Creating Violence Free and Coercion Free Mental Health Treatment Environments for the Reduction of Seclusion and Restraint

> Identifying and Managing S/R Risk Factors A Core Strategy ©

> > A Primary Prevention Tool

NASMHPD



Any work used from this document should be referenced as follows:

"National Executive Training Institute (NETI). (2005). *Training curriculum for reduction of seclusion and restraint. Draft curriculum manual.* Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD), National Technical Assistance Center for State Mental Health Planning (NTAC)"

### Any questions in relation to this work can be sent to:

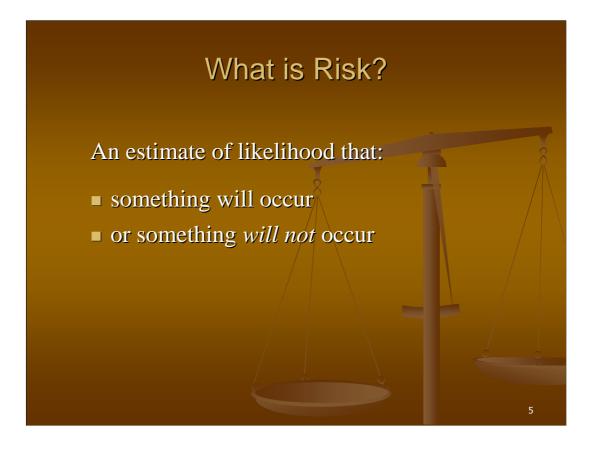
- Kevin Huckshorn
   Kevinurse@aol.com
- Janice Lebel
   Janice.Lebel@dmh.state.ma.us
- Nan Stromberg <u>nan.stromberg@dmh.state.ma.us</u>

### S/R Risk Factors

### Outline

- Identify and manage individual and environmental risk factors to prevent the use of seclusion/restraint
- Identify and manage medical risk factors to avoid injury or death

This module will be focused on identifying and managing individual and environmental risk factors in order to prevent the use of seclusion and restraint and identifying and managing medical risk factors in order to avoid injury or death.



So what is risk? Risk is an estimate of probability, something that may occur or something that may not occur. In addressing risk we want to identify individuals or situations that may be potentially problematic. Knowing who is at risk and understanding the nature of the risk factors, we have the opportunity to proactively develop strategies that may serve to prevent the occurrence of an adverse event.

### Assess What Kind of Risk?

### Aggression & Violence

Identify individuals or situations that may be potentially aggressive or violent in order to avoid the use of seclusion or restraint/

### Medical Risk

Assess and understand medical risks when seclusion or restraint is used to reduce the possibility of serious injury and/or death

In assessing risk for violence, it is necessary to assess a particular individual's vulnerability and the degree to which the environment is "triggering". The second area is the identification and management of medical risk factors in order to avoid injury or death if seclusion or restraint is used. Medical risk assessment cues staff to be especially aware of positioning and monitoring if seclusion or restraint is used.

### Why Assess Risk Factors for Violence?

Help staff identify those individuals most at risk and proactively develop effective interventions to avoid violence

■ Identify *early-on* individuals in need of assistance

- Close monitoring and active attention to individual triggers
- Provide additional treatment modalities
- Develop effective de-escalation preference plans

Risk assessment involves evaluating risk factors and intervening early so that we are able to prevent an untoward event from occurring. We want to be able to identify early on, individuals in need of assistance. We want to problem solve and address individual triggers, provide additional treatment modalities and expand options and choices and develop de-escalation preference plans in advance.

### Assessing Risk for Violence Most Serious Risk Issues

### Current Intent to Harm

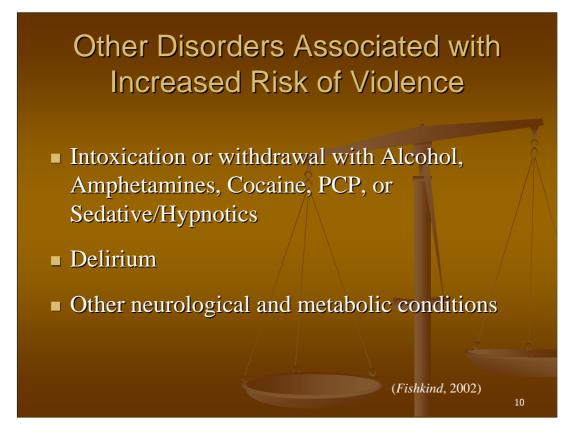
- Without expressed ambivalence or barriers
- A history of serious past attempts
- Presence of specific command hallucinations
- Substance Abuse

(Child and Adolescent Level of Care Utilization System, CALOCUS, Version 1.5, American Academy of Child and Adolescent Psychiatry, American Association of Community Psychiatrists, 2004)

What are some of the most serious violence correlates? A current intent to harm is a significant risk issue. This is the case especially if there is a previous history of significant past attempts, without ambivalence and with access to the means to harm someone. In addition, the presence of specific command hallucinations that targets an individual but not command hallucinations in general. Applebaum found that neither hallucinations in general nor command hallucinations elevated the risk of violence, but if voices commanded a specific act, the likelihood of violence increased. In addition, individuals who are active substance abusers are at higher risk for violence.

# <section-header><section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item>

Examples of previous violent behavior include: physical or sexual aggression, fire setting with the intent to cause property destruction, planned, premeditated violent acts and group or gang violence that is organized with other perpetrators. In addition, people who have been severely physically abused as children and/or are sociopathic are at greater risk.



Other disorders associated with an increased risk of violence include intoxication or withdrawal from alcohol, amphetamines, cocaine or sedative/hypnotics. Delirium, whose etiology might be causally related to a number of factors including neurological or metabolic conditions or intoxication or withdrawal, also poses greater risk. Common to these conditions is the disruption to one's cognitive processes, misinterpretation and paranoia along with greater impulsivity and disinhibition.

### **Environmental Triggers**

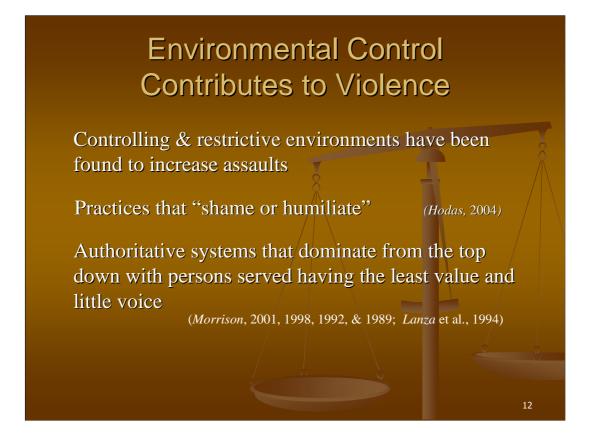
Events related to hospitalization are common triggers to aggression & violence

- Anger related to enforcement of hospital policies
- Anger related to a sense of unfair treatment
- Anger related to long wait times, &
- Anger related to the health care system in general

(May, Grubbs, & Binder, 2000)

### These events are preventable

What are common environmental triggers that lead to violence? Triggering events leading to violence on a unit often have to do with the way a person is treated in the most basic of ways. Anger may be precipitated by the enforcement of hospital policies, a sense of unfair treatment, long wait times; or problems in the health care system. A consumer shared her experience in the hospital. She approached a a nurse who was very busy and could not get the medication that she needed at that moment. She told her in a heartfelt and respectful way that she would have to wait: "I'm so sorry; I can't do this right now. I know you're having a tough time; do you feel like you can wait?" The "power of an apology" and real concern made all the difference in terms of how this interaction was experienced.



Controlling and restrictive environments have been found to increase assaults. Practices that shame and humiliate. Staff communicating disrespect that does not allow the individual to "save face". Authoritative systems that dominate from the top. In these systems, the senior administrators control middle management who micromanage direct care staff. Ultimately, the consumer is at the "bottom of the food chain" and treated accordingly within an organizational culture like this.

### Other Environmental Factors Contributing to Violence & Aggression

- Spatial crowding (i.e., corridors, shared spaces) rather than total number of individuals
- Limited or no staff training in assault prevention and management
- Younger staff with less experience
- Stretches of time with nothing to do
- Lack of peer supports and other natural supports

(Chou, Lu, & Mao, 2002; Nijman & Rector, 1999; Lanza et al., 1994)

Other environment factors include spatial crowding in which people are likely to be herded and lack privacy. Or, environments in which consumers are stuck on a unit all day. Treatment malls, established by some hospitals, have been helpful in this regard. These malls are located in a space away from the psychiatric unit and provide a more "normalized" day. Consumers can get up, leave the unit, engage in activities of their choice, and return to their unit. This offers a healthier, less institutional mobility and freedom.

Other factors include limited or no staff training in de-escalation and crisis prevention, staff who are younger and have less experience. Units that are boring or offer unappealing or irrelevant groups and activities and the lack of peer support. Peer support is a positive and natural kind of resource. Peer specialists are closer to the consumer experience, offer a different kind of support and have more credibility. They role model recovery and offer a potential vision of one' future functioning.

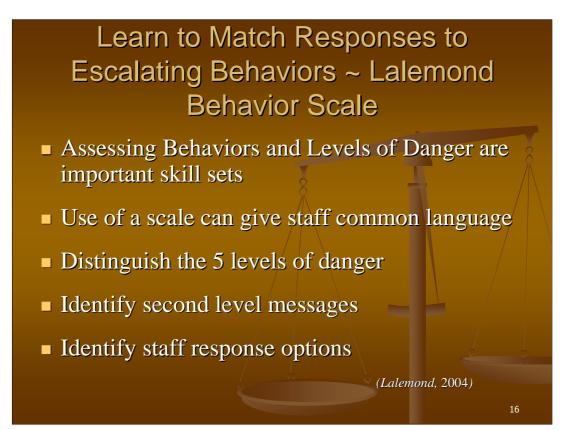


In terms of behavioral indicators of aggression – signs of agitation are important to recognize so there is early intervention use of preventative strategies. These early warning signs might include pacing, clenching fists, teeth, hands, tremors or sweating. Other signs include threats, staring, hypervigilance, brooding or plotting to hurt someone.

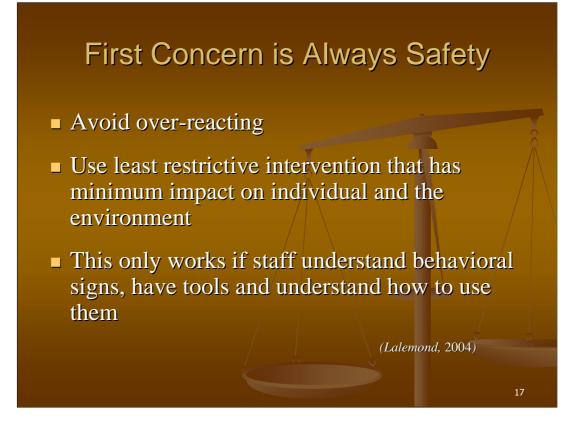
### Assessing Risk for Violence ~ Conclusions

- Know the potential contributors to violence, including demographics, major psychiatric disorders, symptoms, and behaviors
- Recognize the physical and behavioral indicators
- Use tools/checklist when appropriate to the population or as a guide for structured interview
- Combine clinical and tool-based approaches
- Use more than one clinician's clinical judgment

In conclusion, we need to know the potential contributors to violence and recognize the physical and behavioral indicators. We need to use risk assessment or crisis assessment tools such as a check-list when appropriate to the population or as a guide for structured interview. It has been found to be most effective to combine our clinical and our tool based approaches and we need to use more than one clinician's clinical judgment in evaluating risk for violence. It is essential to document the entire assessment process including collegial consultation.



It can be helpful to use an objective scale when assessing behaviors and levels of danger. The Lalemond Behavior Scale offers staff a framework with which to conduct such an assessment. It gives staff a common language in which five levels of danger are determined. This scale offers a way to "hear" second level messages and provide staff response options.



Some essential principles in responding to escalating behavior is to avoid over reacting. To stop, take a deep breath and evaluate the situation. Use the least restrictive intervention that has the minimal impact on the individual and environment. This is effective if staff understand behavioral signs, are able to categorize them and have tools that they know how to use.

# <section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item>

The Lalemond Behavioral Scale identifies five levels of behavior on a continuum from the lowest to highest level of concern. The seriousness of the behavior directs the staff response. The five levels are agitated, disruptive, destructive, dangerous and lethal.

### **Agitated Behavior**

- Behavior change on low level, often is ignored, must be taken in context
- Trained staff will know to act
- Include behaviors such as low level pacing, quietly talking to self, tapping foot or hands, rocking

(Lalemond, 2004)

19

Second level message "I'm Distressed"

Level 1 is agitated behavior. This, the lowest level, is often ignored because it is the least disruptive. Trained staff understand that if intervention occurs here, it is most likely to resolve. The person is saying, essentially, "I'm distressed". Behaviors in this category include low level pacing, talking to oneself, rocking, etc.

### Disruptive Behavior

- This is still fairly low level behavior but now involves other people
- For instance "pacing" in front of TV is higher level than pacing in bedroom
- Second Level message here is "Pay Attention"

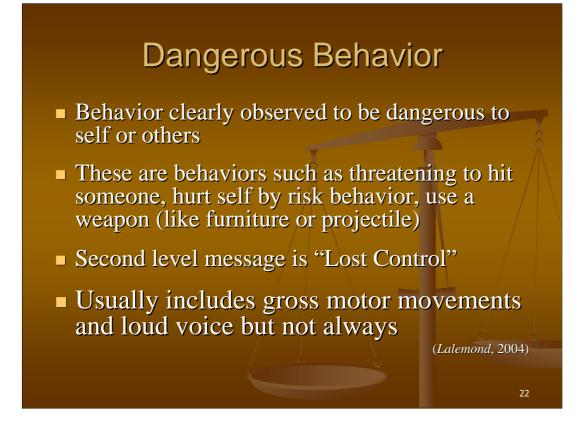
(Lalemond, 2004)

20

Level 2 is Disruptive Behavior. This is still a fairly early stage of upset but now involves other people. Pacing in front of a TV, going into someone else's bedroom, yelling at the nurse's station are such examples. The individual is saying: "Pay Attention". This is often the stage at which staff over-react, start to set limits, rather than offer support or options, and, without this appropriate training, inadvertently contribute to the process of escalation.



Destructive behavior is the third level of behavior and typically involves some kind of physical behavior such as pounding a wall and yelling, throwing clothing or even a chair but not at someone. This requires clear communication and active staff involvement. The individual is communicating that they are starting to lose control.



Dangerous Behavior is the fourth category and reflects dangerous activity. These might include threatening to hit someone with true intent, hurting themselves or using a weapon such a chair or glass to hurt someone else. The second level message is that they have 'lost control". This level usually includes gross motor movements and a loud voice.

### **Lethal Behavior**

- Threat of Lethal Behavior is the threat of suicide or homicide.
- Secondary Message is "Stop Me"
- Staff response is always "Don't do it"
- Is the most dangerous but seen the least

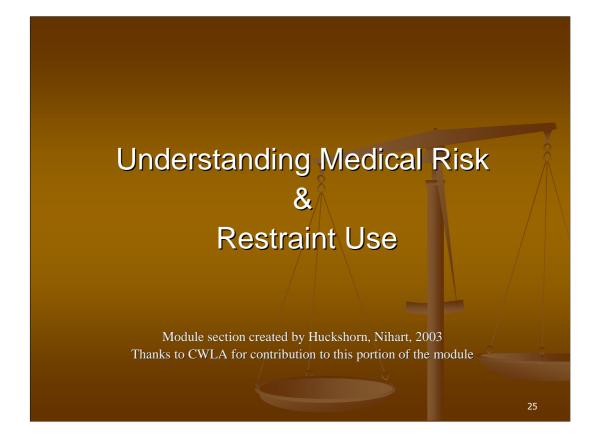
Lethal behavior is the fifth level of behavior and involves a very direct threat of suicide or serious aggression. The second level message is "stop me". The staff response is to take complete control. This is the most dangerous but is actually seen the least.

(*Lalemond*, 2004)



In summary, the staff response options to the five levels include the following:

Ensure that safety is maintained by matching the appropriate response to the behavior of the consumer. Address the underlying distress and attempt to alleviate it. Open up the communication, establish rapport and communicate rather than control at those earlier levels. Attend to the needs of the other consumers and ensure safety for all. Most importantly, use the least restrictive intervention possible. Remember that S/R is only used for Dangerous or Lethal behavior and this behavior is seen the least.



This next section will be addressing Medical Risk and Restraint use.

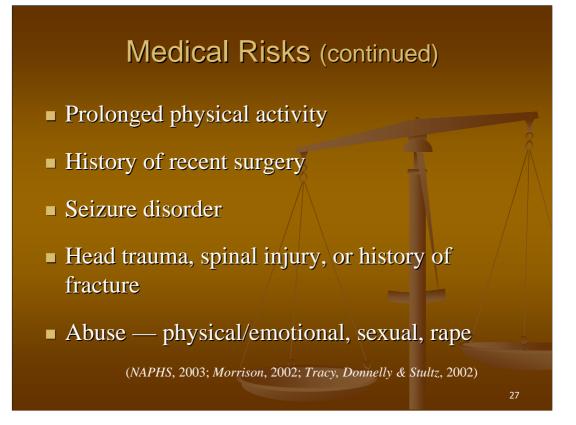
### Medical Risks for Death in Restraint

- Respiratory problems, including asthma, bronchitis, emphysema, chronic pulmonary disease, or other breathing difficulties
- Unknown Cardiac conditions, history of arrhythmias under stress
- Obesity, pregnancy, or other conditions of enlarged abdomens
- Recent ingestion of food and/or fluids

(NAPHS, 2003; Morrison, 2002; Tracy, Donnelly & Stultz, 2002)

26

Takedowns, physical restraint and mechanical restraint are inherently dangerous. Anytime we put hands on another person, there are medical risks for injury and death. Some of the disorders that place an individual at increased risk are: asthma, bronchitis, emphysema, chronic pulmonary disease and other respiratory disorders. Cardiac conditions and history of arrhythmias are also medical risks factors. Obesity, pregnancy or other conditions in which the individual has an enlarged abdomen that effects diaphragmatic movement can also be problematic. The recent ingestion of food and/or fluids has also been associated with restraint death due to aspiration. Often these risk factors occur in combination. Someone could be overweight with cardiopulmonary disease, for example. Research over the past several years has validated what many of us have known for years. Individuals with long term psychiatric illness have significant medical comorbidity – more so than the general population. This puts them at even greater risk when restraint or seclusion is used.



Other medical risk factors include prolonged physical activity that can put undue stress on the cardiovascular system, recent surgery that might cause hemorrhaging and seizure disorders. Head trauma, spinal injury or a history of fractures, which could create a higher risk of further bone breakage, are other factors. Certainly a history of abuse, with the occurrence of biochemical flooding when the individual is retraumatized creates further physical stress.

# <section-header><text><list-item><list-item><list-item><list-item><list-item>

Positional asphyxia is the most common cause of restraint death. Positional asphyxia occurs when the body position interferes with respiration, such as: prone positioning (being placed on one's stomach), especially when obese and over-heated. Flexion of the head into the chest – interfering with the upper airway or any position that causes partial or complete airway obstruction could lead to respiratory distress and or arrest.

### Positional Asphyxia (continued)

Body positions that interfere with breathing also include:

- Neck compression
- Weight being placed on the body limiting the intake of air
- Placing a towel or sheet over the persons' head to protect against spitting or biting
- Obstructing the airway when pulling the person's arms across the neck or chest area

(Tracy, Donnelly, & Stultz, 2002; Morrison, 2002; Mohr, Petti, & Mohr, 2003)

29

Other positional asphyxia risk factors include: neck compression that could occur during a take down as a result of a choke hold, for example. Putting pressure on a consumers back interfering with the bellows action of the lungs. The *Hartford Current* identified that some of the children who died in restraint, had had weight on their backs. Placing a towel or sheet over someone's head, unfortunately used in many States, can lead to suffocation. It is safer to have the staff use use personal protective equipment such as masks, gown, etc. rather than use an intervention that could occlude the nose or mouth. Asphyxia can also occur when the person's arms are being pulled across the neck or chest area, obstructing the upper or lower airway.

### Actions to Decrease Risk of Positional Asphysia Monitor the person's breathing, ensuring an open airway and encourage the person to breath Place the person in the face up position as soon as possible Quickly respond to any person's complaint that they

- cannot breathRecognize that just because a person can talk does not
- mean that they have adequate oxygen

(Tracy, Donnelly, & Stultz, 2002; Morrison, 2002)

30

Actions to decrease the risks of positional asphyxia include monitoring to ensure an open airway and the encouragement to take deep slow breaths. If the person shows signs of distress they should immediately be placed in an upright position with their head elevated. Any difficulty in respiration requires immediate intervention and any complaints of breathing difficulty should be taken seriously. Just because a person can talk does not mean that they have adequate oxygen in their bloodstream. Color and respiratory rate needs to be assessed and the pulse should be evaluated for quality and regularity.

### Aspiration

Supine position, during which the person is immobile in conjunction with decreased or altered levels of consciousness, interferes with their ability to protect their airway

• The person may aspirate vomit, regurgitated gastric juices, or excessive saliva

Note: Greatest risk after the person has recently ingested food or fluids or is taking medications that produce excess saliva

(Tracy, Donnelly, & Stultz, 2002; Morrison, 2002)

Aspiration is the breathing in of fluid or food. This can cause respiratory distress or suffocation. Aspiration typically occurs in the supine or face-up position, especially when the head is flat, the person is immobile and there is a decreased level of consciousness that interferes with the ability to protect the airway. The supine position can be dangerous if there is excessive abdominal weight. Death due to aspiration can occur if someone vomits or has excessive saliva. The greatest risk of aspiration occurs after the person has recently ingested food or fluids or has just taken medication.

### Actions to Decrease Risk of Aspiration

Monitor breathing closely (face visible)

- If the person experiences semi-consciousness and/or unconsciousness, place immediately on side and check for aspiration
- If vomiting occurs, immediately turn the person on their side and clear mouth of any matter

(Tracy, Donnelly, & Stultz, 2002; Morrison, 2002)

32

In order to decrease the risk of aspiration, the person should be monitored closely with their face continuously visible. If the person becomes semi-conscious or unconscious, this would signal a medical emergency. The person needs to be placed on their side and the mouth should be checked for any content and 'swept' clean. The medical condition, not the behavioral condition becomes the clear emergency priority and medical assistance should be immediately accessed.

### Catecholamine (Adrenal) Rush/ Cortisol Flood

- When a person becomes agitated and engages in intense and/or prolonged physical struggle, their body releases an extreme amount of adrenal catecholamines
  - A flood of epinephrine and norepinephrine may produce rhythm disturbances in the heart that can lead to sudden death
- This may be exacerbated by increased heart rate resulting from decreased available oxygen

(Tracy, Donnelly, & Stultz, 2002; Mohr, Petti, & Mohr, 2003)

When a person becomes extremely agitated and is in a state of prolonged struggle, the adrenals can become overactive and the body releases increased adrenaline and epinephrine. This can cause a cortisol "flood" and put undue stress on the cardiovascular system with the possibility of precipitating cardiac rhythm disturbances.

### Catecholamine (Adrenal) Rush and Trauma History

- Triggering a "fight, flight or freeze" response will produce a catecholamine (adrenal) flood
- Re-experiencing trauma or abuse may produce adrenal flood
- Every effort should be made to avoid retraumatizing or triggering events in individuals with trauma histories

(Tracy, Donnelly, & Stultz, 2002)

34

The restraint can easily trigger the fight or flight response in consumers with histories of abuse who are re-experiencing the historical trauma. This can produce that potentially dangerous adrenal flood. Therefore, from a medical perspective as well as a psychological one, every effort should be made to avoid re-traumatizing or triggering events in individuals with trauma histories.

### Actions to Decrease Risk of Catecholamine Flood

- Focus on talking with the person in a clam, non-threatening manner to calm the person and decrease their sense of threat or personal danger
- Use information gathered in trauma assessments and de-escalation preference surveys to avoid the use of physical intervention

(Tracy, Donnelly, & Stultz, 2002)

35

Many of us have learned as part of our training to 'ignore' the person once they've been put in restraint or seclusion because talking with them somehow reinforces the problematic behavior and provides *secondary gain*. In re-thinking our approach, and preventing this chemical flooding that can be dangerous, staff need to consider what is likely to offer the most support. Talking with the person in calm, non-threatening manner can decrease a sense of threat and personal danger. Of course, using information gathered in the trauma assessments and deescalation preference surveys in advance of or during a crisis in order to avoid the use of restraint or seclusion would be the best approach.

## Excited Delirium Syndrome

- Metabolic acidosis in cardiac arrest associated with use of restraint
- Delirium can alter sensation and render patients capable of beyond normal exertion
- Normal body ph is 7.4. Autopsies of patients showed profound acidosis - 6.25

(Mohr, Petti, & Mohr, 2003)

36

Excited Delirium Syndrome occurs when the individual exerts energy beyond his or her physical capacity. This puts enormous strain on the cardiovascular system and can result in a cardiac arrest. Of interest is the phenomenon of metabolic acidosis associated with restraint deaths. Metabolic acidosis is not typically associated with cardiac arrest from other causes. In the case of restraint deaths, the ph, or acid-alkaline balance of the blood is 7.35-7.45 – profound metabolic acidosis when compared with the normal blood ph of 6.25.



Tracy et al, identified that most deaths occur within the first six minutes of restraint...during the take down or during the first minutes of the force of the intervention in combination with the consumer's underlying physiologic state.

## <section-header><list-item><list-item><list-item><list-item><list-item>

In terms of prone restraint and holds, a number of organizations and state offices have prohibited its use because of the high risk of positional asphyxia and medical problems that can occur. The majority of documented restraint deaths occurred in prone take downs and prone restraints.

### **Prone Restraint Risk Factors**

- Compression or restriction of rib cage limiting chest expansion for breathing
- Abdominal organs are pushed against diaphragm and further limits space for lung expansion
- There is an increased need for O2 during takedown events due to adrenal flood
- Staff cannot see person's face; difficulty in communicating
- It is more frightening for person, they cannot see

(PAI, 2002; Tracy, Donnelly et al, 2002; Parkes, 2000, Mohr & Mohr, 2000)

39

When prone restraint is used the following risk factors are present. There can be compression or restriction of the rib cage limiting chest expansion for breathing. The abdominal organs are pushed against the diaphragm further limiting space for lung expansion and interfering with the bellows action of the lungs. There is an increased need for oxygen due to the outpouring of adrenaline (as would be the case during any kind of aerobic activity). When prone restraint is used, staff cannot see the person's face and appropriately monitor breathing and airway condition. It is much more frightening for the person if they cannot see. They are more likely to dissociate, to loose a sense of the present circumstance and to feel even more out of control and terrified.

### **Prone Restraint**

- Most important: Why use it?
  - Danger of any emerging problem is lessened if person is being monitored (1:1) and face is visible
  - Spitting is not lethal
  - Many facilities have outlawed us of prone restraint for years without issue
  - Use of clinical judgment? (what education, training, supervision, and monitoring is occurring?)

It is important to remember that it is not necessary to use prone restraint in the event that a restraint is necessary. Danger is lessened if person is closely monitored with face fully visible. If a rationale for use of prone restraint is that it is a way to manage spitting, it is important to remember that spitting is not lethal, and, as discussed, staff should be the ones to wear protective garments.

40



Of course, by far, the best way to avoid injury or death is to mobilize all of the proactive tools we have to avoid using seclusion or restraint in the first place.



But, if absolutely necessary, we need to: know as much of the medical history as possible in advance. Apply as safely as possible with attention to application and position. Monitor rigorously and continuously. Release as early as possible and avoid the prone position.