IMPLICATIONS OF MENTAL ILLNESS FOR THE SEARCH AND RESCUE COMMUNITY

A JOINT PROJECT OF THE VIRGINIA SEARCH AND RESCUE TRACKING INSTITUTE AND NORTHWESTERN COMMUNITY SERVICES

WHAT IS MENTAL ILLNESS

Mental illnesses include such disorders as schizophrenia, schizoaffective disorder, major depressive disorder, obsessive-compulsive disorder, panic and severe anxiety disorders, autism and pervasive developmental disorder, personality disorder, and other severe and persistent mental illnesses that affect the brain.

In general, mental disorders can profoundly impact a person's thinking, feeling, moods, ability to relate to others, and capacity to cope with everyday life. They are biologically-based brain disorders that can fall along a continuum of severity. They can affect anyone, and are not a sign of personal weakness or upbringing.

PREVALENCE OF MENTAL DISORDERS IN AMERICA

Mental disorders are quite common in the United States. Approximately 22.1% of Americans ages 18 years and older (1 in 5 adults) suffer from a diagnosable mental disorder in a given year. This averages out to approximately 44.3 million people! Many suffer from more than one mental disorder at a time.

COMMON TYPES OF MENTAL AND EMOTIONAL DISORDERS

There are a number of types of mental disorders. Only a small number of these are supported in the research as having direct implications for search and rescue.

- **Adjustment Disorders**: Most milder emotional disorders are short-term/transient in nature, often coming from problems in coping with changes and various life events. When sudden life crises occur, normal patterns of adjusting to stress may be inadequate. Individuals may be thrown into significant periods of emotional turmoil and confusion for days, weeks, or even months. Most people adjust to these life changes successfully. Those who fail to adapt and adjust, or who react in excess of what might normally be developed, may become vulnerable to developing more serious difficulties.
- **Anxiety Disorders**: These are the most frequently occurring of all psychiatric disorder. As the name indicates, anxiety is the primary symptom. The anxiety may become so intense that panic and a sense of impending doom occurs. Some individuals with certain fears/phobias may refuse to leave their homes in order to avoid a feared object or situation (ex. public places).
- **Personality Disorders**: Personality traits are established during childhood and adolescence. They can be thought of as patterns that the individual develops in thinking, relating to others, and interpreting their environment/life events. Most personality traits and patterns are persistent and endure over time. There are times, however, when the personality traits and patterns are based upon rigid and maladaptive attitudes and/or ways of thinking, perceiving, and relating to people and life events. The most common feature is an impairment and difficulty in conduct and relationships with others. This is largely due to attitudes and distortions that affect how they interpret and perceive other people and situations.
- **Mood Disorders:** This category involves a disturbance in emotion, and can include extremes of mood ranging from deep depression to manic elation, euphoria, and excitement. Depression is the most

common. Individuals with Bipolar disorder may alternate between periods of "highs" with symptoms that include extreme excitement and elation, spending sprees and financial irresponsibility, pressured speech and talkativeness, sleeplessness, etc.

- **Psychotic Disorders/Schizophrenia**: Often referred to as psychosis. There is a mental disorganization that results in a serious disturbance in the individual's thinking, feeling, and behavior. The individual has difficulty in maintaining contact with reality. Schizophrenia is the best known and most recognized form of psychosis.

SOME SPECIFIC DISORDERS ENCOUNTERED IN SAR

Bolded symptoms should be considered significant in terms of SAR issues

DEPRESSION (A MOOD DISORDER)

Depression is more severe than the normal experiences of sadness, loss, or passing mood states that we all experience from time to time. Major depression is persistent and can significantly interfere with thoughts, behavior, mood, and physical health. The major symptoms are:

- Persistent sad and irritable mood
- Pronounced changes in sleep, appetite, and energy
- Difficulty thinking, concentrating, and remembering
- **Physical slowing**
- Lack of interest in or pleasure from activities that were once enjoyed.
- Feelings of guilt, worthlessness, hopelessness, and emptiness
- **Recurrent thoughts of death or suicide (Note: Despondent)**
- Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and chronic pain.

BIPOLAR DISORDER (A MOOD DISORDER)

Bipolar disorder (also called Manic Depressive Illness) causes shifts in a person's mood, energy, and ability to function. The symptoms of Bipolar disorder are more sever that the normal mood swings (ups and downs) that everyone goes through. In this disorder, there may be dramatic mood swings such as:

Overly "high" and or irritable ⟶ to sad and hopeless ⟶ then back to high
(MANIA) (DEPRESSION) (MANIA)

MANIA:

- Either an elated, happy mood or an irritable, angry, unpleasant mood
- **Increased activity and energy**
- More thoughts and faster thinking than normal
- Increased talking, more rapid speech than normal
- Ambitious, often grandiose plans
- **Poor judgment**
- Increased sexual interest and activity
- Decreased sleep and decreased need for sleep.

DEPRESSION:

- Depressed mood
- **Decreased activity and energy**
- Restlessness and irritability
- Fewer thoughts than usual and slowed thinking
- Less talking and slowed speech
- Less interest, and participation, in normal activities
- Hopelessness and helpless feelings
- Feelings of guilt and worthlessness
- **Thoughts of suicide (Note: Despondent)**
- Changes in sleep patterns

BEHAVIORAL PROFILE OF DESPONDENTS

- Two distinct patterns emerge
  - Most subjects want to "get just out of sight".
  - Second group seeks a specific location, often scenic or significant in their life history.
- Location may be method of suicide (cliffs, water)
- Those seeking significant location or scene were willing to travel (96% = 5 miles)
- These subjects are not really lost.
- 21% usually located in open woods. Remind teams to look up. Tend to avoid brush and briars.
- Age or sex does not predict "out of sight" or "specific location" behavior.
- Mood disorders combined with substance/alcohol abuse places individual in highest risk group for suicidal behavior!

POSSIBLE QUESTIONS TO ASK RE: Manic or Despondent

1. Has this individual spoken to friends or family regarding suicide? If so, did he or she talk about a specific plan to do so? Note: with despondent, may help to identify method/location of possible suicide
2. Has this individual attempted suicide in the past and, if so, what was the method used? e
3. Are there any weapons missing from the household? Note: risk issue of possibly armed despondent
4. Does this individual have a specific place they like to go?
5. What has this individual's energy level been like recently?
6. When this individual has been in a manic phase, what kinds of things have they done in the past

SCHIZOPHRENIA: A THOUGHT/PSYCHOTIC DISORDER

Schizophrenia is a devastating brain disorder that affects about 2.2 million Americans. It is part of the spectrum of "**Psychotic" Disorders**. It interferes with a person's ability to think clearly, to distinguish reality from fantasy, to manage emotions, make decisions, and relate to others. Most people with schizophrenia suffer chronically or episodically throughout their lives. A person with schizophrenia does not have a "split personality", and most are not dangerous or violent towards others when receiving treatment. The major symptoms include:

- **Delusions**: Cause a person to believe that people can read their thoughts, inserting thoughts into their mind, or plotting against them; that others are secretly monitoring, controlling, or threatening them; or that they can control other people's minds; that they have a special power; etc..
- **Hallucinations:** Are sensory in nature, and can cause a person to hear, see things, taste, smell, or physically feel things that are not really there.
- Confused thinking or speech
- **Paranoia (see delusions)**
- **Behavior may not make sense** or be repetitive
- **Difficulty in making sense of every day sights, sounds**
- Emotional flatness, lack emotional expression, lack of pleasure in everyday life.
- Speech is brief and may lack content

Some Subtypes

- Schizoaffective Disorder: Subtype of schizophrenia in which there may be a Major Depressive Disorder, a Manic Episode (see Bipolar), or Mixed Episode.
- Substance-Induced Psychotic Disorder: Prominent hallucinations or delusions due to use of illicit substances. Person is not aware of the connection between substance use and symptoms.

Other Effects:

- Changes in cognition, affecting ability to remember and plan for achieving goals. Attention and motivation may be diminished.
- Changes in mood: May be **depressed** or have mood swings (inc. Bipolar Disorder).

PROFILE/CONSIDERATIONS FOR "PSYCHOTICS "

- Lack of medications has been causes of several searches.
- Many (93%) do not respond to name, but may be verbal (21%).
- Some may be evasive (see Paranoia, delusions)
- Tend not to penetrate thick briars/brush. Often found in open woods (30%), structures (23%), or along roads (23%)
- Not "lost" in the traditional sense. Subjects tend not to travel to identifiable targets/locations.
- Subjects may flee, hide, or move. May be evasive. Need to re-search areas.
- May have fear of authority (consider your "field" uniform)
- Containment along roads important. Cut for signs along roadways and trails.
- Have no higher statistical risk of aggression than the normal population. These individuals tend not to be violent.

POSSIBLE QUESTIONS TO ASK RE: "Psychotics"

1. Has this individual been prescribed medications? If so, have they been taking them recently?
2. If this individual is not taking their medications, please describe their mental state when not taking medications.
3. Does the individual have any hallucinations, delusions, or paranoia regarding other people that are important for us to know about?

AUTISM SPECTRUM DISORDERS

Autism Spectrum Disorders are also called Pervasive Developmental Disorders. They cause severe and pervasive impairment in thinking, feeling, language, and the ability to relate to others. They are usually diagnosed early in childhood. A milder form is Asperger Syndrome and a severe form Autism.

AUTISM: Autism is a severe disorder of communication and behavior, typically characterized by a profound and almost total withdrawal from all human contact. Many autistic children are **unable to speak**. The cause of autism is unknown. The severity of autism varies. Some individuals need assistance in almost all aspects of their daily lives, while others are able to function at a very high level and can even attend school in a regular classroom. Although it is difficult to determine, studies show that below-normal intelligence occurs in about 70% of autistic children.[1] In addition, the social functioning of autistic children is less than what is expected for their intelligence quotient (IQ) levels.
Symptoms include

- Impairment in the use of nonverbal behaviors: Use of eye-to-eye contact, facial expressions, body postures.
- Lack of emotional or social reciprocity, spontaneous seeking to share enjoyment or interests)
- Delay in, or **total lack of spoken language**. When there is adequate speech development, there may be impairment in initiating or sustaining conversation. Language may be repetitive or idiosyncratic.
- May have stereotyped behaviors: Examples include inflexible adherence to specific routines or rituals, repetitive motor movement (ex. hand or finger flapping or twisting), etc.
- An unusual focus on pieces. Younger children with autism often focus on parts of toys, such as the wheels on a car, rather than playing with the entire toy.
- **Preoccupation with certain topics**. Older children and adults are often fascinated by train schedules, weather patterns, or license plates.
- A **need for sameness** and routines. For example, a child with autism may always need to eat bread before salad and insist on driving the same route every day to school.

ASPERGERS SYNDROME:
- Milder symptoms of Autism see above.

PROFILE CONSIDERATIONS FOR AUTISM

- Most often "run away" between ages 3-16.
- Are unaware that people may be looking for them. No sense that they are lost.
- Individuals with autism may run or climb into dangerous situations. There is typically no sense of the world as a dangerous place.
- Be aware that the subject may have a favorite hiding place in the home or surrounding area. This may make it easier to locate the subject.
- Lack of response to shouting name does not mean subject is not in the area.
- Suggestions for dealing with autistic subjects include: talking in short, concise phrases, allow for delayed responses, use low gestures and keep hands down, and allowing repetitive behaviors to continue, unless there is danger to the individual or others around them.

"When it got dark, I'm almost positive he just kept walking. It was a full moon and we didn't get any rain here. What was probably going through his mind was that he loves water. We do a lot of hiking as a family and he loves to play in water. I'm sure that's why he walked along the creek bed. I don't have a clue why he eventually went up the side of the mountain. He didn't have any water with him and I'm not sure if he drank from the creek." Mother of Younger Eckhart, recovered 8-year-old autistic boy.

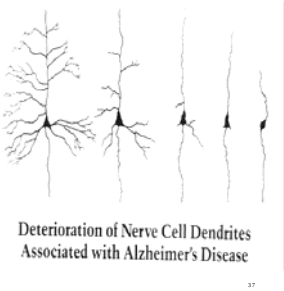
QUESTIONS TO ASK RE: Autism

1. Is there any specific place this individual likes to go to? Any "secret spots"?
2. Does this individual respond verbally at all? If so, is there anything specific he or she will respond to?
3. Is there anything special SAR people should know about when approaching this individual? What do they respond most favorably to?
4. Has this individual been lost before? (Lost in this context could simply mean wandering to a neighbor's house, etc. When asking such a question, do not think of "being lost" in terms of how SAR people use the word)
5. Are there any specific pre-occupations this individual has? For example, do they like trains (search train tracks), water (search creeks), etc.

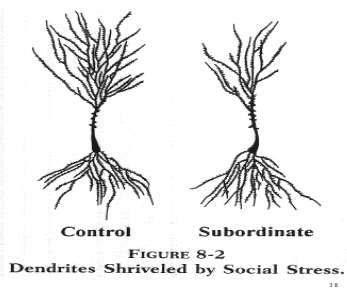
ALZHEIMERS DISEASE AND RELATED DISORDERS

NOTE: Interested individuals really need to read the dbS Productions studies on Alzheimer's available on the Web. Very detailed information regarding search considerations.

Alzheimer's Disease is a specific, progressive disorder that slowly kills nerve cells in the brain, resulting is significant and chronic deterioration of intellectual capacity. Note below the deterioration of nerve cell dendrites over the course of Alzheimer's progression. It is interesting to also note that stress can also shrivel dendrites.



Deterioration of Nerve Cell Dendrites
Associated with Alzheimer's Disease



Control Subordinate

FIGURE 8-2
Dendrites Shriveled by Social Stress.

However, the term "Alzheimer's" is often used interchangeably with the term "Dementia".
As noted by dbS Productions, "Everyone who suffers from Alzheimer's disease has Dementia. However, not everyone with Dementia has Alzheimer's Disease". There are a number of Alzheimer's-related disorders that would quality as a form of "Dementia". Some of these are:

- Vascular Dementia
- Parkinson's Dementia
- Korsakof f's Syndrome
- Picks Disease
- Huntingtons Disease

Alzheimer's Disease is characterized by some of the following symptoms:

- Loss of short-term memory-cannot learn new information
- Loss of long-term memory-person cannot remember personal information
- Impaired judgment
- Aphasia-cannot recall words or understand the meaning of commonly used words
- Apraxia-loses control over muscles and can't, for example, button shirts or operate zippers
- **Loss of spatial ability**
- Personality changes

The central concern for Search and Rescue is the "Wandering" behavior that often leads to searches.
Wandering can be goal directed or non-goal directed.

- Goal-Directed Wandering (dbS Productions) is wandering were the individual's movements can be attributed to some goal. This has also been described with several subtypes/models, including:
    - Searching/industrious
    - Active
    - Direct/Pacing/Lapping
    - Purposeful/Escapist
- Random Wandering: Whereby the individual moves aimlessly, without clear direction, and no apparent goal.

In terms of Search and Rescue-related issues, dbS Productions notes that**, "At this time, it appears that the nature of wandering…is the same for all Alzheimer's and Related Disorders.**

The symptoms of Alzheimer's may be broken down into phases. What is common to all of these phases is that neurons in the brain gradually deteriorate. The effect may be noted in various behavioral changes.

Mild Alzheimer's: In this early stage, people suffering from Alzheimer's develop barely noticeable memory loss and changes in personality. They seem to tire, get upset, or be more anxious more easily. Most importantly, there are the beginnings of memory loss or forgetfulness. Some of the implications of this memory loss are:

- Begin groping for words during conversation
- Covering up memory lapses by denying forgetfulness, or blaming it on certain events or other people.
- Will begin to misplace items or place items in unusual locations
- Can't cope well with change
- **Loss of sense of time and direction (see below). This "greatly interferes with the ability to navigate, and are important components to "sense of direction".**
- **Can follow familiar routes, but traveling to new places causes confusion and, ultimately, being lost.**

PROFILE/CONSIDERATIONS FOR MILD ALZHEIMER'S

- Most common characteristic is becoming lost in unfamiliar environments.
- The wandering is often goal directed. That is, the individual has some place or activity in mind, and has sufficient remaining physical and intellectual capacity to act.
- As such, it is important to determine/ask whether there may be a specific goal the individual may be trying to obtain (ex: going to a place he or she previously lived)
- Note that in trying to obtain goal, individual may easily become lost.
- Minimal apraxia: individual can move quickly
- Often capable of using public transportation or driving in effort to attain goal.
- Also note that some mild cases engage in escapist behavior.

Moderate Alzheimer's: At the moderate stage, there is profound memory loss. For example, they may forget the names of long-time friends. Some of the other indicators of moderate Alzheimer's include:

- Significant disruption of daily activities
- **Can become lost in familiar surroundings**
- Cannot learn new material
- **Judgment and insight impacted critically**
- Often can engage in restless wandering (ex. appearing like they are searching for something, or pacing). Wandering at this stage is often linked to being agitated.
- Can be hostile and aggressive, or engage in inappropriate behavior.
- May suffer from other psychological problems, including paranoia, hallucinations, or delusions.

Severe Alzheimer's: During this last stage, there is severe impairment in both mind/cognitive functions and body. There is a general loss of body control and coordination. As such, there is reduced mobility, unsteadiness/balance problems, and increased risk of falling. The individual no longer possesses capacity necessary to judge time or location. In its most severe form, **the individual may also lose the ability to communicate meaningfully, or at all.**

"SUNDOWNING" PHENOMENA

Sundowning is a phenomenon whereby an individual with Alzheimer's exhibits increased confusion during the evening hours. As a result, there may be an increase in wandering behavior.

SEVERE ALZHEIMERS AND WANDERING

Note that wandering behavior increased 50% in this state of Alzheimer's.
Tend to go until they get stuck!

GENERAL BEHAVIORAL PROFILE

- Tend to go until they get stuck
- Appear to lack ability to turn around
- Oriented to the past (short term memory goes before long term memory)
- Subjects usually found in a creek/drainage, or in briars/bushes
- Can have medical conditions that compromise mobility
- May cross or depart from roadways, but usually found within a short distance from the road (50% within 33 yards)
- May attempt to travel to a favorite spot or former residence
- Will not cry out for help or respond to shouts.

QUESTIONS TO ASK

1. Is there any specific place this individual likes to go to? For example, in the past, has he or she tried to drive to the store or walk to a friend's house?
2. Does this individual respond verbally at all? If so, is there anything specific he or she will respond to?
3. Is there anything special SAR people should know about when approaching this individual? What do they respond most favorably to?
4. Has this individual been lost before? (Lost in this context could simply mean wandering to a neighbor's house, etc. When asking such a question, do not think of "being lost" in terms of how SAR people use the word)

FIND LOCATIONS BY DIAGNOSTIC CATEGORY: VIRGINIA STUDIES

LOCATION	PSYCHOTICS	RETARDED	DESPONDENT	ALZHEIMERS
Structure	23%	21%	18%	15%
Yard/Field	-	16%	3%	18%
Drainage	7%	21%	10%	18%
Woods	30%	16%	21%	7%
Brush/Briar	7%	11%	4%	7$
Road	23%	11%	4%	7%
Linear Feature	-	5%	13%	-
Other	-	-	18% Water 5% Cliffs	4%

SOME RESOURCES USED IN THIS PRESENTATION

Please note that much of the data provided within this document is from studies available via the internet from dbS Productions.

1. dbS Productions at http://www.dbs-sar.com/SAR_Research: This website has a great deal of data related of missing subjects in Virginia, and is a great source of information for anyone interested in this subject.
2. National Institute of Mental Health, http://www.nimh.nih.gov/HealthInformation/adhmenu.cmf
3. American Psychiatric Association Pamphlet Series, "Lets Talk About Facts", Revised 1997
4. Southeastern Consulting, "Understanding Mental and Emotional Disorders: A Guide for Consumers, Families, and Referral Organizations", February 2002
5. The work of Northwestern Community Services, Front Royal, VA.