2905	g42d	agelast alc desire
902	V2906	g42a	sedativ not resist
903	V2907	g42b	age sedative desire
904	V2908	g42c	lastx sedatv desire
905	V2909	g42d	agelast sedtv desir
906	V2910	g42a	tranqulz not resist
907	V2911	g42b	age tranqulz desire
908	V2912	g42c	lastx tranqu desire
909	V2913	g42d	agelast tranq desir
910	V2914	g42a	stimulant notresist
911	V2915	g42b	age stimulnt desire
912	V2916	g42c	lastx stimul desire
913	V2917	g42d	agelast stim desire
914	V2918	g42a	anlgesic not resist
915	V2919	g42b	age anlgesic desire
916	V2920	g42c	lastx anlgsc desire
917	V2921	g42d	agelast anlgs desir
918	V2922	g42a	inhalant not resist
919	V2923	g42b	age inhalant desire
920	V2924	g42c	lastx inhaln desire
921	V2925	g42d	agelast inhal desir
922	V2926	g42a	marijuana notresist
923	V2927	g42b	age marijuan desire
924	V2928	g42c	lastx mariju desire
925	V2929	g42d	agelast marij desir
926	V2930	g42a	cocaine not resist
927	V2931	g42b	age cocaine desire
928	V2932	g42c	lastx coke desire
929	V2933	g42d	agelast coke desire
930	V2934	g42a	hallucgn not resist
931	V2935	g42b	age hallucgn desire
932	V2936	g42c	lastx halluc desire
933	V2937	g42d	agelast halluc desr

934	V2938	g42a	heroin not resist
935	V2939	g42b	age heroin desire
936	V2940	g42c	lastx heroin desire
937	V2941	g42d	agelast heroin desr
938	V2942	g20a	ckpt-alc only circl
939	V2943	g20b	"form type is ""2"""
940	V3001	g21/43	regular drug use
941	V3002	g43a	alcohol regular use
942	V3003	g43b	age alc regular use
943	V3004	g43c	lastx alc reglr use
944	V3005	g43d	agelast alc reg.use
945	V3006	g43a	sedativ regular use
946	V3007	g43b	age sedtv regulruse
947	V3008	g43c	lastx sedtv reg.use
948	V3009	g43d	agelast sedtv reglr
949	V3010	g43a	tranqul regular use
950	V3011	g43b	age tranqu reglruse
951	V3012	g43c	lastx tranq reg.use
952	V3013	g43d	agelast tranq reglr
953	V3014	g43a	stimulnt regularuse
954	V3015	g43b	age stimlnt reg.use
955	V3016	g43c	lastx stiml reg.use
956	V3017	g43d	agelast stim regulr
957	V3018	g43a	anlgesic regulr use
958	V3019	g43b	age anlgsic reg.use
959	V3020	g43c	lastx anlgs reg.use
960	V3021	g43d	agelast anlgs reglr
961	V3022	g43a	inhalant regularuse
962	V3023	g43b	age inhalnt reg.use
963	V3024	g43c	lastx inhal reg.use
964	V3025	g43d	agelast inhal regul
965	V3026	g43a	marijuana regulruse
966	V3027	g43b	age marijua reg.use
967	V3028	g43c	lastx marij reg.use
968	V3029	g43d	agelast marij regul
969	V3030	g43a	cocaine regular use
970	V3031	g43b	age coke regulr use
971	V3032	g43c	lastx coke regular
972	V3033	g43d	agelast coke regulr
973	V3034	g43a	hallucgn regulr use
974	V3035	g43b	age hallucg reg.use
975	V3036	g43c	lastx halluc regulr
976	V3037	g43d	agelast halluc regl
977	V3038	g43a	heroin regular use
978	V3039	g43b	age heroin reglruse
979	V3040	g43c	lastx heroin regulr
980	V3041	g43d	agelast heroin regl
981	V3101	g22/44	unable cut down
982	V3102	g44a	alcohol not stop
983	V3103	g44b	age alcohl not stop
984	V3104	g44c	lastx alchl notstop
985	V3105	g44d	agelast alc notstop

986	V3106	g44a	sedative not stop
987	V3107	g44b	age sedatv not stop
988	V3108	g44c	lastx sedtv notstop
989	V3109	g44d	agelast sedtv nostp
990	V3110	g44a	tranquilzr not stop
991	V3111	g44b	age tranqu not stop
992	V3112	g44c	lastx tranq notstop
993	V3113	g44d	agelast tranq nostp
994	V3114	g44a	stimulant not stop
995	V3115	g44b	age stimlnt notstop
996	V3116	g44c	lastx stiml notstop
997	V3117	g44d	agelast stim nostop
998	V3118	g44a	analgesic not stop
999	V3119	g44b	age anlgesc notstop
1000	V3120	g44c	lastx anlgsc nostop
1001	V3121	g44d	agelast anlgs nostp
1002	V3122	g44a	inhalant not stop
1003	V3123	g44b	age inhalnt notstop
1004	V3124	g44c	lastx inhal notstop
1005	V3125	g44d	agelast inhal nostp
1006	V3126	g44a	marijuana not stop
1007	V3127	g44b	age mariju not stop
1008	V3128	g44c	lastx marij notstop
1009	V3129	g44d	agelast marij nostp
1010	V3130	g44a	cocaine unable stop
1011	V3131	g44b	age cocaine notstop
1012	V3132	g44c	lastx cocain nostop
1013	V3133	g44d	agelast coke nostop
1014	V3134	g44a	hallucngen not stop
1015	V3135	g44b	age halluc not stop
1016	V3136	g44c	lastx halluc nostop
1017	V3137	g44d	agelast halluc stop
1018	V3138	g44a	heroin unable stop
1019	V3139	g44b	age heroin not stop
1020	V3140	g44c	lastx heroin nostop
1021	V3141	g44d	agelast heroin stop
1022	V3201	g24/46	>lmo use/effects
1023	V3202	g46a	alc >lmo use/effect
1024	V3203	g46b	age alc >lmo effect
1025	V3204	g46c	lastx alc>lmo effex
1026	V3205	g46d	agelast alc>lmoeffx
1027	V3206	g46a	sedativ >lmo effect
1028	V3207	g46b	age sedtv>lmo effex
1029	V3208	g46c	lastx sedtv>lmoeffx
1030	V3209	g46d	agelast sedtiv >lmo
1031	V3210	g46a	tranqul >lmo effexs
1032	V3211	g46b	age tranq >lmoeffex
1033	V3212	g46c	lastx tranq>lmoeffx
1034	V3213	g46d	agelast tranql >lmo
1035	V3214	g46a	stimulnt >lmo effex
1036	V3215	g46b	age stimul>lmoeffex
1037	V3216	g46c	lastx stim>lmoeffex

1038	V3217	g46d	agelast stimul >lmo
1039	V3218	g46a	anlgesic >lmo effex
1040	V3219	g46b	age anlgsc>lmoeffex
1041	V3220	g46c	lastx anlgs>lmoefex
1042	V3221	g46d	agelast anlgsc >lmo
1043	V3222	g46a	inhalant >lmo effex
1044	V3223	g46b	age inhal >lmoeffex
1045	V3224	g46c	lastx inhal>lmoeffx
1046	V3225	g46d	agelast inhalnt>lmo
1047	V3226	g46a	marijuan >lmo effex
1048	V3227	g46b	age mariju>lmoeffex
1049	V3228	g46c	lastx marij>lmoeffx
1050	V3229	g46d	agelast mariju >lmo
1051	V3230	g46a	cocaine >lmo effect
1052	V3231	g46b	age cocain>lmoeffex
1053	V3232	g46c	lastx cocain>lmoefx
1054	V3233	g46d	agelast cocain >lmo
1055	V3234	g46a	hallucgn >lmo effex
1056	V3235	g46b	age halluc >lmoeffx
1057	V3236	g46c	lastx halluc>lmoefx
1058	V3237	g46d	agelast halluc >lmo
1059	V3238	g46a	heroin >lmo effects
1060	V3239	g46b	age heroin >lmoeffx
1061	V3240	g46c	lastx heroin>lmoefx
1062	V3241	g46d	agelast heroin >lmo
1063	V3301	g25/47	more/longer time
1064	V3302	g47a	alc more/longr time
1065	V3303	g47b	age alc more/longer
1066	V3304	g47c	lastx alc mor/longr
1067	V3305	g47d	agelast alc mr/lngr
1068	V3306	g47a	sedativ more/longer
1069	V3307	g47b	age sedtv mor/longr
1070	V3308	g47c	lastx sedtv mr/lngr
1071	V3309	g47d	agelast sedtv more
1072	V3310	g47a	tranqul more/longer
1073	V3311	g47b	age tranq mor/longr
1074	V3312	g47c	lastx tranq mr/long
1075	V3313	g47d	agelast tranq longr
1076	V3314	g47a	stimulnt more/longr
1077	V3315	g47b	age stimul mor/long
1078	V3316	g47c	lastx stimul longer
1079	V3317	g47d	agelast stimul more
1080	V3318	g47a	anlgesc more/longer
1081	V3319	g47b	age anlgsc mor/long
1082	V3320	g47c	lastx anlgsc longer
1083	V3321	g47d	agelast anlgs longr
1084	V3322	g47a	inhalnt more/longer
1085	V3323	g47b	age inhalant longer
1086	V3324	g47c	lastx inhaln longer
1087	V3325	g47d	agelast inhaln more
1088	V3326	g47a	marijua more/longer
1089	V3327	g47b	age marij mor/longr

1090	V3328	g47c	lastx mariju longer
1091	V3329	g47d	agelast mariju more
1092	V3330	g47a	cocaine more/longer
1093	V3331	g47b	age cocaine longer
1094	V3332	g47c	lastx cocaine longr
1095	V3333	g47d	agelast coke longer
1096	V3334	g47a	hallucgn more/longr
1097	V3335	g47b	age hallucng longer
1098	V3336	g47c	lastx halluc longer
1099	V3337	g47d	agelast halluc more
1100	V3338	g47a	heroin more/longer
1101	V3339	g47b	age heroin longer
1102	V3340	g47c	lastx heroin longer
1103	V3341	g47d	agelast heroin more
1104	V3401	g26/48	intoxicatd/high
1105	V3402	g48a	alc intoxicatd/high
1106	V3403	g48b	age alc intoxicated
1107	V3404	g48c	lastx alc intoxictd
1108	V3405	g48d	agelast alc intoxic
1109	V3406	g48a	sedative intoxicatd
1110	V3407	g48b	age sedtv intoxictd
1111	V3408	g48c	lastx sedtv intoxic
1112	V3409	g48d	agelast sedtv intox
1113	V3410	g48a	tranqul intoxicated
1114	V3411	g48b	age tranq intoxicat
1115	V3412	g48c	lastx tranq intoxic
1116	V3413	g48d	agelast tranq intox
1117	V3414	g48a	stimulnt intoxicatd
1118	V3415	g48b	age stimuln intoxic
1119	V3416	g48c	lastx stimul intoxc
1120	V3417	g48d	agelast stiml intox
1121	V3418	g48a	anlgesic intoxicatd
1122	V3419	g48b	age anlgsc intoxict
1123	V3420	g48c	lastx anlgsc intoxc
1124	V3421	g48d	agelast anlgs intox
1125	V3422	g48a	inhalant intoxicatd
1126	V3423	g48b	age inhalnt intoxic
1127	V3424	g48c	lastx inhalnt intox
1128	V3425	g48d	agelast inhal intox
1129	V3426	g48a	marijuana intoxictd
1130	V3427	g48b	age marijua intoxic
1131	V3428	g48c	lastx marij intoxic
1132	V3429	g48d	agelast marij intox
1133	V3430	g48a	cocaine intoxicated
1134	V3431	g48b	age cocaine intoxic
1135	V3432	g48c	lastx cocaine intox
1136	V3433	g48d	agelast coke intoxc
1137	V3434	g48a	hallucingn intoxict
1138	V3435	g48b	age hallucg intoxic
1139	V3436	g48c	lastx halluc intoxc
1140	V3437	g48d	agelast halluc intx
1141	V3438	g48a	heroin intoxicated

1142	V3439	g48b	age heroin intoxict
1143	V3440	g48c	lastx heroin intoxc
1144	V3441	g48d	agelast heroin intx
1145	V3501	g27/49	more-same effect
1146	V3502	g49a	alc more-same effex
1147	V3503	g49b	age alc more 4 same
1148	V3504	g49c	lastx alc more-same
1149	V3505	g49d	agelast alc more-sm
1150	V3506	g49a	sedtv more-sameeffx
1151	V3507	g49b	age sedtv more-same
1152	V3508	g49c	lastx sedtv more-sm
1153	V3509	g49d	agelast sedtv-more
1154	V3510	g49a	tranq more-sameeffx
1155	V3511	g49b	age tranq more-same
1156	V3512	g49c	lastx tranq more-sm
1157	V3513	g49d	agelast tranq more
1158	V3514	g49a	stiml more-sameeffx
1159	V3515	g49b	age stiml more-same
1160	V3516	g49c	lastx stim more-sam
1161	V3517	g49d	agelast stimul more
1162	V3518	g49a	anlgs more-sameeffx
1163	V3519	g49b	age anlgs more-same
1164	V3520	g49c	lastx anlg more-sam
1165	V3521	g49d	agelast anlgsc more
1166	V3522	g49a	inhal more-sameeffx
1167	V3523	g49b	age inhal more-same
1168	V3524	g49c	lastx inhal more-sm
1169	V3525	g49d	agelast inhaln more
1170	V3526	g49a	marij more-sameeffx
1171	V3527	g49b	age marij more-same
1172	V3528	g49c	lastx marij more-sm
1173	V3529	g49d	agelast mariju more
1174	V3530	g49a	cocain more-sameffx
1175	V3531	g49b	age cocain more-sam
1176	V3532	g49c	lastx cocaine more
1177	V3533	g49d	agelast cocain more
1178	V3534	g49a	halluc more-sameffx
1179	V3535	g49b	age halluc more-sam
1180	V3536	g49c	lastx hallucgn more
1181	V3537	g49d	agelast halluc more
1182	V3538	g49a	heroin more-sameffx
1183	V3539	g49b	age heroin more-sam
1184	V3540	g49c	lastx heroin more
1185	V3541	g49d	agelast heroin more
1186	V3601	g28/50	stop-cause illnes
1187	V3602	g50a	alc stop caus illns
1188	V3603	g50b	age alc caus illnes
1189	V3604	g50c	lastx alc caus illn
1190	V3605	g50d	agelast alc illness
1191	V3606	g50a	sedtv cause illness
1192	V3607	g50b	age sedtv caus illn
1193	V3608	g50c	lastx sedtv illness

1194	V3609	g50d	agelast tranq illns
1195	V3610	g50a	tranq cause illness
1196	V3611	g50b	age tranq caus illn
1197	V3612	g50c	lastx tranq illness
1198	V3613	g50d	agelast tranq illns
1199	V3614	g50a	stimul caus illness
1200	V3615	g50b	age stimul caus ill
1201	V3616	g50c	lastx stimul illnes
1202	V3617	g50d	agelast stimul illn
1203	V3618	g50a	anlgsc caus illness
1204	V3619	g50b	age anlgs caus illn
1205	V3620	g50c	lastx anlgs caus il
1206	V3621	g50d	agelast anlgsc illn
1207	V3622	g50a	inhalnt caus illnes
1208	V3623	g50b	age inhal caus illn
1209	V3624	g50c	lastx inhal causill
1210	V3625	g50d	agelast inhal illns
1211	V3626	g50a	mariju caus illness
1212	V3627	g50b	age marij caus illn
1213	V3628	g50c	lastx marij causill
1214	V3629	g50d	agelast marij illns
1215	V3630	g50a	cocain caus illness
1216	V3631	g50b	age coke caus illns
1217	V3632	g50c	lastx coke caus ill
1218	V3633	g50d	agelast coke illnes
1219	V3634	g50a	halluc caus illness
1220	V3635	g50b	age halluc caus ill
1221	V3636	g50c	lastx halluc illnes
1222	V3637	g50d	agelast halluc illn
1223	V3638	g50a	heroin causd illnes
1224	V3639	g50b	age heroin caus ill
1225	V3640	g50c	lastx heroin illnes
1226	V3641	g50d	agelast heroin illn
1227	V3642	g51	w/drawal sxs go away
1228	V3643	g51a	alcohl w/drawal sxs
1229	V3644	g51a	sedtiv w/drawal sxs
1230	V3645	g51a	tranqu w/drawal sxs
1231	V3646	g51a	stimul w/drawal sxs
1232	V3647	g51a	anlgsc w/drawal sxs
1233	V3648	g51a	inhaln w/drawal sxs
1234	V3649	g51a	mariju w/drawal sxs
1235	V3650	g51a	cocain w/drawal sxs
1236	V3651	g51a	halluc w/drawal sxs
1237	V3652	g51a	heroin w/drawal sxs
1238	V3701	g29/52	reducd activities
1239	V3702	g52a	alc reducd activits
1240	V3703	g52b	age alc reduc activ
1241	V3704	g52c	lastx alc reduc act
1242	V3705	g52d	agelast alc reduced
1243	V3706	g52a	sedtv reduc activit
1244	V3707	g52b	age sedtv reduc act
1245	V3708	g52c	lastx sedtv reduced

1246	V3709	g52d	agelast sedtv reduc
1247	V3710	g52a	tranq reduc activit
1248	V3711	g52b	age tranq reduc act
1249	V3712	g52c	lastx tranq reduced
1250	V3713	g52d	agelast tranq reduc
1251	V3714	g52a	stimul reduc activs
1252	V3715	g52b	age stim reduc acts
1253	V3716	g52c	lastx stimul reducd
1254	V3717	g52d	agelast stim reducd
1255	V3718	g52a	anlgsc reduc activs
1256	V3719	g52b	age anlgs reduc act
1257	V3720	g52c	lastx anlg reducact
1258	V3721	g52d	agelast anlgs reduc
1259	V3722	g52a	inhal reduc activit
1260	V3723	g52b	age inhal reduc act
1261	V3724	g52c	lastx inhalnt reduc
1262	V3725	g52d	agelast inhal reduc
1263	V3726	g52a	mariju reduc activs
1264	V3727	g52b	age marij reduc act
1265	V3728	g52c	lastx marijua reduc
1266	V3729	g52d	agelast marij reduc
1267	V3730	g52a	cocain reduc activs
1268	V3731	g52b	age coke reduc acts
1269	V3732	g52c	lastx coke reducact
1270	V3733	g52d	agelast coke reducd
1271	V3734	g52a	halluc reduc activs
1272	V3735	g52b	age halluc reducact
1273	V3736	g52c	lastx halluc reducd
1274	V3737	g52d	agelast halluc redu
1275	V3738	g52a	heroin reduc activs
1276	V3739	g52b	age heroin reducact
1277	V3740	g52c	lastx heroin reducd
1278	V3741	g52d	agelast heroin redu
1279	V3742	g53	tell dr subst abuse
1280	V3743	g53a	age 1st told doctor
1281	V3744	g54	dr prescrb mediction
1282	V3745	g54a	age 1st prescrption
1283	V3746	g55	dr advise m.h.profsl
1284	V3747	g55a	age 1st advis mhprf
1285	V3748	g56	refer treatment prog
1286	V3749	g56a	age treatment progr
1287	V3750	g57	meds >1x 4 substabus
1288	V3751	g57a	age med>1 substabus
1289	V3752	g58	see m.h.prof substnc
1290	V3753	g58a	age saw m.h. profsl
1291	V3754	g59	see other professnl
1292	V3755	g59a	age saw other profs
1293	V3756	g60	self-help group
1294	V3757	g60a	age self-help group
1295	V3803	none	sum of v3801 (h8)
1296	V3804	h15	ckpt-H14 sum on rowC
1297	V3805	h16	behavr fr alch/drugs

1298	V3806	h16a	bhvr alwys alc/drug
1299	V3807	h26	#yes bottom of sheet
1300	V3808	h27	behavr fr alch/drugs
1301	V3809	h27a	bhvr alwys alc/drug
1302	V3810	h28	ckpt-E29 box checked
1303	V3811	h29	behavrs evr w/mania
1304	V3812	h29a	bhvr alwys w/drugs
1305	V4101	k1/14	spying/following R
1306	V4102	k14b	K14a exs realistic
1307	V4103	k2/15	poison/hurt R
1308	V4104	k15b	K15a exs realistic
1309	V4105	k3/16	reading R's mind
1310	V4106	k16a	knew thought/guessd
1311	V4107	k16c	K16b exs realistic
1312	V4108	k4/17	hear R's thoughts
1313	V4109	k17b	K17a exs realistic
1314	V4110	k5/18	hear othrs thought
1315	V4111	k18b	K18a exs realistic
1316	V4112	k6/19	controlld by force
1317	V4113	k19b	K19a exs realistic
1318	V4114	k7/20	othr stole thought
1319	V4115	k20b	K20a exs realistic
1320	V4116	k8/k21	special messg/tv
1321	V4117	k21b	K21a exs realistic
1322	V4118	k9/22	hypnotz/magic/forc
1323	V4119	k22b	K22a exs realistic
1324	V4120	k10/23	saw visions
1325	V4121	k23b	K23a exs realistic
1326	V4122	k11/24	heard noise/voice
1327	V4123	k24b	hear voice >few min
1328	V4124	k24c	K24a exs realistic
1329	V4125	k25	voice mentioned K24a
1330	V4126	k26	hear voic othr didnt
1331	V4127	k27	herd voice from body
1332	V4128	k28	voic commentd action
1333	V4129	k29	heard 2 or > voices
1334	V4130	k30	voices discussing R
1335	V4131	k31	conversation w/voics
1336	V4132	k32	see vision w/voices
1337	V4133	k12/33	smells/body odors
1338	V4134	k33b	K33a exs realistic
1339	V4135	k13/34	feelng in/on body
1340	V4331	k56a	expr alwys w/anxiet
1341	V4332	k56b	anxiety/expernc 1st
1342	V4333	k56c	anxity/expr awaylst
1343	V4334	k57	d40/d81 chk ref card
1344	V4335	k57a	e29 checkd ref card
1345	V4336	k57b	e29 checkd ref card
1346	V4337	k58	feelng/experienc 1st
1347	V4338	k59	feelng samex expernc
1348	V4339	k59a	feel/expr samex 2wk
1349	V4340	k59b	feelng/expr awaylst

1350	V4341	k59c	exp w/out feel 2wks
1351	V4503	m3	excl reln lastd 1yr/>
1352	V4504	m4	#time living together
1353	V4505	m4	timeunit livng togeth
1354	V4506	m5	satisfactn w/relatnsp
1355	V4507	m6	#times married lifetm
1356	V4508	m6a	#marrg divrc/annulmt
1357	V4509	m7	year 1st time married
1358	V4510	m7a	month 1stx married
1359	V4511	m8	#length knw 1stspouse
1360	V4512	m8	timeunit knw 1stspous
1361	V4513	m9	rellyr/> b4 1stspouse
1362	V4514	m10	r married only once
1363	V4515	m11	r marriage status
1364	V4516	m12	yr 1st marriag ended
1365	V4517	m12a	mo 1st marrge ended
1366	V4518	m13	1st marrg-divrc/widw
1367	V4519	m14	excl 1yr/> rel since
1368	V4520	m15	R marital status
1369	V4521	m16	yr maried spouse now
1370	V4522	m16a	mo maried spous now
1371	V4523	m17	marital satisfaction
1372	V4524	m18	yr separatd recently
1373	V4525	m18a	mo sepratd recently
1374	V4526	m19	who decided separate
1375	V4527	m20	yr divorce official
1376	V4528	m20a	mo divorce official
1377	V4628	m41	excl rel lastd 1yr/>
1378	V6101	u1	#1war combat experien
1379	V6102	u2	#2lifethreatng accidn
1380	V6103	u2a	age 1st threat accid
1381	V6104	u3	#3fire/flood/nataccid
1382	V6105	u3a	age 1st fire/flood
1383	V6106	u3b	fire/flood past 12mo
1384	V6107	u3c	mo recent fire/flood
1385	V6108	u3c	yr recent fire/flood
1386	V6109	u4	#4saw injury/killing
1387	V6110	u4a	age 1stsaw injur/kil
1388	V6111	u4b	saw injur/kill 12mo
1389	V6112	u4c	mo recent injur/kill
1390	V6113	u4c	yr recent injur/kill
1391	V6114	u5	#5 raped
1392	V6115	u5a	age 1st rape
1393	V6116	u5b	rape in past 12month
1394	V6117	u5c	mo most recent rape
1395	V6118	u5c	yr most recent rape
1396	V6119	u5d	rape isolatd/repeatd
1397	V6120	u5e	#howlong rape contin
1398	V6121	u5e	timeunit rape contin
1399	V6122	u5f	a. Relative raped R
1400	V6123	u5f	b. Step-relatv rapedr
1401	V6124	u5f	c. Someone else R knew

1402	V6125	u5f	d. Stranger raped R
1403	V6126	u6	#6 sexually molested
1404	V6127	u6a	age 1st sex molested
1405	V6128	u6b	sex molestd past12mo
1406	V6129	u6c	mo recent sex molest
1407	V6130	u6c	yr recent sex molest
1408	V6131	u6d	molest isolat/repeat
1409	V6132	u6e	#howlong molest cont
1410	V6133	u6e	timeunit molest cont
1411	V6134	u6f	a.Relative molestd R
1412	V6135	u6f	b.Steprelatv molestr
1413	V6136	u6f	c.Someone else R knew
1414	V6137	u6f	d.Stranger molestd R
1415	V6138	u7	#7 phys attak/assault
1416	V6139	u7a	age 1st phys assault
1417	V6140	u7b	assault past 12 mont
1418	V6141	u7c	mo recent assaulted
1419	V6142	u7c	yr recent assaulted
1420	V6143	u8	#8 physabuse as child
1421	V6144	u9	#9 neglected as child
1422	V6145	u10	#10captV/kidnap/weap
1423	V6146	u10a	age 1st kidnap/capt
1424	V6201	u11	othr terrible expern
1425	V6202	u11a	#1terrible experinc
1426	V6203	u11a	#2terrible experinc
1427	V6204	u11b	age 1sterribl exper
1428	V6205	u11c	othr terribl expern
1429	V6206	u11d	#1terrible experien
1430	V6207	u11d	#2terrible experien
1431	V6208	u11e	age exper 1stoccurd
1432	V6209	u12	#12shock exper other
1433	V6210	u12a	# of worst event
1434	V6211	u12b	#1 person event
1435	V6212	u12b	#2 person event
1436	V6213	u12c	age learnd of event
1437	V6214	none	work variable
1438	V6215	u13	only 1 yes box u1-12
1439	V6216	u14	most upsetting exper
1440	V6217	u16	kept remembrng event
1441	V6218	u17	dream/nightmar event
1442	V6219	u18	felt event occuring
1443	V6220	u19	upset w/situ remindr
1444	V6221	u20	1/> yes box u16-u19
1445	V6222	u21	no longer love/warm
1446	V6223	u22	avoid remindr situat
1447	V6224	u23	try not to thinkofit
1448	V6225	u24	memory blank ofevent
1449	V6226	u25	feel isolatd/distant
1450	V6227	u26	no point think futur
1451	V6228	u27	lose interst inthing
1452	V6229	none	work variable
1453	V6230	u28	3/> yes box u21-u27

1454	V6231	u29	trouble concentratng
1455	V6232	u30	irritabl/lose temper
1456	V6233	u31	trouble sleeping
1457	V6234	u32	overly careful
1458	V6235	u33	jumpy/easly startled
1459	V6236	u34	sweat/heart beatfast
1460	V6237	none	work variable
1461	V6238	u35	2/> yes box u29-u34
1462	V6239	u36	#day rxns aftr exper
1463	V6240	u36	timeunit rxns after
1464	V6241	u37	#day cont reactions
1465	V6242	u37	timeunit cont reactn
1466	V6243	u38	last had reactions
1467	V7301	e35	anything cause mania
1468	V7302	e36_01	#1period durng spell
1469	V7303	e36_02	#2period durng spell
1470	V7304	e36_03	#3period durng spell
1471	V7305	e36_04	#4period durng spell
1472	V7306	e36_05	#5period durng spell
1473	V7307	e36_06	#6period durng spell
1474	V7308	e36_07	#7period durng spell
1475	V7309	e36_08	#8period durng spell
1476	V7310	e36_09	#9period durng spell
1477	V7311	e37	due to meds/drug/alc
1478	V7312	e37a_01	#1period by drg/alc
1479	V7313	e37a_02	#2period by drg/alc
1480	V7314	e37a_03	#3period by drg/alc
1481	V7315	e37a_04	#4period by drg/alc
1482	V7316	e37a_05	#5period by drg/alc
1483	V7317	e37a_06	#6period by drg/alc
1484	V7318	e37a_07	#7period by drg/alc
1485	V7319	e37a_08	#8period by drg/alc
1486	V7320	e37a_09	#9period by drg/alc
1487	V7403	cc1	use a.Cgt daily/mo+
1488	V7404	cc2	age fst rg use a.Cgt
1489	V7405	cc3	#/da most use a.Cgt
1490	V7406	cc4	last reg use a.Cgt
1491	V7407	cc5	age last reg a.Cgt
1492	V7408	cc1	use b.Cgr daily/mo+
1493	V7409	cc2	age fst rg use b.Cgr
1494	V7410	cc3	#/da most use b.Cgr
1495	V7411	cc4	last reg use b.Cgr
1496	V7412	cc5	age last reg b.Cgr
1497	V7413	cc1	use c.Pip daily/mo+
1498	V7414	cc2	age fst rg use c.Pip
1499	V7415	cc3	#/da most use c.Pip
1500	V7416	cc4	last reg use c.Pip
1501	V7417	cc5	age last reg c.Pip
1502	V7418	cc1	use d.Chw daily/mo+
1503	V7419	cc2	age fst rg use d.Chw
1504	V7420	cc3	#/da most use d.Chw
1505	V7421	cc4	last reg use d.Chw

1506	V7422	cc5	age last reg d.Chw
1507	V7423	cc6	iw checkpoint
1508	V7424	cc7	#tim quit/cut 2wks+
1509	V7425	cc8	probs when quit/cut
1510	V7426	cc8a	#days prob lasted
1511	V7427	cc8b	prob sev times?
1512	V7428	cc8c	start again
1513	V7429	cc9	continue to use
1514	V7430	cc10	cause health probs
1515	V7431	cc10a	continue-health
1516	V7432	cc11	emot/mental probs
1517	V7433	cc11a	continue=emot/ment
1518	V7434	cc12	unable quit/cut
1519	V7435	cc12a	unable quit mult
1520	V7436	cc13	more than intend
1521	V7437	cc14	reg-would not chg
1522	V7438	cc15	giVe up activities
1523	V7439	cc15a	repeatedly give up
1524	V7440	cc16	iw checkpoint
1525	V7441	cc17	age first problems
1526	V7442	cc18	last had problems
1527	nap50	none	non-affective psycho

Appendix C
Construction of Diagnostic Variables

1. Available syndromes

The public use tape contains diagnostic variables, typically coded yes-no, with age of onset and recent codes, for the following DSM-III-R syndromes:

Mood disorders: Major depressive episode, Manic episode, Dysthymia (300.40)

Anxiety disorders: Panic disorder with (300.21) or without (300.01) agoraphobia, Agoraphobia, Social phobia (300.23), Simple phobia (300.29), Generalized anxiety disorder (300.02)

Addictive disorders: Alcohol abuse (305.00), Alcohol Dependence (303.90), Abuse (305.XX) of at least one of the following classes of drugs ( ), Dependence (303.XX) on at least one of the same classes of drugs

Other disorders: Conduct disorder (CD), Adult antisocial behavior (AAB), Antisocial personality disorder (ASPD; 301.70). CD and AAB are criteria of ASPD.

2. Syndromes and disorders

You will note that some of the syndromes listed above contain DSM-III-R diagnostic numbers while others do not. This is because only the syndromes with numbers are disorders. The others are syndromes that may or may not be disorders depending on other information.

In an effort to maintain as much flexibility as possible in the public use tape, the data have been coded in this two-part approach so that you can examine the data at the syndrome level. The relevant issues are as follows.

a. Mania-Depression: DSM-III-R defines manic episodes and depressive episodes as syndromes that go into the definitions of bipolar disorder (296.XX)and major depressive disorder (296.XX). You should refer to DSM-III-R for the exact definitions, but the basic distinction is that a diagnosis of bipolar disorder

requires at least one manic episode but does not require the respondent ever to have had a depressive episode, while a diagnosis of major depressive disorder requires at least one major depressive episode and requires that the respondent has never had a manic episode. By providing data at the syndrome level in the public use tape, we make it possible for you either to study the epidemiology of the syndromes or to combine the syndromes to generate diagnoses, as you prefer. It is important to note, however, that we have not generated diagnoses of bipolar disorder or major depressive disorder on the tape.

b. Panic-Agoraphobia: DSM-III-R distinguishes panic with agoraphobia from panic without agoraphobia. It also distinguishes agoraphobia without panic (which is a DSM-III-R disorder) from agoraphobia with panic (which is not a DSM-III-R disorder). We do not make these distinctions on the public use tape. Instead, we provide separate information on whether the respondent meets criteria for panic disorder with or without agoraphobia and meets criteria for agoraphobia with or without panic. This allows you to study these syndromes or to cross-classify the syndromes to define disorders.

c. Abuse-Dependence: DSM-III-R stipulates that a person no longer receives a diagnosis of substance abuse once he or she meets criteria for dependence on that same substance. However, it is possible for a person to have had a diagnosis of abuse prior to the age of being dependent. In order to capture this fact, our file provides lifetime diagnoses of both abuse and dependence without the hierarchy restriction. You need to check the ages of onset to know whether there was ever a time when the respondent met criteria for abuse without dependence.

3. Imputing values

Although the diagnostic computer programs were used to generate all diagnoses, there were a number of instances where additional information was used as well either to define cases or to define ages of onset or ages of offset. As a result, mechanical use of the diagnostic programs will not always generate the same results as those in the diagnosis files. The following discussion reviews these instances:

a. Mania: There was one missing case for age of onset and this was imputed using hot deck imputation.

b. Major Depression: four cases had missing information on onset and five more on onset age. Four had missing data on recency and 25 on recency age. The large number missing recency age is due to a skip error in the interview schedule that was not caught until data collection had started. We attempted to recontact all respondents to fill in this missing information and those that we could not recontact were imputed using the hot deck method.

c. Dysthymia: Eight cases were missing either onset or recency and were imputed using hot deck imputation.

d. Agoraphobia: Ancillary information from open-ended responses to the simple phobia section was used to assign 13 cases a diagnosis of agoraphobia using their onset and recency ages from the simple phobia section. In addition, a skip error in the NCS that was not found until the end of fieldwork led to 175 cases being missing on onset and recency data. A regression-based imputation scheme was used to generate imputation classes and hit deck imputation was used within these classes to fill in this missing information.

e. Simple phobia: An additional 60 cases would be classified as meeting criteria for this diagnosis if information on open-ended responses to the B49k question were not used. The onset and recency ages were either taken from the simple phobia section or imputed using a hot deck method.

f. Social phobia: If information on open-ended responses to the simple phobia questions were not used, 18 cases would be classified as meeting criteria for social phobia. Onset and recency data were either taken from the simple phobia responses or imputed.

f. Panic disorder: Four cases were imputed for missing data on either age of onset or recency.