

Patient Care Guidelines:

ASSESSMENT AND MANAGEMENT OF PSYCHOLOGICAL CONSEQUENCES OF TRAUMA AND TERRORISM

NORMAL REACTIONS

Children, like adults, are resilient, and with appropriate support will cope with the effects of a traumatic event. The following are common, normal reactions to trauma:

Normal Trauma Reactions: Infant (birth to age 2):

Respond to the distress of caregivers and the resulting disruption in the attachment relationship.

- Separation issues
- Appear “fussy”
- Regressive behaviors
- Crying
- Feeding and sleeping problems
- Easily startled

Normal Trauma Reactions: Toddler and Pre-school (2-6 years old):

Difficulty understanding other points of view. Inability to understand death as permanent.

- Regressive behaviors
- Sensitivity to loud noises, easily startled
- Trouble falling or staying asleep/nightmares
- Confusion and irritability
- Temper tantrums
- Magical thinking
- Blaming oneself for event
- Increased worries and fears
- Uncontrollable crying
- Running aimlessly
- Excessive clinging to care taker
- Appetite changes
- Fear of going to sleep or leaving the house

Normal Trauma Reactions: School-Age (7-11 years old):

Concrete thinking makes traumatic experiences difficult to comprehend.

- Fear, confusion, and anxiety
- Excessive clinging to care taker
- Competing with siblings for attention
- Regressive behaviors
- School avoidance
- Decrease in concentration
- Argumentative

- Rebellious behaviors
- Withdrawal from peers and/or family
- Focus on concrete details of event
- Sleep and appetite changes

Normal Trauma Reactions: Teenage (12-18 years old):

Can think independently and abstractly. Good sense of cause and effect. Have increased focus on religion, spirituality, morality, and ethics.

- Sadness
- Feelings of hopelessness and helplessness
- Increased worries and fears
- Somatic complaints
- Isolating behavior
- Tend to internalize feelings
- Risk taking behaviors
- Irritability and acting-out behaviors
- Increased defiance, wish for revenge
- Action oriented response to trauma
- Disenchantment
- Apathetic •
- Decrease in concentration
- Minimization of concerns

ABNORMAL REACTIONS: With proper interventions, treatment and support, long-term stress disorders and psychiatric morbidity can be mitigated and possibly prevented.

SEVERITY SPECTRUM FOR TRAUMA-RELATED DISORDERS

	Symptom Severity			
	MILD			SEVERE
Condition	Bereavement/Stress Reaction (NOT disorders)	Adjustment Disorder	Acute Stress Disorder	Posttraumatic Stress Disorder
Symptoms	Full range of emotional reactions	Depression, anxiety, apathy, sleep/eating changes, withdrawal, suicidality, etc.	Disassociative symptoms and some reexperiencing, avoidance, arousal	Reexperiencing, avoidance, arousal
Treatment	Sometimes (short-term symptomatic relief)	Often	Usually	Almost always
Final Impact	Normally resolves by 2 months to 1 year after traumatic experience	Usually resolves within 6 months of termination of stressor	Resolves within 4 weeks or progresses to PTSD	May last for years and result in inability to function

The following will impact a child's reaction to trauma:

- Amount of destruction seen
- Gruesome nature of the event
- Death and/or injury of loved one
- Direct or indirect involvement in the trauma

Acute Stress Disorder (ASD): Lasting up to 4 weeks.

- Maladaptive and impaired thoughts, feelings, and

behaviors in response to traumatic events.

Post-Traumatic Stress Disorder (PTSD):

People are “stuck” on the trauma, keep re-living it in thoughts, feelings, images and/or behavior.

- Symptoms lasting more than four weeks. Delayed onset can occur months to years later.

ASD and PTSD Symptoms Overlap:

- **Derealization:** Emotional numbing, dazed, unable to recall the trauma.
- Intrusive thoughts: Flashbacks and nightmares of the event.
- **Avoidant behavior:** Avoidance of thoughts, feelings, conversations, activities, places, or people associated with the trauma. Can manifest as school refusal and withdrawal.
- **Hyperarousal:** Exaggerated startle response, explosive anger, restlessness, insomnia, decrease in concentration.

Risk factors for ASD and PTSD:

- Previous psychiatric disorder
- Previous trauma or exposure
- Limited education
- Limited coping skills
- Family history of depression, anxiety, and drug abuse
- Family dysfunction
- Limited social supports

NEURO-PSYCHIATRIC SYMPTOMS OF WMD AGENTS

Differentiate between autonomic arousal and reactions caused by agent or treatment of agent.

General Symptoms of Anxiety and Autonomic Arousal:

- Anorexia
- Diarrhea
- Dry mouth
- Nausea/vomiting
- Chest pain/tightness
- Diaphoresis
- Dyspnea
- Hyperventilation
- Dizziness
- Faintness
- Paresthesias

- Palpitations
- Flushing
- Pallor
- Muscle tension/aches
- Urinary frequency

BIOLOGIC AGENTS

Neuropsychiatric syndromes or symptoms:

Anthrax: Meningitis, advanced stage- encephalitis, hallucinations
 Brucellosis: Depression, irritability, headaches
 Q fever: Malaise, fatigue, encephalitis, hallucinations
 Botulinum toxin: Depression due to lengthy recovery
 Viral encephalitis: Mood changes such as depression, long-term cognitive impairment
 Viral Hemorrhagic Fevers: Restlessness, confusion, myalgia, and hyperesthesia
 All biologic agents: Delirium

BIOLOGIC AGENTS Neuropsychiatric syndromes or symptoms:

Anthrax: Meningitis, advanced stage- encephalitis, hallucinations
 Brucellosis: Depression, irritability, headaches
 Q fever: Malaise, fatigue, encephalitis, hallucinations
 Botulinum toxin: Depression due to lengthy recovery
 Viral encephalitis: Mood changes such as depression, long-term cognitive impairment
 Viral Hemorrhagic Fevers: Restlessness, confusion, myalgia, and hyperesthesia
 All biologic agents: Delirium

CHEMICAL AGENTS

Acute effects of exposure to Organophosphate pesticides (Nerve agents) include:

- Impaired vigilance and concentration
- Memory deficits
- Slowing of information processing
- Psychomotor retardation
- Slowing of speech
- Word finding difficulties
- Depression
- Anxiety
- Irritability

Long-term neuro-psychiatric effects of acute intoxication with organophosphate pesticides (nerve agents) include:

- Drowsiness, fatigue
- Memory impairment
- Depression
- Increased irritability
- Auditory problems
- Visual memory deficit
- Decrease in motor speed
- Decrease in problem solving ability

Blister Agents: (Nitrogen or sulfur mustards):

- Psychological distress over disfigurement
- Sensation of suffocation

Other Chemical Agents: Cyanide:

- Anxiety
- Confusion
- Nausea
- Feeling of weakness
- Giddiness
- Hyperventilation

TREATMENT OF CHEMICAL AGENT EXPOSURE

Treatment of nerve agent exposure using Atropine may cause psychiatric symptoms including:

- Drowsiness
- Hyperactivity
- Hallucinations
- Blurred vision
- Tachycardia
- Dry mouth
- Suppression of sweating
- Urinary retention
- Cognitive impairment
- Psychosis
- Delirium
- Coma

RADIATION**Acute radiation exposure:**

- Rapid onset of nausea, vomiting, and malaise. (This can be confused with psychogenic vomiting that can result from stress/fear reactions.)

Chronic radiation exposure:

- Sleep/appetite disturbances
- Generalized weakness, easily fatigued
- Increased excitability, mood changes
- Impaired memory, loss of concentration

Psychological effects of blast and thermal agents:

- Acute and chronic stress disorders
- Survivor guilt
- Anticipation of lingering death

Recommendations and Guidelines for Assisting Children and Families after a WMD-related Attack:

- Do not over-medicalize normal reactions to an abnormal situation! Understand normal symptoms that will resolve over time with appropriate support.
- Avoid the use of the term “worried well” or similar expressions.
- Provide clear, accurate, and ongoing communication to both children and families.
- Whenever possible, reunite children with families, and facilitate communication.

- Be aware that hoaxes, myths, misunderstanding and unfamiliarity of the events can increase anxiety.
- Be aware that the personal protective equipment, process for decontamination, and isolation may be especially frightening for children.
- Provide reassurance and support
- Even if a person has not been exposed to an agent, psychosomatic symptoms may be present due to the public's fear of the effects of exposure to agents. Professional intervention and appropriate treatment may be necessary to reduce potential long-term psychiatry morbidity.

Recommendations for Healthcare Providers:

- Healthcare providers can also feel anxious and have concerns about traumatic events. To provide the best care for patients and families, healthcare providers must take care of their own emotional health as well.
- Be sure to take breaks and get enough sleep.
- Maintain regular exercise and proper nutrition.
- If stress begins to interfere with daily activities and functioning, it is important to seek assistance from a mental health professional, a member of the CISM team, or Employee Assistance Program.

We are all affected by these events!

REFERENCES

1. Center for the Study of Traumatic Stress, Uniformed Services University School of Medicine. "Psychological and Behavioral Issues Healthcare Providers Need to Know When Treating Patients Following A Radiation Event."
2. DiGiovanni, Cleto. "Domestic Terrorism with Chemical or Biological Agents: Psychiatric Aspects", Am J Psychiatry, 1999; 156:1500-1505.
3. Military Medical Operations Office, Armed Forces Radiobiology Research Institute. Medical Management of Radiological Casualties Handbook, 1st Edition. Bethesda, Maryland: AFRRI, 1999.
4. U.S. Army Medical Research Institute of Chemical Defense. Medical Management of Chemical Casualties Handbook. Aberdeen Proving Ground, Maryland: USAMRICD, 2000.
5. U.S. Army Medical Research Institute of Infectious Diseases. USAMRIID's Medical Management of Biological Casualties Handbook. Fort Detrick, Maryland: USAMRIID, 2001.