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**Author(s): Julian Ford, Ph.D.; Robert L. Trestman, M.D., Ph.D.**

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## ABSTRACT

### *Evidence-Based Enhancement of the Detection, Prevention, and Treatment of Mental Illness in the Correction Systems*

**Purpose.** The goal of the present project was to develop and validate a brief mental health screening instrument suitable for use by correctional custody or healthcare staff in identifying jail detainees who warrant specialized mental health evaluation for undetected psychiatric impairment. **Participants.** English-speaking women (N=670) and Men (N=1526), 40% Black, 20% Hispanic, 40% White, ages 18-76 years old (Median=31 years old), who had no institutionally-identified serious mental health condition, were randomly recruited 24-72 hours after entry to jail. A randomly selected sub-sample (201 women; 307 men) received a structured diagnostic interview within five days. **Setting.** All data collection occurred in state-run jails for men (four sites) and women (one site) in the State of Connecticut. **Methods.** Data collection techniques involved the administration of a 25-minute “Composite Screening” interview in Phase 1. 20% of participants were then invited to complete a longer, more intensive “Structured Interview” one week later, which established a more detailed account of Axis I and Axis II psychiatric disorders and psychosocial functioning. Correctional Records Data was also obtained including Mental Health Scores and Overall Risk Scores. In Phase 2, the newly developed Screening Tool was then tested on an additional 206 participants, following the same protocol as in Phase 1. **Data Analysis.** Exploratory (EFA) and Confirmatory (CFA) Factor Analyses were calculated to derive the best subset of items to be used in the brief mental health screen. Sensitivity, specificity, and positive and negative predictive power were calculated for the results of empirically-derived gender-differentiated brief screening instruments in relation to psychiatric diagnoses obtained by blind researchers using the Structured Clinical Interview for DSM-IV Axis I disorders (SCID-P) and the Clinician Administered PTSD Scale as criterion standards. **Results.** The main outcome measures derived from this project are: The Correctional Mental Health Screen for Females (CMHS-F; 8 items) and The Correctional Mental Health Screen for Males (CMHS-M, 12 items). Epidemiology of mental health disorders is also reported. **Conclusions.** This new brief screening tool is designed to expedite the process of accurately identifying individuals in the correctional system with mental illness. Dissemination of this tool can help to standardize screening practices nationwide. Prevalence rates of psychological disorders were found to be comparable to those found in psychiatric settings, and timely, proper identification of psychological illness in jails can aid in the treatment process for these individuals.

## **FINAL REPORT**

### ***Evidence-Based Enhancement of the Detection, Prevention, and Treatment of Mental Illness in the Correction Systems***

#### **Submitted to:**

**Andrew Goldberg  
National Institute of Justice  
810 Seventh Street N.W.  
Washington, DC 20531**

#### **Submitted by:**

**Julian Ford, Ph.D., Co-Principal Investigator  
Robert L. Trestman, M.D., Ph.D., Co-Principal Investigator  
Department of Psychiatry  
University of Connecticut Health Center  
263 Farmington Avenue  
Farmington, Connecticut 06030  
(860) 679-8778  
(860) 679-1298 (fax)**

## **EXECUTIVE SUMMARY**

In the past decade, our nation’s courts, jails, prisons, and parole systems have experienced an enormous increase in the volume of adjudications, incarcerations, and post-release surveillances they must manage. Simultaneously, other socioeconomic and institutional changes have led to significant increases in the proportion of legally detained persons who suffer from mental illness. Early identification and effective care of mental health needs within the prisons and jails is critical to providing constitutionally entitled services, as well as enhancing healthy readjustment into the community after release. The Brief Mental Health Screening Tool was developed to enhance the timely and accurate identification of psychiatric disorders within adult correctional systems.

Through the process of developing this tool, two objectives were obtained: (1) The evaluation of the reliability and validity of a composite mental health screen adapted from existing evidence-based protocols, and (2) the determination of the best brief subset of the mental health screen’s items for the rapid identification of inmates with psychiatric disorders requiring care. Data analysis involved sensitivity, specificity, and positive and negative predictive power calculations. This resulted in two empirically derived and gender-differentiated brief screening measures.

Data collection techniques involved the administration of a 25-minute “Composite Screening” interview in Phase 1 with questions derived from the Screening module for the SCID-P for DSM-IV (First et al., 1990), Primary Care PTSD screen (PC-PTSD; Ford et al., 1996; Prins et al., 1999), Iowa Personality Disorders Screen (IPDS; Langbehn et al., 1999), Referral Decision Scale (RDS; Teplin & Swartz, 1989), and the Alcohol and

Substance Involvement Screening Test (ASIST; Babor et al., 1999). 20% of participants were then invited to complete a longer, more intensive “Structured Interview” approximately one week later, which established a more detailed account of Axis I and Axis II psychiatric disorders and psychosocial functioning. Correctional Records Data was also obtained including Mental Health Scores, Medical Scores, Disciplinary History, Suicide Risk Scores, Overall Risk Scores, Escape Profile, Educational and Vocational Training, Substance Abuse Treatment, and Sex Offender Treatment. These variables were used to establish convergent and discriminant validity with the total scores on the Brief Mental Health Screening Tool. In Phase 2, the newly developed Screening Tool was then tested on an additional 206 participants, following the same protocol as in Phase 1. Participants were excluded if they were severely mentally impaired and unable to comprehend the informed consent process or the interview questions.

Epidemiology of mental disorders in the jail population was also obtained as a result of this project. Prevalence rates of Affective Disorders, Anxiety Disorders, Personality Disorders, and Post-Traumatic Stress Disorder were determined; consistent with earlier reports in different populations, substantial elevations in prevalence rates above those found in the community were observed.

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## **FINAL REPORT**

### ***Evidence-Based Enhancement of the Detection, Prevention, and Treatment of Mental Illness in the Correction Systems***

#### **INTRODUCTION AND LITERATURE REVIEW**

Several brief screening instruments have been developed to identify undetected and untreated psychiatric disorders with psychiatric (Daradkeh, Ghubash, El-Rufaie, & Abou-Saleh, 1999; Zimmerman & Mattia, 2001), medical (Boutin-Foster, Ferrando, & Charlson, 2003; Ericsson et al., 2002; Furukawa, Goldberg, & 2001; Herrmann, 1997; Spitzer, Kroenke, Williams et al., 1999), and community (Kessler et al., 2002) populations. A brief efficient screening instrument is needed with another population whose members are at risk for undetected psychiatric disorders: incarcerated adults. Although screening instruments have been developed for the adult correctional population, none have proven consistently psychometrically robust as yet and none has been designed and evaluated for the detection of newly admitted prisoners with psychiatric disorders. Therefore, the purpose of this study was to adapt existing screening instruments to create and empirically validate a brief screen that can efficiently identify undetected psychiatric disorders in newly admitted prisoners.

Official estimates based upon institutional data (generally in the absence of formal screening or diagnostic assessments) are that 16% of state prison inmates, 7% of federal inmates and 16% of jail prisoners suffer from a psychiatric disorder (Ditton, 1999). Epidemiological studies with formal psychometric assessments in jails and prisons have provided substantially higher lifetime prevalence estimates, which also tend to be two to four times

higher than those from investigations using comparable methodologies with non-incarcerated adults. Results in correctional populations have been reported for affective disorders (major depression, 7-21%; dysthymia, 4-14%; bipolar disorder, 1.6-3.6%; Diamond, Wang, Holzer, Thomas & Cruser, 2001; Jordan, Schlenger, Fairbank, & Cadell, 1996); schizophrenia (1.5-5%; Diamond et al., 2001; Jordan et al., 1996); and antisocial personality disorder (12-75%; Diamond et al., 2001; Jordan et al., 1996).

Generalized anxiety or panic disorder may be less prevalent among incarcerated adults than adults in the community, but still affect a substantial number of incarcerated women (1.6-8%; Jordan et al., 1996) and men (Teplin, 1994). Current and past year prevalence estimates are less often reported, but also tend to be two to three times higher than those from community populations (Diamond et al., 2001; Jordan et al., 1996). Incarcerated men and, to an even greater extent, women, disclose substantial psychopathology on psychometric measures such as the MMPI-2 (Megargee, Mercer, & Carbonell, 1999).

Although prevalence estimates tend to be lower among jail detainees than prison inmates (Diamond et al., 2001; Lamb & Weinberger, 1998), more than half of men and women jail detainees meet criteria for a lifetime affective, anxiety (particularly PTSD—although this has not been assessed in epidemiologic studies with men in jail settings), psychotic, or substance use disorders (Parsons, Walker, & Grubin, 2001; Teplin, 1990, 1994). More than 30% of men (Gavin, Parsons, & Grubin, 2003; Teplin, 1994), and approximately 10% of women (Abram, Teplin, & McLelland, 2003), detained in jail meet criteria for a current psychiatric disorder, most often with co-occurring alcohol or other substance use disorder. Fewer than one in three incarcerated adults with psychiatric disorders is identified in routine



entry screening (Parsons et al., 2001). In New Zealand, most (81%) incarcerated adults with bipolar disorder were receiving mental health services, most with depression (54%) or psychosis (63%) were not (Brinded, Simpson, Laidlaw, Fairley, & Malcolm, 2001). These data underscore the need for early accurate detection of psychiatrically impaired jail detainees and prison inmates.

Even ten years ago, almost all State Departments of Correction had policies mandating mental health screening to be administered by health care professionals for all newly admitted inmates (Metzner, Miller, & Kleinsasser, 1994). In 2000, almost 70% of State prisons had formal policies mandating the screening of inmates at intake, with almost two-thirds conducting psychiatric assessments (Beck & Maruschak, 2001). Nine in ten State correctional facilities reported providing mental health services for inmates, and one in eight State prisoners was reported to be receiving “mental health therapy or counseling” (most of whom were receiving psychotropic medications; Beck & Maruschak, 2001, p. 1). However, mental health screening is much less common at entry to jail (Teplin, 1994). Compared to prison inmates, jail detainees with mental illness are 50% less likely to receive mental health services, and almost 200% less likely to receive counseling or therapy (Ditton, 1999). Yet, mental illness in jails is a potentially serious problem not just for the detainee but also for the safety and effectiveness of custody procedures: jailed adults with mental illness are 50% more likely than other jail inmates to have serious disciplinary problems (Ditton, 1999).

Screening measures assessing attitudes or personality characteristics that may lead to disciplinary problems (especially risk of violence) have been developed for adult correctional populations (Cooke, 1998; Walters &

Chlumsky, 1993), but screening measures that target psychiatric disorders are less often reported. Teplin and Swartz (1989) statistically derived a 14-item Referral Decision Scale (RDS) using discriminant function analyses from the Diagnostic Interview Schedule (DIS) administered to 728 male jail detainees (aged 16-68 yrs). With this sample and in a replication with 1,149 male prison inmates, the RDS subscales for depression, bipolar disorder, and schizophrenia had 79-.88 average sensitivity and .99 average specificity for predicting full DIS diagnoses. Hart, Roesch, Corrado and Cox (1993) provided an independent replication with 790 male pretrial detainees, reporting .98 negative predictive power but only .19 positive predictive power in relation to full DIS diagnoses. DiCataldo, Greer and Profit (1995) adjusted RDS items and cut-off scores to reduce the rate of false positives, and reported mixed evidence of predictive validity in relation to institutional data: RDS scores correlated with indices of initial adjustment problems but not of violence or disciplinary remand. McLearn and Ryba (2003) reported a comparable sensitivity level (.73) and higher specificity (.84), but low positive predictive power (.63) for the RDC with 95 male jail detainees.

Relatively brief (i.e., 21-36 item) screening instruments have shown promise when evaluated psychometrically with adult correctional populations, but over-reporting or over-identification (i.e., false positives) consistently appear to be a more serious artifact than under-reporting (i.e., false negatives) (see also Lewis, Simcox, & Berry, 2002). Boothby & Durham (1999) used the Beck Depression Inventory and found that 27% of incarcerated men and women had moderate to severe depressive symptoms, with first-time inmates and those in maximum security reporting more severe depression than recidivists or lower security prisoners. Smith and Borland (1999) assessed problems with mood, anxiety, and somatic distress

and psychosocial functioning in 204 women prison inmates with the General Health Questionnaire, identifying 52% as potential psychiatric “cases.”

Anderson, Sestoft, Lillebaek, Gabrielson and Hemmingsen (2002)

administered the 28-item GHQ with a random sample of 184 prisoners (aged 18-60 yrs) in Denmark, finding evidence of moderate sensitivity but weak specificity. The 36-item Holden Psychological Screening Inventory (HPSI) supplements three factor analytically validated subscales for psychiatric (including anxiety, somatic, and psychotic), social, and depressive symptomatology with a validity index to detect faking and other response biases (Book, Knap, & Holden, 2001). Although evidence of convergent and discriminant validity have been reported for the HPSI, its predictive utility for identifying psychiatric disorders has not been reported (Book et al., 2001).

No brief screening instrument has as yet been developed and validated for use by correctional custody or healthcare staff in identifying jail detainees who warrant specialized mental health evaluation for undetected psychiatric impairment. Therefore, the current study utilized several brief but comprehensive self-report instruments that were administered as a structured interview (the “*Composite Screen*”) by research assessors within the first 24-72 hours of detention in adult jails. The goal was to identify the briefest sub-set of items that retained the conceptual/clinical structure of the full composite screen while achieving sensitive and specific prediction of current and lifetime history of any research interview-derived (i.e., independent structured interview) DSM-IV Axis I psychiatric disorder (excluding substance use disorders). Exploratory and confirmatory factor analyses of the full composite screen item set were conducted to establish a structural model. An item reduction procedure designed to eliminate low

base rate and redundant items on a bivariate and multivariate (discriminant function) basis then was conducted separately for men and women.

The brief screening instruments are designed to be used following the two-stage strategy articulated by Shrout, Skodol, and Dohrenwend (1986), beginning with a brief screen that selects high risk individuals to receive a stage two intensive research or clinical assessment. Although there is evidence that psychological test scores are temporally reliable over a two-week period in the first month following admission to prison (Von Cleve, Jemelka, & Trupin, 1991), newly incarcerated jail detainees experience substantial and highly variable stressors that may lead to poor retest reliability on screening measures. Therefore, we re-administered the initial screen to a randomly selected sample of participants in order to determine if the results are sufficiently stable over the first few days in jail to constitute a reliable index of risk of psychiatric problems.

## STUDY DESIGN

### *PARTICIPANTS*

Study participants were 2196 adults (ages 18-76 years old, Mean = 32.2 [Standard Deviation, SD = 9.5], Median = 31 years old) detained in a State of Connecticut jail within the past 24-76 hours. Criminal charge data was obtained from Connecticut Department of Correction records for 84% of the sample (N=1851) that consented to the release of this information to the study. Men (N=1526) were recruited in the four jails for male prisoners in the state Correction system, and women (N=670) were recruited in the one jail for female prisoners in the state Correction system. Participants' self-reported ethnicities included: White, not Hispanic (44%), Black (including African-American and Caribbean American, 35%), and Latino/Hispanic (20%). Education level ranged from 0-19 years of school ( $M=11.4$  years [ $SD=1.8$ ],  $Mdn = 12$  years).

The primary types of crime with which participants were charged included: nonviolent, 58%; violent, 16% (e.g., use of weapon, physical or sexual assault, manslaughter, or murder), and probation violation, 36%. The demographic composition and types of crime represented in the study sample were consistent with the characteristics of the overall jail population, except for ethnicity. According to information gathered regarding the demographic characteristics of the jail population available for participation

at the time of recruitment, Hispanics were somewhat under-represented (20% screened versus 25% in the jails).

## ***PROCEDURE***

Screenings were conducted to provide a sample that included new admissions throughout the week, on a schedule dictated by each facility's logistics and policies. When research assessors arrived at each facility, an "intake list" was provided by the Custody supervisor that included the age, ethnicity, and correctional status of each person who had been admitted to the facility in the past 24 (Tuesday-Friday) or 72 (Monday) hours. The research assessor identified: (a) adults (18 years of age or older), (b) who were not "high bond" security risks (because these individuals could not be interviewed without a custody officer present), (c) who were not already admitted to a medical (e.g., due to need for immediate medical care due to wounds or injuries or acute substance intoxication or detoxification) or mental health (e.g., due to severe acute psychosis, mania, suicidality, or delirium, or a history of intensive psychiatric treatment) (because these individuals were not considered by the Department of Correction and the IRB to be physically or mentally able to voluntarily consent and participate in the interview process), and (d) who were in the general population (not in restricted housing, because these prisoners were not permitted to leave restricted housing units).

The research assessor randomly selected inmates from the remaining individuals on the intake list. There was one exception to the randomized selection procedure. After the first 1,000 screenings were reviewed, we found that Whites were over-represented and Hispanics were under-

represented. The sampling strategy was modified to over-sample Hispanics and under-sample Whites for the remaining 1,196 interviews.

Following a brief description of the purpose of the study and the parameters of participation, the research assessor provided inmates who expressed willingness to participate with a written and oral description of the informed consent process. In order to ensure comprehension each potential participant was asked to describe, in his or her own words, the purpose of the study, what he or she was being asked to do, that declining to participate would have no effect on her or his incarceration or services, and that participation could be discontinued at any time. Participants were informed that they would not receive any financial or other compensation. The consent process and form and all study procedures, personnel, and assessment measures were reviewed and approved by the Institutional Review Board of the University of Connecticut Health Center, which includes a formally appointed prisoner advocate with expertise in Human Subject issues that apply to research with incarcerated persons, and by the State Department of Correction Research Advisory Committee.

Consenting individuals were given a copy of the Composite Screen Interview to follow while the research assessor read each question and its answer options out loud and recorded the participant's oral answers. The order of the sub-scales within the screen interview was randomly varied in order to reduce bias due to order effects. The research assessors were instructed to probe only as much as necessary to obtain a "yes" or "no" response to each item in the Composite Screening assessment packet.

The research assessor used a pre-set numerical sequence to randomly select every fifth screening participant to be invited to participate in the

follow-up interview. Informed consent was fully re-administered at the start of the follow-up interview.

A different research assessor who was blind to the screen results conducted the follow-up interview within the next 1-5 days. Custody staff escorted the participant to a private interview room in the same area where the screening had been conducted. The assessor read all interview questions out-loud and provided the participant with visual aids to facilitate use of the numerical answer keys for each question. The follow-up interview required between 45-180 minutes to complete (Median = 130 minutes).

Of the 6264 men and 2233 women on intake lists during the validation study, 18% of men and 7.9% of women consented. Most non-participants were not invited due to time constraints (55%) or being unavailable due to other activities (e.g., court, medical care, recreation; 9%). One in four (24%) were ineligible, including 99 (1%) who did not speak English. Reasons for ineligibility included: in court, high bond/high risk, bonded out, in the hospital, admitted to inpatient mental health, under 18 years of age, in restricted housing, being transferred or moved to another unit or facility, or being held under the custody of Immigration or for a Federal offense. One in ten (10%) declined to participate. Reasons for declining to participate included: detoxing, participation in gym, recreation, dinner, sick, and language (did not speak or understand English). Gender, age, and ethnicity were unrelated to likelihood of refusal, except that Black women were more likely to refuse (51% refusals) than White women (36% refusals) ( $\chi^2(2) = 13.99, p < .003$ ).

Inter-rater reliability was assessed by conducting 124 screening interviews and 16 follow-up interviews with a secondary interviewer present silently observing and independently recording numerical answers.



Temporal stability of the screening interview was assessed by conducting 30 re-tests 1 - 5 days following the initial screening interview.

### ***COMPOSITE SCREENING MEASURE***

Five psychometrically developed questionnaires comprised the screening interview, four of which were used to yield 53 dichotomous scores representing the primary criterion symptoms for DSM-IV Axis I mood disorders (bipolar, major depressive, and dysthymic disorders), psychotic disorders (schizophrenia), anxiety disorders (panic disorder, agoraphobia, PTSD, obsessive-compulsive disorder, generalized anxiety disorder, and social phobia); somatoform disorders (somatization disorder, hypochondriasis), and eating disorders (anorexia, bulimia), and the major features of Cluster A, B, and C Axis II psychiatric disorders. A substance use disorder screening measure also was administered, but its scores were not included in the present study.

Screening module from the Structured Clinical Interview-Patient version for DSM-IV (SCID-S; Spitzer, Williams, Gibbon, & First, 1990a): This 24-item screen is designed to rule out disorders rapidly (7-10 minute administration time) by using lead criteria for each Axis I disorder, and thus is likely to have strong specificity (detecting true negatives) but uncertain sensitivity (detecting true positives). Items provide dichotomous scores for symptoms of depressive episodes (2 items), dysthymia (1 item), bipolar disorder (2 items), panic, agoraphobia, social phobia, generalized anxiety, and obsessive-compulsive disorders (1 item each, except 2 items for obsessive-compulsive), psychotic disorders (8 items), eating disorders (4 items), and somatization disorder (1 item).

Primary Care PTSD screen (PC-PTSD; Prins et al., 1999): This 4-item self-report measure has demonstrated reliability, validity, and diagnostic utility with adult primary care populations for the rapid (2-3 minute administration time) detection of posttraumatic stress disorder (PTSD) symptoms (i.e., intrusive re-experiencing, avoidance, emotional numbing, hyperarousal).

Iowa Personality Disorders Screen (IPDS; Langbehn et al., 1999): This measure extracts 11 items from the Structured Interview for DSM Personality Disorders that were selected based upon ability to discriminate adults with or without a personality disorder from clinical and community samples in six research sites internationally. Five and seven item combinations from the IPDS prospectively identified psychiatric outpatients and inpatients with personality disorders with sensitivity (.79-.92) and specificity (.79-.86). Items represent primary symptoms of Axis II Clusters A, B, and C. The IPDS items require 5-7 minutes to administer.

Referral Decision Scale (RDS; Teplin & Swartz, 1989): The RDS is a 14-item reliable and validated measure derived from the National Institute of Mental Health Diagnostic Interview Schedule (NIMH-DIS) for the purpose of identifying individuals with severe DSM Axis I mental illness (Bipolar, Depressive, and Psychotic disorders) in jail settings. The RDS takes 5-10 minutes to administer and was designed for use by trained correctional professionals.

### ***STRUCTURED DIAGNOSTIC INTERVIEW***

The follow-up structured interview included the Structured Clinical Interview for DSM-IV-Patient Version (SCID-P; Spitzer et al., 1990a) for Axis I disorders (excluding the substance use disorder and PTSD modules), and the Structured

Clinical Interview for DSM-IV Axis II (*SCID-II*; Spitzer et al., 1990b). To assess PTSD, a comprehensive and detailed but brief set of behaviorally-specific questions was administered in order to elicit complete information about the type, number of distinct episodes, and onset and recency of DSM-IV Criterion A traumatic experiences. The Clinician Administered PTSD Scale (*CAPS*; Weathers et al., 1999) was used to provide a reliable and validated assessment of the frequency and intensity of PTSD symptoms in the past 30 days, in order to provide a diagnosis of PTSD. Two additional structured interviews were done at the end of each follow-up interview in order to assess complex PTSD and health-related functioning, but these measures do not yield DSM-IV diagnoses and their results are not reported here.

### ***STATISTICAL ANALYSES***

We first conducted item reduction analyses separately for each gender, eliminating items with very low (<10%) or high (>90%) base rates. Bivariate Pearson correlations were computed for all remaining pairs of items, and sets of items with  $r > .50$  were reduced to a single item if their content was judged redundant. The sensitivity, specificity, positive predictive power (PPP), and negative predictive power (NPP) (Kessel & Zimmerman, 1993) of each remaining item was examined, with items with sensitivity of greater than or equal to 75% and/or specificity of greater than or equal to 90% for each of nine mental health diagnostic categories were retained (unless two items each had high accuracy for at least two different diagnostic criterion sets, in which case, both were retained). These item reduction procedures resulted in a final pool of 38 items for women and 40 for men.

The nine diagnosis clusters were: Current Depressive Disorders, Current Anxiety Disorders, Cluster A Personality Disorders, Antisocial Personality Disorder (ASPD), Borderline Personality Disorder (BPD), Cluster C Personality Disorders, Current PTSD (full or partial), any current Axis I psychiatric disorder or Axis II disorder, and any current Axis I or Axis II disorder except ASPD.

The diagnostic categories were selected based on several considerations. Most specific Axis I and II disorders were relatively uncommon in this non-clinical population, and distinctions among these disorders have less relevance in the initial screening phase of correctional mental health care than whether any disorder of a given class is present. Therefore, we selected clusters of disorders that share common features within the DSM-IV such that the prevalence was sufficient (>5%) to permit predictive analyses to be conducted. The selected clusters of disorders represent psychiatric diagnoses that are associated with emotional or behavioral instability (including risk of harming self or others, as well as problems adhering to the firmly controlled activity schedule and disciplinary standards during the first 14 days of incarceration. Psychotic disorders (current and lifetime) were excluded from the item analysis due to a low frequency of occurrence that resulted from institutional procedures that exclude persons whose behavior on admission or history of mental health treatment requires immediate provision of mental health services (typically hospitalization). Based on studies showing that subthreshold PTSD confers substantial psychosocial and health-related burden, partial PTSD was included as well as full PTSD in order to meet the >5% prevalence threshold. Partial PTSD was defined as present if at least one symptom from each DSM-IV PTSD symptom cluster was endorsed as present in the past month.

Next we examined the structure of the *Composite Screen* with Exploratory Factor Analyses (EFA) conducted separately with randomly selected half-samples of men ( $N=763$ ) and women ( $N=335$ ), followed by Confirmatory Factor Analyses (CFA) with the remaining half-samples of men ( $N=763$ ) and women ( $N=335$ ). EFAs were Principal Axis Factoring analyses (Pedhazur & Schmelkin, 1991) with varimax rotation and Kaiser normalization to obtain orthogonal factors. The Measures of sampling adequacy (MSAs) were computed for initial selection of variables. 40 variables based on  $MSA \geq 0.90$  were selected for men EFA ( $MSA \geq 0.85$  for women). Factors retained for interpretation were selected based on eigenvalues  $> 1.4$  for men ( $1.5$  for women) and inspection of Scree plots to determine the point at which new variance was attenuated.

For the CFAs, structural equation modeling techniques were used to test the fit of three different models, all of which included only the screening items whose highest loading was either  $> .40$  on one of the EFA factors (1) a *first order factor model* specifying the factors identified in the EFA, (2) a *second order superordinate factor model* specifying the EFA factors and a single higher-order factor, and (3) a *single factor model* including only one latent variable representing overall psychological distress. The resulting subset of indicator items were 7 items for women and 12 items for men.

Two provisional brief screens, one for women (*CMHS-F*) and one for men (*CMHS-M*), were constructed using items identified as contributing to the *efficient empirical model* in both the single factor and multi-factor model CFAs. Inter-rater and re-test reliability was assessed for each of the 56 items from the composite screen by calculating Kappa, and for the total *CMHS-F* and *CMHS-M* with intra-class correlation coefficients. Cronbach's Alpha was used to calculate the internal consistency of the *CMHS-F* and

*CMHS-M*. Discriminant function analyses tested the predictive utility of the *CMHS-F* and *CMHS-M* separately, with the presence or absence of (a) any Axis I or II disorder, and (b) any Axis I or II disorder excluding ASPD, as the criteria. Convergent and discriminant validity were tested by using bivariate correlations between the *CMHS-F* and *CMHS-M* total scores with correctional records data that served as indices of (a) mental health-relevant (e.g., correctional institutional “level” scores for extent of mental health needs and substance use services needs), and (b) non-mental health variables (e.g., violent versus non-violent crime; physical health status), respectively. As a test of criterion validity, the mean *CMHS* score for respondents who did versus did not meet criteria on the structured interview for each of the diagnostic category were compared using *t*-tests for independent samples.

## **RESULTS**

### ***EXPLORATORY (EFA) AND CONFIRMATORY (CFA) FACTOR ANALYSES***

Four factors including 38 screening items were identified for women, accounting for 39.22% of the shared variance: (1) Depression, (2) Severe Mental Illness (3) Personality Disorder, and (4) PTSD. Five factors including 40 screening items were identified for men, accounting for 43.43% of the shared variance: (1) PTSD, (2) Depression/Anxiety, (3) Severe Mental Illness, (4) Social Anxiety, and (5) Affect Dysregulation.

### ***COMPOSITE MENTAL HEALTH SCREEN***

The *CMHS* consisted of dichotomous items, 8 for women (*CMHS-F*) and 12 for men (*CMHS-M*). Both male and female versions of the *CMHS* include

items from the *PC-PTSD* (Prins et al., 1999) for PTSD/trauma symptomology, the *IPDS* (Langbehn et al., 1999) for personality disorders, the *SCID-P* (Spitzer et al., 1990) for major Axis I symptomology, and the *RDS* (Teplin & Swartz, 1989) for major mental disorder symptomology.

### ***PREDICTIVE UTILITY***

Discriminant function analyses of the *CMHS-F* composite set was able to identify each of the nine diagnostic categories with statistically significant accuracy: any mental health diagnosis ( $\Lambda=.59$ ,  $X^2(8, N=101)=50.70$ ,  $p<.001$ ); any mental health diagnosis except ASPD ( $\Lambda=.65$ ,  $X^2(8, N=101)=41.70$ ,  $p<.001$ ); Depressive Disorder-Lifetime ( $\Lambda=.79$ ,  $X^2(8, N=101)=22.84$ ,  $p<.01$ ); Anxiety Disorder-Lifetime ( $\Lambda=.78$ ,  $X^2(8, N=101)=23.26$ ,  $p<.01$ ); PTSD-Lifetime ( $\Lambda=.91.$ ,  $X^2(8, N=101)=9.45$ ,  $p=.306$ ); Axis II Cluster A personality disorder ( $\Lambda=.84$ ,  $X^2(8, N=101)=16.17$ ,  $p<.05$ ); Antisocial Personality Disorder ( $\Lambda=.90$ ,  $X^2(8, N=101)=9.75$ ,  $p=.28$ ); Borderline Personality Disorder ( $\Lambda=.78$ ,  $X^2(8, N=101)=23.65$ ,  $p<.01$ ).

Discriminant function analyses of the *CMHS-M* composite set was able to identify each of the nine diagnostic categories with statistically significant accuracy: any mental health diagnosis ( $\Lambda=.77$ ,  $X^2(12, N=199)=49.25$ ,  $p<.001$ ); any mental health diagnosis except ASPD ( $\Lambda=.71$ ,  $X^2(12, N=199)=64.40$ ,  $p<.001$ ); Depressive Disorder-Lifetime. ( $\Lambda=.81$ ,  $X^2(12, N=199)=41.26$ ,  $p<.001$ ); Anxiety Disorder-Lifetime ( $\Lambda=.80$ ,  $X^2(12, N=199)=42.33$ ,  $p<.001$ ); PTSD-Lifetime ( $\Lambda=.88.$ ,  $X^2(12, N=199)=23.46$ ,  $p<.05$ ); Axis II Cluster A personality disorder. ( $\Lambda=.86$ ,  $X^2(12, N=199)=29.86$ ,  $p<.01$ ); Antisocial Personality Disorder. ( $\Lambda=.87$ ,  $X^2(12,$

$\chi^2(12, N=199)=26.69, p<.01$ ); Borderline Personality Disorder. ( $\Lambda=.83, \chi^2(12, N=199)=35.00, p<.001$ ).

### ***CONVERGENT, DISCRIMINANT, AND CRITERION VALIDITY***

Bivariate Pearson correlations were calculated between the *CMHS-F* and *CMHS-M* total scores with correctional records data that served as indices of (a) mental health-relevant, and (b) non-mental health variables, respectively.

Mean *CMHS-F* scores differed for respondents who met criteria versus those who did not meet criteria for the following diagnostic categories: any mental health diagnosis ( $M= 5.32$  vs  $2.62$ ;  $SD=2.04$  vs.  $1.62$ ;  $t = -7.13, df = 99, p < .001$ ); any mental health diagnosis except ASPD ( $M=5.36$  vs.  $2.80$ ;  $SD= 2.01$  vs.  $1.80$ ;  $t = -6.68, df = 99, p < .001$ ); Depressive Disorder-Lifetime. ( $M= 5.08$  vs.  $3.71$ ;  $SD= 1.99$  vs.  $2.32$ ;  $t = -2.99, df = 99, p < .01$ ); Anxiety Disorder-Lifetime ( $M= 5.32$  vs  $2.62$ ;  $SD=2.04$  vs.  $1.62$ ;  $t = -7.13, df = 99, p < .001$ ); PTSD-Lifetime ( $M=5.58$  vs.  $3.37$ ;  $SD= 1.77$  vs.  $2.19$ ;  $t = -5.28, df = 99, p < .001$ ); Axis II Cluster A personality disorder. ( $M= 5.56$  vs.  $4.07$ ;  $SD= 2.19$  vs.  $2.28$ ;  $t = -1.88, df = 99, p = .06$ ); Antisocial Personality Disorder. ( $M= 5.42$  vs.  $4.03$ ;  $SD= 2.02$  vs.  $2.29$ ;  $t = -1.99, df = 99, p = .05$ ); Borderline Personality Disorder. ( $M= 5.90$  vs.  $3.75$ ;  $SD= 2.32$  vs.  $2.08$ ;  $t = -4.12, df = 99, p < .001$ ).

Mean *CMHS-M* scores differed for respondents who met criteria versus those who did not meet criteria for the following diagnostic categories: any mental health diagnosis ( $M= 5.84$  vs  $3.94$ ;  $SD=3.09$  vs.  $3.00$ ;  $t = -4.29, df = 198, p < .001$ ); any mental health diagnosis except ASPD ( $M=6.53$  vs.  $3.87$ ;  $SD= 3.00$  vs.  $2.89$ ;  $t = -5.85, df = 198, p < .001$ ); Depressive Disorder-Lifetime ( $M= 7.53$  vs.  $4.35$ ;  $SD= 2.39$  vs.  $3.08$ ;  $t = -4.35, df = 198, p < .001$ );



Anxiety Disorder-Lifetime (M= 6.14 vs 4.40; SD=3.00 vs. 3.12;  $t = -2.78$ ,  $df = 198$ ,  $p = .006$ ); PTSD-Lifetime (M=6.57 vs. 4.34; SD= 3.40 vs. 3.01;  $t = -3.56$ ,  $df = 198$ ,  $p < .001$ ); Axis II Cluster A personality disorder. ( M= 7.32 vs. 4.38; SD= 2.83 vs. 3.07;  $t = -4.00$ ,  $df = 198$ ,  $p < .001$ ); Antisocial Personality Disorder.( M= 5.00 vs. 4.58; SD= 3.04 vs. 3.19;  $t = -.71$ ,  $df = 198$   $p = .48$ ); Borderline Personality Disorder.( M= 8.06 vs. 4.34; SD= 2.46 vs. 3.03;  $t = -4.91$ ,  $df = 198$ ,  $p < .001$ ).

### ***DEMOGRAPHICS***

The average age of participants who completed the screening instrument and the follow-up interview was 31.6 years. The average number of years of education was 11.48 (see Table 1). The racial breakdown for the 508 follow-up participants was: White: 42.9%, African-American: 34.8%, Hispanic: 21.7%, American Indian: 0.4%, and Asian: 0.2% (see Table 2).

### ***PREVALENCE OF MENTAL DISORDERS***

Prevalence of Affective Disorders was: Depression: 32.3%, Mania: 1.6%, Hypomania: 0.2% (see Table 3). Percentages of Anxiety Disorders were: Panic Disorder: 26.1%, Panic Disorder with Agoraphobia: 8.2%, Agoraphobia: 1.4%, Social Phobia: 3.4%, Specific Phobia: 9.6%, Generalized Anxiety Disorder: 9.6%, Anxiety NOS (Not Otherwise Specified): 2.2%, Anorexia Nervosa: 2.2%, Bulimia: 1.8%, and Post-Traumatic Stress Disorder: 28.6% (see Table 4). Personality Disorder percentages were: Paranoid: 9.8%, Schizotypal: 0.4%, Schizoid: 2.0%, Antisocial: 34.6%, Borderline: 16.9%, Histrionic: 0.6%, Narcissistic: 0.6%, Avoidant: 9.4%, Dependent: 4.2%, and Obsessive Compulsive: 6.0% (see Table 5).

## **CONCLUSION AND RECOMMENDATIONS**

The Brief Mental Health screen was developed to enhance and more accurately identify individuals in jails with mental illness. It is anticipated that this tool will be disseminated nationwide for use in all correctional facilities.

The prevalence rates that were assessed were as high or higher than found in psychiatric settings, of particular note, Post-Traumatic Stress Disorder and several personality disorders. In particular, the prevalence of Borderline Personality Disorder and Paranoid Personality Disorder may help us think through more effective strategies of detection and treatment in correctional settings.

Preliminary data analyses were presented at the U.S. Department of Justice Annual Conference on Criminal Justice Research and Evaluation in Washington, D.C. in July 2002. Interim data analyses were presented at a conference sponsored by the National Institute of Mental Health in Washington, D.C. in March 2003. Discussion of the development of the brief adult mental health screening tool for jails and interim study data analyses was presented in a scientific report session during the annual American Psychiatric Association's annual conference in March 2003. Phase I data analyses and items selected for the shortened screening tool was presented as part of a concurrent panel entitled, "Assessing the Mentally Ill in a Corrections Setting" at the National Institute of Justice Research and Evaluation conference in Washington, D.C. in July 2003, and also at the annual meeting of the American Correctional Association (ACA) in New Orleans, LA in January, 2004. Discussion of epidemiology and the development of the brief screen were presented at the annual meeting of the

American Psychiatric Association in New York, NY in May 2004. Information about the development of the brief screening tool for jail settings was presented at the annual meeting of the International Association of Forensic Mental Health services in Stockholm, Sweden in June 2004. A presentation on the epidemiology of co-occurring disorders in Connecticut jails was given at the National Institute of Mental Health conference in Washington, D.C. in June 2004. A presentation entitled, "Fundamentals of Correctional MH research was given at the American Association of Psychiatric Law in Scottsdale, AZ in October 2004. Final data results on the epidemiology of personality disorders and the development of the brief screening tool was discussed in a presentation given at the International Society for the Study of Personality Disorders conference in Buenos Aires, Argentina in April 2005.

We are currently working on articles for publication in the following journals: *Archives of General Psychiatry and Psychological Assessment*.

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## APPENDIX A

### BRIEF MENTAL HEALTH SCREENING TOOL ITEMS - WOMEN

|          |  |
|----------|--|
| YES / NO | 1. Do you get annoyed when friends or family complain about their problems? Or do people complain that you're not sympathetic to their problems?   |
| YES / NO | 2. Have you ever tried to avoid reminders, or to not think about, something you experienced or witnessed?  |
| YES / NO | 3. Some people find their mood changes frequently-as if they spend every day on an emotional roller coaster. For example, they might switch from feeling angry to depressed to anxious many times a day. Does this sound like you? |
| YES / NO | 4. Have there ever been a few weeks when you've felt like you were useless, or sinful, or guilty?  |
| YES / NO | 5. How much of the time do you feel depressed most of the day?<br><i>(Yes=depressed mood, most of the day, more than half the time)</i>  |
| YES / NO | 6. Do you find that most people will take advantage of you if you let them know too much about you?  |
| YES / NO | 7. Have you ever been troubled by repeated thoughts, feelings, or nightmares about something you experienced or witnessed?   |
| YES / NO | 8. Have you ever been in the hospital for non-medical reasons such as in a psychiatric hospital?   |

## APPENDIX B

### BRIEF MENTAL HEALTH SCREENING TOOL ITEMS - MEN

|          |   |
|----------|---|
| YES / NO | 1. Have you ever had worries that you just can't get rid of or let go of?   |
| YES / NO | 2. Some people find their mood changes frequently-as if they spend everyday on an emotional roller coaster. For example, they might switch from feeling angry to depressed to anxious many times a day. Does this sound like you? |
| YES / NO | 3. Do you get annoyed when friends or family complain about their problems? Or do people complain that you're not sympathetic to their problems?  |
| YES / NO | 4. Have you ever felt like you didn't have any feelings, or felt distant or cut off from other people or from your surroundings?  |
| YES / NO | 5. Has there ever been a time when you felt so irritable that you found yourself shouting at people or starting fights or arguments? <i>(if not clear that this is due to respondent's irritability, ask for a brief example)</i> |
| YES / NO | 6. Do you often get in trouble at work or with friends because you act excited at first but then lose interest in projects and don't follow through?  |
| YES / NO | 7. Do you tend to hold grudges or give people the silent treatment for days at a time?  |
| YES / NO | 8. Have you ever tried to avoid reminders, or to not think about, something you experienced or witnessed?   |
| YES / NO | 9. How much of the time do you feel depressed most of the day? <i>(Yes=depressed mood, most of the day, more than half the time)</i>  |
| YES / NO | 10. Have you ever been troubled by repeated thoughts, feelings, or nightmares about something you experienced or witnessed?   |
| YES / NO | 11. Have you ever been in a hospital for non-medical reasons such as in a psychiatric hospital?   |
| YES / NO | 12. Have you ever felt constantly on guard or watchful even when you didn't need to, or felt jumpy and easily startled?   |

## APPENDIX C

### TABLE 1

#### DEMOGRAPHICS

(N = 508 Total Follow-up Participants)

|                                   | MEAN  | MINIMUM | MAXIMUM |
|-----------------------------------|-------|---------|---------|
| AGE                               | 31.6  | 18      | 64      |
| EDUCATION<br>(years of schooling) | 11.48 | 0       | 16      |

## APPENDIX D

### TABLE 2

### DEMOGRAPHICS

(N = 508 Total Follow-up Participants)

|                   | <b>FREQUENCY</b> | <b>PERCENT</b> | <b>CURRENT<br/>CDOC %</b> |
|-------------------|------------------|----------------|---------------------------|
| <b>WHITE</b>      | <b>218</b>       | <b>42.9</b>    | <b>27.8</b>               |
| <b>BLACK</b>      | <b>177</b>       | <b>34.8</b>    | <b>45.0</b>               |
| <b>HISPANIC</b>   | <b>110</b>       | <b>21.7</b>    | <b>26.5</b>               |
| <b>AM. INDIAN</b> | <b>2</b>         | <b>0.4</b>     | <b>0.2</b>                |
| <b>ASIAN</b>      | <b>1</b>         | <b>0.2</b>     | <b>0.5</b>                |
| <b>TOTAL</b>      | <b>508</b>       | <b>100.0</b>   |                           |

## APPENDIX E

### TABLE 3

#### PREVALENCE RATES - AFFECTIVE DISORDERS

| <b>AXIS I<br/>DISORDER</b> | <b>MALES<br/>(N=307)</b> |             | <b>FEMALES<br/>(N=201)</b> |             | <b>TOTAL<br/>(N=508)</b> |             |
|----------------------------|--------------------------|-------------|----------------------------|-------------|--------------------------|-------------|
|                            | <b>FREQ</b>              | <b>%</b>    | <b>FREQ</b>                | <b>%</b>    | <b>FREQ</b>              | <b>%</b>    |
| <b>DEPRESSION</b>          | <b>65</b>                | <b>15.3</b> | <b>99</b>                  | <b>23.3</b> | <b>164</b>               | <b>32.3</b> |
| <b>MANIA</b>               | <b>4</b>                 | <b>1.0</b>  | <b>4</b>                   | <b>1.0</b>  | <b>8</b>                 | <b>1.6</b>  |
| <b>HYPOMANIA</b>           | <b>1</b>                 | <b>0.2</b>  | <b>0</b>                   | <b>0</b>    | <b>1</b>                 | <b>0.2</b>  |

## APPENDIX F

### TABLE 4

#### PREVALENCE RATES - ANXIETY DISORDERS

| AXIS I DISORDER     | MALES<br>(N=307) |      | FEMALES<br>(N=201) |      | TOTAL<br>(N=508) |      |
|---------------------|------------------|------|--------------------|------|------------------|------|
|                     | FREQ             | %    | FREQ               | %    | FREQ             | %    |
| PANIC DO            | 50               | 13.3 | 83                 | 22.1 | 133              | 26.1 |
| PANIC W/AGORAPHOBIA | 16               | 4.3  | 26                 | 6.9  | 42               | 8.2  |
| AGORAPHOBIA         | 2                | 0.6  | 5                  | 1.5  | 7                | 1.4  |
| SOCIAL PHOBIA       | 10               | 3.0  | 7                  | 2.1  | 17               | 3.4  |
| SPECIFIC PHOBIA     | 25               | 5.3  | 24                 | 5.1  | 49               | 9.6  |
| GAD                 | 27               | 6.2  | 22                 | 5.0  | 49               | 9.6  |
| ANXIETY NOS         | 3                | 0.9  | 8                  | 2.5  | 11               | 2.2  |
| ANOREXIA            | 0                | 0    | 11                 | 3.4  | 11               | 2.2  |
| BULIMIA             | 2                | 0.6  | 7                  | 2.3  | 9                | 1.8  |
| PTSD                | 56               | 12.1 | 76                 | 16.5 | 132              | 28.6 |

**APPENDIX G:**

**TABLE 5**

**PREVALENCE RATES - PERSONALITY DISORDERS**

| <b>AXIS II<br/>DISORDER</b>     | <b>MALES<br/>(N=307)</b> |             | <b>FEMALES<br/>(N=201)</b> |             | <b>TOTAL<br/>(N=508)</b> |             |
|---------------------------------|--------------------------|-------------|----------------------------|-------------|--------------------------|-------------|
|                                 | <b>FREQ</b>              | <b>%</b>    | <b>FREQ</b>                | <b>%</b>    | <b>FREQ</b>              | <b>%</b>    |
| <b>PARANOID</b>                 | <b>29</b>                | <b>9.6</b>  | <b>20</b>                  | <b>10.1</b> | <b>49</b>                | <b>9.8</b>  |
| <b>SCHIZOTYPAL</b>              | <b>2</b>                 | <b>0.7</b>  | <b>0</b>                   | <b>0</b>    | <b>2</b>                 | <b>0.4</b>  |
| <b>SCHIZOID</b>                 | <b>10</b>                | <b>3.3</b>  | <b>0</b>                   | <b>0</b>    | <b>10</b>                | <b>2.0</b>  |
| <b>ANTISOCIAL</b>               | <b>120</b>               | <b>39.5</b> | <b>53</b>                  | <b>27.0</b> | <b>173</b>               | <b>34.6</b> |
| <b>BORDERLINE</b>               | <b>39</b>                | <b>12.9</b> | <b>45</b>                  | <b>23.2</b> | <b>84</b>                | <b>16.9</b> |
| <b>HISTRIONIC</b>               | <b>2</b>                 | <b>0.7</b>  | <b>1</b>                   | <b>0.5</b>  | <b>3</b>                 | <b>0.6</b>  |
| <b>NARCISSISTIC</b>             | <b>3</b>                 | <b>1.0</b>  | <b>0</b>                   | <b>0</b>    | <b>3</b>                 | <b>0.6</b>  |
| <b>AVOIDANT</b>                 | <b>25</b>                | <b>8.2</b>  | <b>22</b>                  | <b>11.2</b> | <b>47</b>                | <b>9.4</b>  |
| <b>DEPENDENT</b>                | <b>8</b>                 | <b>2.6</b>  | <b>13</b>                  | <b>6.6</b>  | <b>21</b>                | <b>4.2</b>  |
| <b>OBSESSIVE<br/>COMPULSIVE</b> | <b>17</b>                | <b>5.6</b>  | <b>13</b>                  | <b>6.6</b>  | <b>30</b>                | <b>6.0</b>  |

# Correctional Mental Health Screen for Women (CMHS-W)

|                                      |                         |  |                     |
|--------------------------------------|-------------------------|--|---------------------|
| <b>Name</b> _____<br>Last, First, MI | <b>Detainee #</b> _____ | <b>Date</b> ___/___/____<br>mm/dd/year | <b>Time</b> ___:___ |
|--------------------------------------|-------------------------|--|---------------------|

| Questions  | No | Yes | Comments |
|--|----|-----|----------|
| 1. Do you get annoyed when friends and family complain about their problems? Or do people complain you are not sympathetic to their problems?  |    |     |          |
| 2. Have you ever tried to avoid reminders of, or to not think about, something terrible that you experienced or witnessed?   |    |     |          |
| 3. Some people find their mood changes frequently-as if they spend everyday on an emotional rollercoaster. For example, switching from feeling angry to depressed to anxious many times a day. Does this sound like you? |    |     |          |
| 4. Have there ever been a few weeks when you felt you were useless, sinful, or guilty?   |    |     |          |
| 5. Has there ever been a time when you felt depressed most of the day for at least 2 weeks?  |    |     |          |
| 6. Do you find that most people will take advantage of you if you let them know too much about you?  |    |     |          |
| 7. Have you been troubled by repeated thoughts, feelings, or nightmares about something terrible that you experienced or witnessed?  |    |     |          |
| 8. Have you ever been in the hospital for non-medical reasons, such as a psychiatric hospital? (Do NOT include going to an Emergency Room if you were not hospitalized.)   |    |     |          |

|                           |                          |
|---------------------------|--------------------------|
| <b>TOTAL # YES:</b> _____ | <b>General Comments:</b> |
|---------------------------|--------------------------|

**Refer for further Mental Health Evaluation if the Detainee answered Yes to 5 or more items OR If you are concerned for any other reason**

- **URGENT Referral** on \_\_\_/\_\_\_/\_\_\_\_ to \_\_\_\_\_
- **ROUTINE Referral** on \_\_\_/\_\_\_/\_\_\_\_ to \_\_\_\_\_
- **Not Referred**

**Person Completing Screen:** \_\_\_\_\_



## ***INSTRUCTIONS FOR COMPLETING THE CMHS-W***

### **General Information:**

The CMHS is a tool designed to assist in the early detection of psychiatric illness during the jail intake process. The Research Team under the direction of Drs. Julian D. Ford and Robert L. Trestman at the University of Connecticut Health Center developed this Correctional Mental Health Screen for Women (CMHS-W), with a grant funded by the National Institute of Justice.

### **Instructions for administration of the CMHS-W:**

Correctional Officers may administer this mental health screen during intake.

Name: Detainee's name- Last, first and middle initial  
Detainee#: Detainee's facility identification number  
Date: Today's month, date, year  
Time: Current time (24hr or AM/PM)

**Questions #1-8** may be administered as best suits the facility's policies and procedures and the reading level, language abilities, and motivation of the detainee who is completing the screen. The method chosen should be used consistently. Two recommended methods:

- Staff reads the questions out loud and fills in the detainee's answers to the questions on the form
- Staff reads the questions out loud, while the detainee reads them on a separate sheet and fills in her answers

Each question should be carefully read, and a check mark placed in the appropriate column (for "NO" or "YES" response).

The staff person should add a note in the **Comments** Section to document any information that is relevant and significant for any question that the detainee has answered "YES."

If the detainee declines to answer a question or says she does not know the answer to a question, do NOT check "YES" or "NO." Instead, record DECLINED or DON'T KNOW in the **Comments** box.

**Total # YES:** total number of YES responses

**General Comments:** Staff may include information here to describe overall concerns about the responses (for example: intoxicated, impaired, or uncooperative)

### **Referral Instructions:**

**Urgent Referral:** A referral for **urgent** mental health evaluation may be made by the staff person if there is any behavioral or other evidence that a detainee is unable to cope emotionally or mentally or is a suicide risk.

**Routine Referral:** A detainee answering "**YES**" to **5 or more items** should be referred for **routine** mental health evaluation. A referral also may be made if the staff person has any concerns about the detainee's mental state or ability to cope emotionally or behaviorally.

\*\* If at any point during administration of the CMHS-W the detainee experiences *more than mild and temporary emotional distress* (such as severe anxiety, grief, anger or disorientation) she should be referred for immediate mental health evaluation.

**Referral:** Check the appropriate box for whether a detainee was referred. If referred, check URGENT or ROUTINE, enter the date of the referral and the mental health staff person or mental health clinic to whom the referral was given.

**Person completing screen:** Enter the staff member's name

# Correctional Mental Health Screen for Men (CMHS-M)

|   |                         |   |                     |
|---|-------------------------|---|---------------------|
| <b>Name</b> _____<br><small>Last, First, MI</small> | <b>Detainee #</b> _____ | <b>Date</b> ___/___/____<br><small>mm/dd/year</small> | <b>Time</b> ___:___ |
|---|-------------------------|---|---------------------|

| QUESTIONS   | NO | YES | COMMENTS |
|---|----|-----|----------|
| 1. Have you ever had worries that you just can't get rid of?  |    |     |          |
| 2. Some people find their mood changes frequently – as if they spend everyday on an emotional roller coaster. Does this sound like you?                                   |    |     |          |
| 3. Do you get annoyed when friends or family complain about their problems? Or do people complain that you're not sympathetic to their problems?                          |    |     |          |
| 4. Have you ever felt like you didn't have any feelings, or felt distant or cut off from other people or from your surroundings?  |    |     |          |
| 5. Has there ever been a time when you felt so irritable that you found yourself shouting at people or starting fights or arguments?                                      |    |     |          |
| 6. Do you often get in trouble at work or with friends because you act excited at first but then lose interest in projects and don't follow through?                      |    |     |          |
| 7. Do you tend to hold grudges or give people the silent treatment for days at a time?  |    |     |          |
| 8. Have you ever tried to avoid reminders, or to not think about, something terrible that you experienced or witnessed?   |    |     |          |
| 9. Has there ever been a time when you felt depressed most of the day for at least 2 weeks?   |    |     |          |
| 10. Have you ever been troubled by repeated thoughts, feelings, or nightmares about something you experienced or witnessed?   |    |     |          |
| 11. Have you ever been in a hospital for non-medical reasons such as in a psychiatric hospital? (Do NOT include going to an Emergency Room if you were not hospitalized.) |    |     |          |
| 12. Have you ever felt constantly on guard or watchful even when you didn't need to, or felt jumpy and easily startled?   |    |     |          |

|                           |                                |
|---------------------------|--------------------------------|
| <b>TOTAL # YES:</b> _____ | <b>General Comments:</b> _____ |
|---------------------------|--------------------------------|

**Refer for further Mental Health Evaluation if the Detainee answered Yes to 6 or more items OR** If you are concerned for any other reason

- **URGENT Referral** on \_\_\_/\_\_\_/\_\_\_\_ to \_\_\_\_\_
- **ROUTINE Referral** on \_\_\_/\_\_\_/\_\_\_\_ to \_\_\_\_\_
- **Not Referred**

**Person Completing Screen:** \_\_\_\_\_

## ***INSTRUCTIONS FOR COMPLETING THE CMHS-M***

### **General Information:**

The CMHS is a tool designed to assist in the early detection of psychiatric illness during the jail intake process. The Research Team under the direction of Drs. Julian D. Ford and Robert L. Trestman at the University of Connecticut Health Center developed this Correctional Mental Health Screen for Men (CMHS-M) with a grant funded by the National Institute of Justice.

### **Instructions for administration of the CMHS-M:**

Correctional Officers may administer this mental health screen during intake.

Name: Detainee's name- Last, first and middle initial  
Detainee#: Detainee's facility identification number  
Date: Today's month, date, year  
Time: Current time (24hr or AM/PM)

**Questions #1-12** may be administered as best suits the facility's policies and procedures and the reading level, language abilities, and motivation of the detainee who is completing the screen. The method chosen should be used consistently. Two recommended methods:

- Staff reads the questions out loud and fills in the detainee's answers to the questions on the form
- Staff reads the questions out loud, while the detainee reads them on a separate sheet and fills in his answers

Each question should be carefully read, and a check mark placed in the appropriate column (for "NO" or "YES" response).

The staff person should add a note in the **Comments** Section to document any information that is relevant and significant for any question that the detainee has answered "YES."

If the detainee declines to answer a question or says he does not know the answer to a question, do NOT check "YES" or "NO." Instead, record DECLINED or DON'T KNOW in the **Comments** box.

**Total # YES:** total number of YES responses

**General Comments:** Staff may include information here to describe overall concerns about the responses (for example: intoxicated, impaired, or uncooperative)

### **Referral Instructions:**

**Urgent Referral:** A referral for **urgent** mental health evaluation may be made by the staff person if there is any behavioral or other evidence that a detainee is unable to cope emotionally or mentally or is a suicide risk.

**Routine Referral:** A detainee answering "**YES**" to **6 or more items** should be referred for **routine** mental health evaluation. A referral also may be made if the staff person has any concerns about the detainee's mental state or ability to cope emotionally or behaviorally.

\*\* If at any point during administration of the CMHS-M the detainee experiences *more than mild and temporary emotional distress* (such as severe anxiety, grief, anger or disorientation) he should be referred for immediate mental health evaluation.

**Referral:** Check the appropriate box for whether a detainee was referred. If referred, check URGENT or ROUTINE, enter the date of the referral and the mental health staff person or mental health clinic to whom the referral was given.

**Person completing screen:** Enter the staff member's name