Forensic Nursing Services:

Training and a trauma-informed approach impact the identification and treatment of Non-Fatal Strangulation

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Objectives

As a result of this session, participants will be able to:

• Describe the mechanism, signs and symptoms, and the health consequences of Non-Fatal Strangulation

• Identify the prevalence of Strangulation within the context of interpersonal violence and child physical abuse.

• Define the comprehensive, trauma informed approach of the forensic nurse in the response to Non-Fatal Strangulation.
Norton Sound Health Corporation is tribally owned and operated. We have a Regional Hospital in Nome and Health Clinics in the 15 Native Alaskan Villages in the 44,000 square mile Bering Strait Region of Alaska.

3 distinct linguistic and cultural groups: Inupiat, Yupik and Siberian Yupik

Population: 9,500
NSHC Forensic Nursing Program

Forensic nurses work with victims of sexual and interpersonal violence and child maltreatment. We see victims in the immediate aftermath of the violence and trauma.

But the medical forensic exam is only 1 aspect of the holistic care we provide.
Why should we care about strangulation?

• Strangulation is one of the most lethal forms of Interpersonal Violence: unconsciousness may occur within seconds and death within minutes. Gail Strack, Esq. and Casey Gwinn, Esq. https://www.strangulationtraininginstitute.com/impact-of-strangulation-crimes/

• Strangulation is one of the best predictors for the subsequent homicide of victims of IPV. One study showed that the “odds of becoming an attempted homicide increased about 7-fold for women who have been strangled by their partner”. (Journal of Emergency Medicine, 2008).
Some of the information in this presentation came from:
Strangulation and Suffocation in Indian Country Seminar
National Advocacy Center, Columbia, SC
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www.allianceforhope.com

https://www.strangulationtraininginstitute.com/

• Gael Strack, Esq., CEO
• Casey Gwinn, J.D.
• Detective Mike Agnew, Fresno PD
• Dr. Ralph Riviello, Director of the Philadelphia Sexual Assault Response Center

National Indian Country Training Initiative
Leslie A. Hagen, Coordinator
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Alaska’s Response to Strangulation

Alaska’s Comprehensive Guide for MDTs


Alaska DHHS Office of Children’s Services

• List of important research articles, training materials, brochures, statistics.
  http://dhss.alaska.gov/ocs/Pages/childrensjustice/resource.aspx
Defining Strangulation

- **Strangulation** is the application of external pressure to the neck that occludes the blood vessels or airway and prevents oxygenated blood from reaching the brain (a form of asphyxia).

- ‘Choking’
- Suffocation
- Fatal vs. NonFatal Strangulation
The Brain

• The Brain needs a continuous supply of oxygen and glucose(sugar) which is carried by the blood. Without this, brain cells malfunction and die.

• Without ANY blood to the brain, for 10-15 seconds, a person will lose consciousness and, without recovery, the person will eventually die.
Carotid Artery: carries oxygenated blood **up** to the brain.

Jugular Vein: carries blood with waste products **down** from the brain.

**Hyoid bone:** supports the tongue

**Neck Muscles**

**Larynx:** Protects the top of the airway and contains the **Vocal Cords**.

**Trachea:** The airway to the lungs.
Manual Strangulation is the most common method

- Two hands
- One hand (C-clamp)
- Carotid restraint
- Choke hold
How strong does a person have to be to cut off Oxygen to the brain?

**Jugular Vein** - 4lbs of pressure for **20-30 seconds**

**Carotid Artery** - 11lbs of pressure for **10 seconds**

**The Trachea** - 33lbs of pressure for **4-5 minutes**

- 3-11lbs of pressure
- 20lbs of pressure
- 8-80lbs of pressure
Most victims of Non-Fatal Strangulations have no Physical Signs

In one study of 300 strangulation victims:

- 50% had no visible injury
- 35% had minor injury that didn’t photograph well
- 15% had visible injury

SIGN AND SYMPTOMS OF STRANGULATION

NEUROLOGICAL
- Loss of memory
- Loss of consciousness
- Confusion
- Behavioral changes
- Delirium
- Loss of sensation
- Seizures
- Difficulty speaking
- Dizziness
- Headaches

SCALP
- Petechiae
- Bald spots (hair being pulled)
- Bump to the head (from blunt force trauma or falling to the ground)

EYES & EYELIDS
- Petechiae to eyelid
- Petechiae on eyeball(s)
- Bruised/bruised eyelid(s)
- Vision changes
- Droopy eyelid

EARS
- Ringing in ears
- Petechiae on earlobe(s)
- Bruising behind the ear
- Bleeding in the ear

FACE
- Petechiae (teal/pink dots/gray) on face
- Scratches marks
- Facial drooping
- Swelling

MOUTH
- Bruising
- Swollen tongue
- Swollen lips
- Cutlurations
- Internal Petechiae

CHEST
- Chest pain
- Redness
- Scratch marks
- Bruising
- Airtrone

NECK
- Redness
- Scratch marks
- Finger nail impressions
- Bruising (hump or flanges)
- Swelling
- Ligature Marks

VOICE & THROAT CHANGES
- Hoarse or hoarse voice
- Coughing
- Unable to speak
- Trouble swallowing
- Painful to swallow
- Clearing the throat

BREATHING CHANGES
- Difficulty breathing
- Respiratory distress
- Unable to breathe


www.strangulationtraininginstitute.com

Graphics by Yasmin Asema
If there are no visible injuries
was the strangulation really life threatening?

YES

Many autopsies of victims who died of strangulation have shown internal injuries that were not visible on the outside of the body.
Long Term Health Risks

Delayed fatality or disability can include:

- Stroke (immediately or delayed).
- Carotid artery dissection
- Anoxic brain injury
- Unilateral weakness
- Pneumonia
- Lung injury
- Miscarriage
- PTSD
- Suicide
Progression of Strangulation

Consciousness
Pressure is applied to the neck

Unconsciousness
If pressure is released, consciousness can be regained in 10 seconds.
After 50 seconds- "The Point of No Return" (the bounce-back reflexes may fail)

Death
Without resuscitation after the ‘point of no return’,
Brain death will occur in 4-5 minutes.
What is the Victim’s experience?

- **Disbelief**: Dizzy, stunned, disoriented.

- **Realization**: The victim realizes that they are losing their air and blood supply. Often they think of family & children. • Sees stars/spots, vision narrows

- **Primal Reaction**: The victim fights with whatever means is available to get air and blood flow back.

- **Resignation**: The victim gives up, feeling s/he can do nothing and goes limp.

- **Unconsciousness**: Involuntary urination, defecation, or seizure. Recovery or Death.
Terror and Pain

What did you think was going to happen?

“I thought I was going to die.”

“I thought he was never going to stop.”

“The last thing I did was look away from him.”

“This is how I’m going to die.”
Strangulation is terrorizing

“Non Fatal strangulation might well be the domestic violence equivalent of water boarding.”

Casey Gwinn, Esq., CEO of Alliance for Hope

- Both can leave few marks
- Both cause the same feeling of primal panic
- Can result in loss of consciousness
- Used to assert dominance and authority
- Create intense fear
- Can potentially result in death
- Can be used repeatedly
Anoxic Brain Injury + Trauma Response + Ongoing Social Stressors

Short term effects can include:

• Memory deficits (31% have ongoing difficulty)
• Suicidal ideation
• Poor concentration
• Disrupted sleep
• Chronic headaches
• Depression
• Anxiety
• Substance Abuse

Long term Symptoms can include:

Psychosis
Amnesia
Changes in personality
Progressive dementia
Minimizing the Risk

The possible lethality of Strangulation is often minimized by:

- Victims
- Law enforcement dispatchers
- Officers
- Medical Providers

They may not have the training to realize the danger or recognize the symptoms.

“He didn’t really choke me, he just had me in a headlock and I couldn’t breathe.”

Only 3% of Victims seek Medical Help
EVERYONE who works with victims of interpersonal violence and child maltreatment needs to be trained in Trauma informed interviewing and assessment for strangulation.
Trauma informed interviewing

Interested, concerned, empathetic, non-judgemental

- Acknowledge the trauma
- What are you able to tell me about your experience or where do you want to begin?
- Are you able to tell me more? Tell me more about... Help me understand more about...
- What were your thoughts before, during, and afterwards?
- What were your feelings during this experience? (physically, emotionally)
- What was the most difficult part?
- What can’t you forget?
- What did you see? Smell? Hear?

Trauma informed interviewing,
Casey Gwinn, Esq. www.strangulationtraininginstitute.com
Strangulation as a predictor of lethal violence

“The most dangerous DV offenders strangle their victims. The most violent rapists strangle their victims. We used to think all abusers were equal. They are not. Our research has now made clear that when a man puts his hands around a woman’s neck, he has just said, “I’m a killer.” They are more likely to kill police officers, to kill children, and to later kill their partners. So when you hear “He choked me”, now we know you are on the edge of a homicide.”

Casey Gwinn, President
Family Justice Center
In a 2013 study by the DA of Riverside County:

From 1993-2013

50% of the police officers who were murdered were killed by a criminal suspect with a public records history of strangulation assault against a woman in a current or prior relationship.
Assess for strangulation in therapy

- When BHS Clinicians assess for DV/IPV at intake, assess for strangulation as part of the abuse.

- Help your client understand the dangers of anoxic insults to the brain and the increased lethality risk.

- Identify victims needing immediate medical attention and refer to the hospital Emergency Department.
Questions/Comments

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