

# **Strangulation Assault Awareness**

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**Improving our  
response**



- **Vital structures of the neck infographic**

**I would like to gratefully acknowledge the Alliance for HOPE International, Gael Strack, Esq., and many others, for allowing the reproduction, in part or in whole, of the works mentioned to the left and exhibited in this presentation. The documents were accessed through the online Resource Library hosted by the Training Institute on Strangulation Prevention or obtained from the Training Institute staff.**

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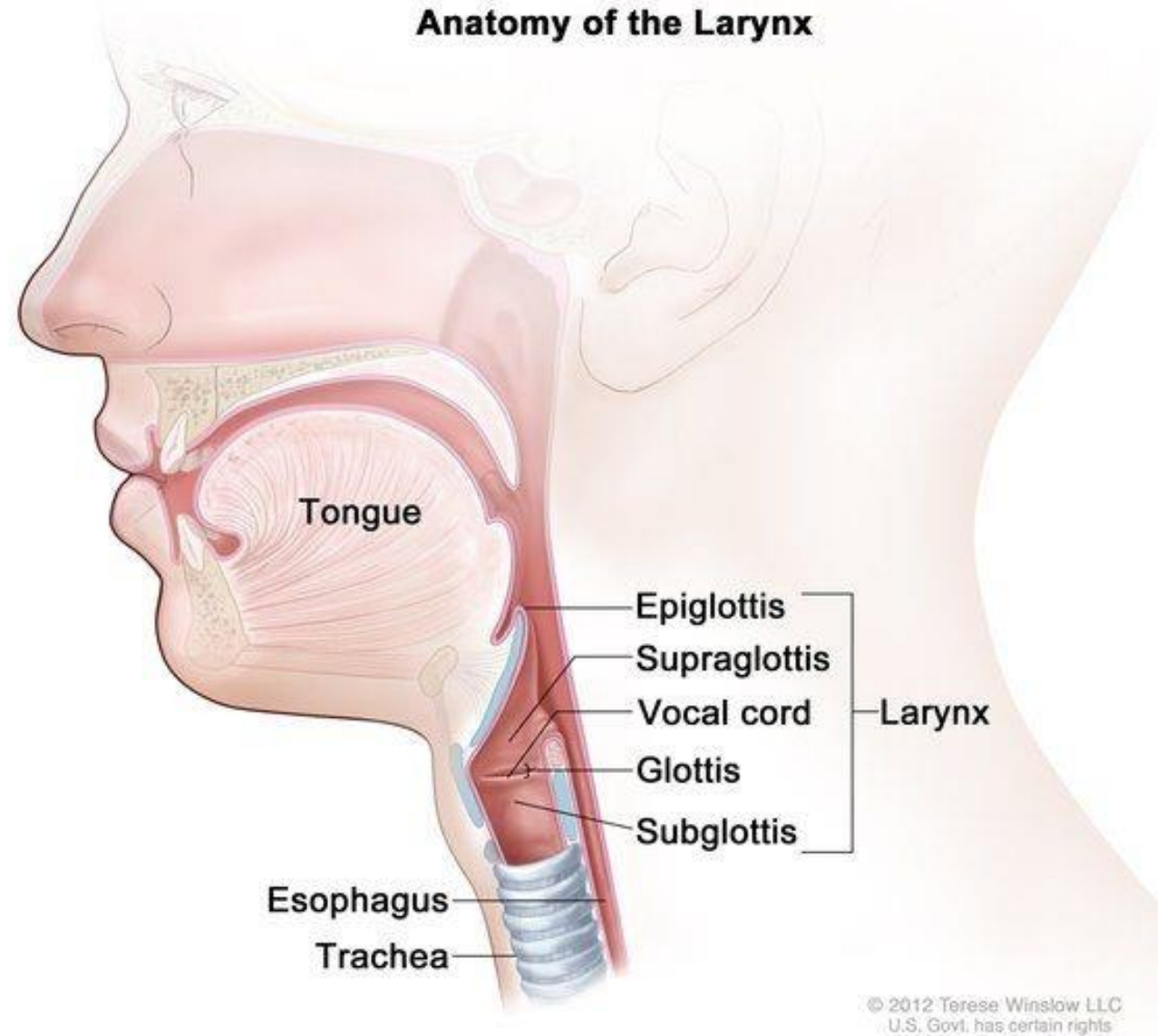
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# Overview

- **Choking**
- **Strangulation**
  - **Manual**
  - **Ligature**
- **Important structures of the neck**
- **Signs and Symptoms**
- **Improved responses**

# Choking

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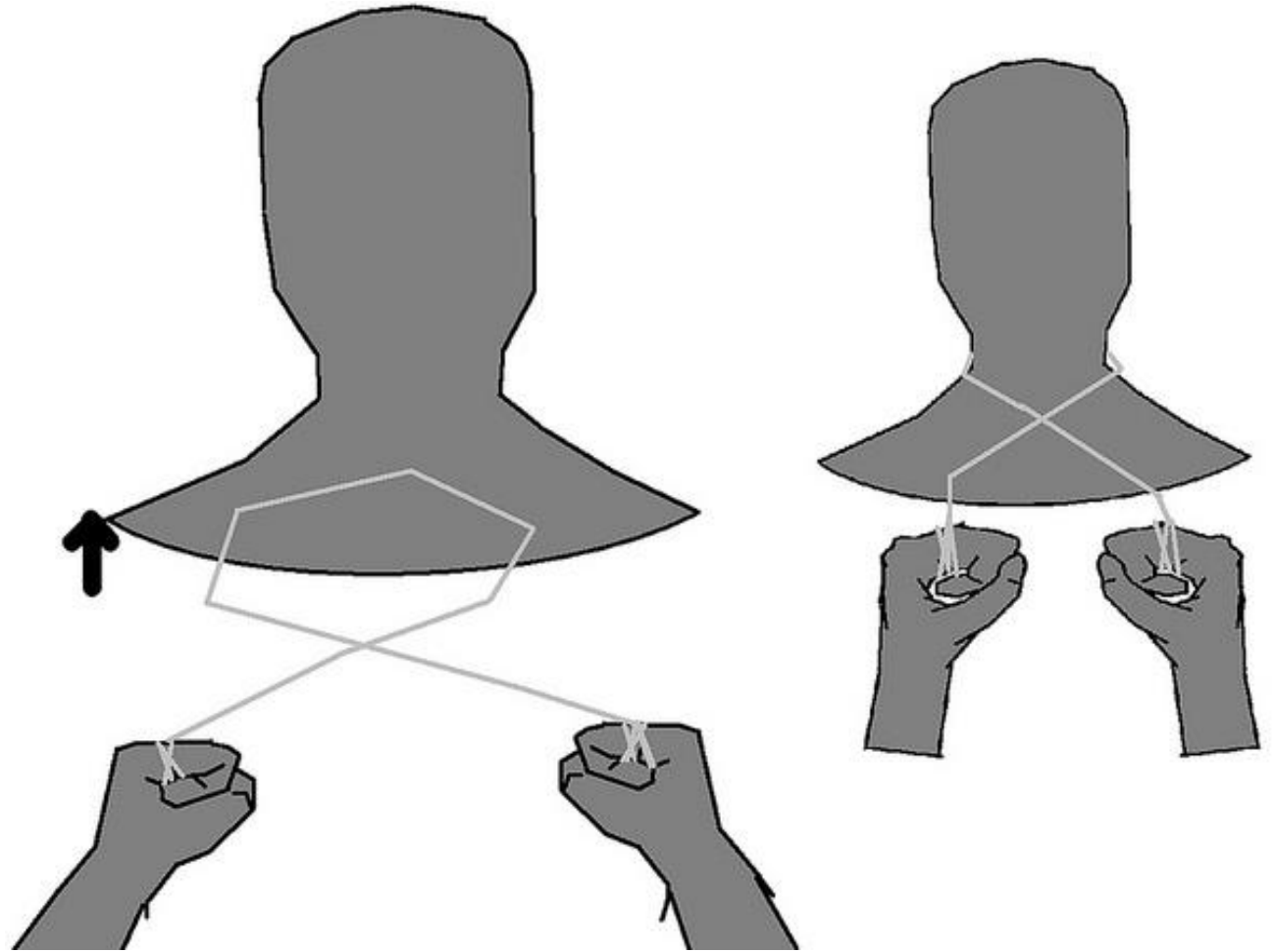
# Manual Strangulation

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# Ligature Strangulation

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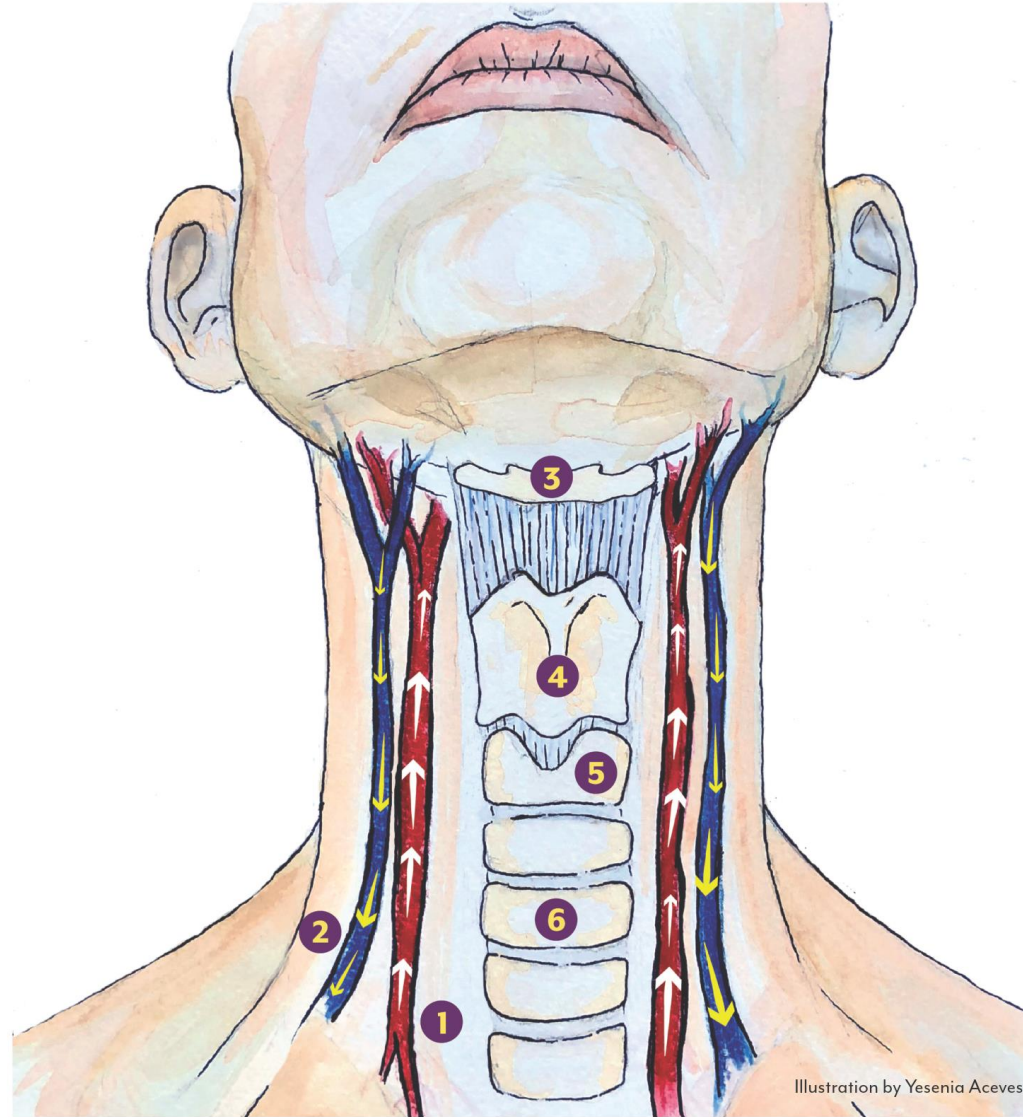


# Vital structures of the neck

Carotid  
artery

Jugular  
vein

Trachea



1 Carotid Artery

3 Hyoid Bone

5 Cricoid Cartilage

2 Jugular Vein

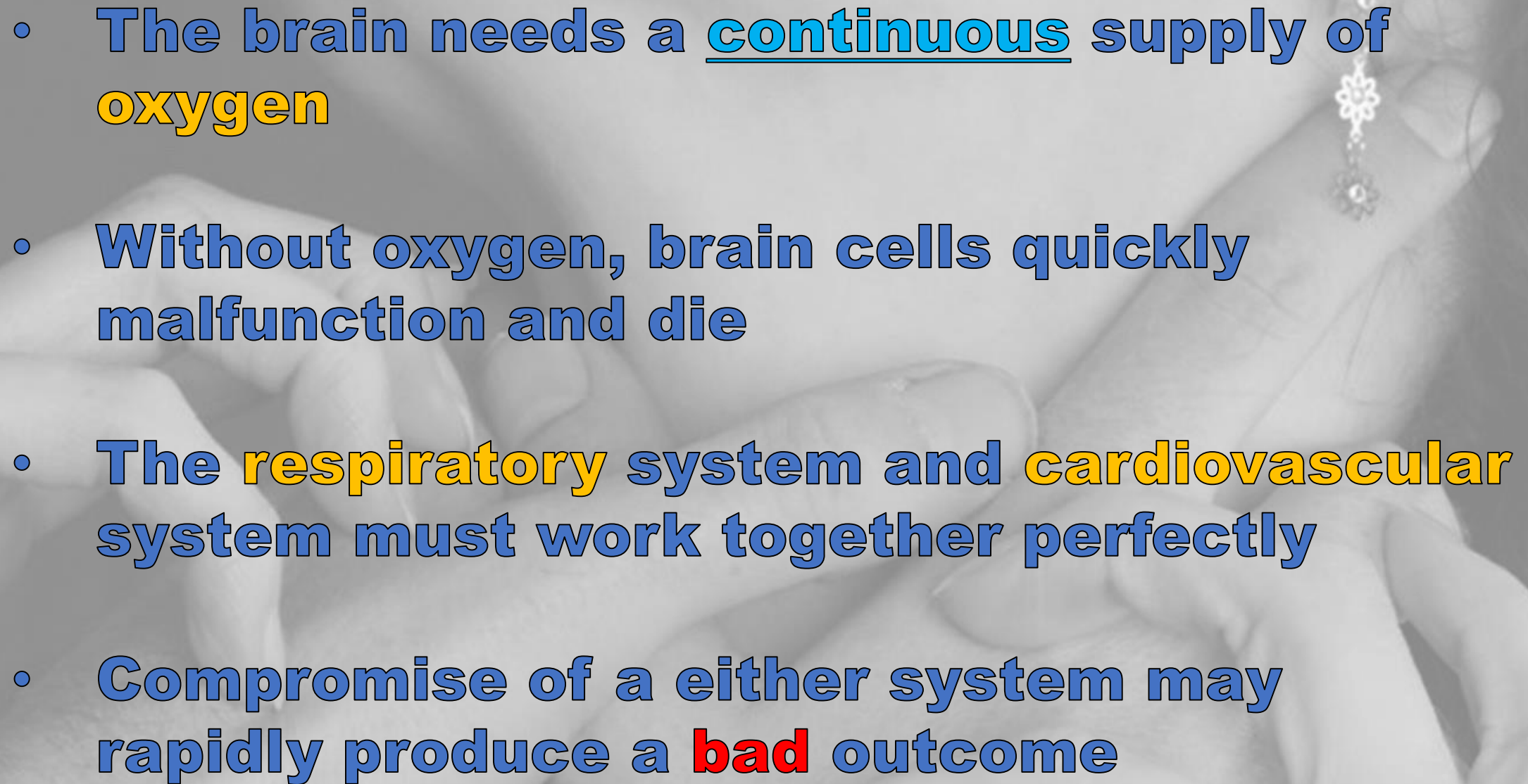
4 Thyroid Cartilage

6 Tracheal Rings



# **A Brief Medical Overview**



- 
- The brain needs a continuous supply of oxygen
  - Without oxygen, brain cells quickly malfunction and die
  - The respiratory system and cardiovascular system must work together perfectly
  - Compromise of a either system may rapidly produce a bad outcome



## Signs and Symptoms

**Signs** – what the officer is able to observe

**Symptoms** – what the victim reports they are experiencing



## Signs and Symptoms

### San Diego DA Case Study:

- **50% of cases - no visible sign/injury**
- **35% of cases - slightly visible sign/injury**
- **15% of cases - clearly visible sign/injury**

Hawley, D. A., McClane, G. E., & Strack, G. B. (2001, 10). A review of 300 attempted strangulation cases part III: Injuries in fatal cases. *The Journal of Emergency Medicine*, 21(3), 317-322. doi:10.1016/s0736-4679(01)00401-2



**Content  
Warning**

# Signs of Strangulation





# Strangulation injuries

- **Redness**
- **Bruising**
- **Scratch marks**
- **Abrasions**
- **Swelling**
- **Drooping eyelid/face**

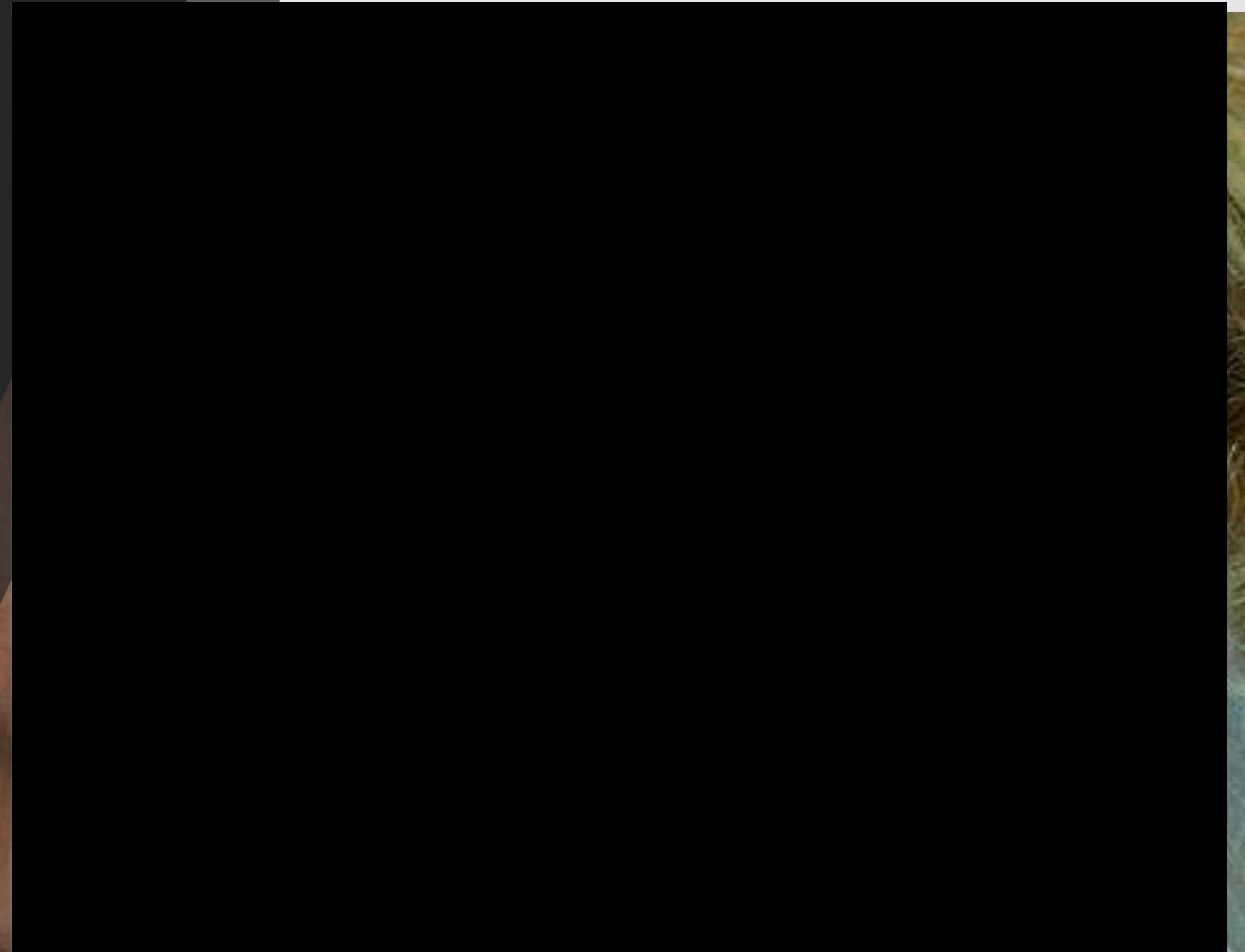


# **Strangulation injuries**

- **Ligature patterns**
- **Swollen tongue/lips**
- **Bleeding - nose/ears**
- **Unexplained bumps on head**

# Signs: Head

- **Bruising behind ear**
- **Bleeding in ear**
- **Petechiae**
- **Bumps on head**
- **Facial droop**



# **Petechial hemorrhage**

- **1 - 2 mm in diameter**
- **Will not blanch**
- **Cannot be palpated**
- **Occur in a “geographic” pattern**
- **Eyes, ears, nose, inside mouth, scalp**



# Subconjunctival hemorrhage

- **Visible in “whites” of eyes**
- **Can be seen in conjunction with petechial hemorrhage**
- **Usually painless**



Source: K.J. Knoop, L.B. Stack, A.B. Storrow, R.J. Thurman:  
The Atlas of Emergency Medicine, 4th Edition,  
[www.accessemergencymedicine](http://www.accessemergencymedicine)  
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# **Symptoms of Strangulation**

**I would always remember soreness and bruises on my neck. [My neck] would be sore for four or five days.**

**- Survivor**

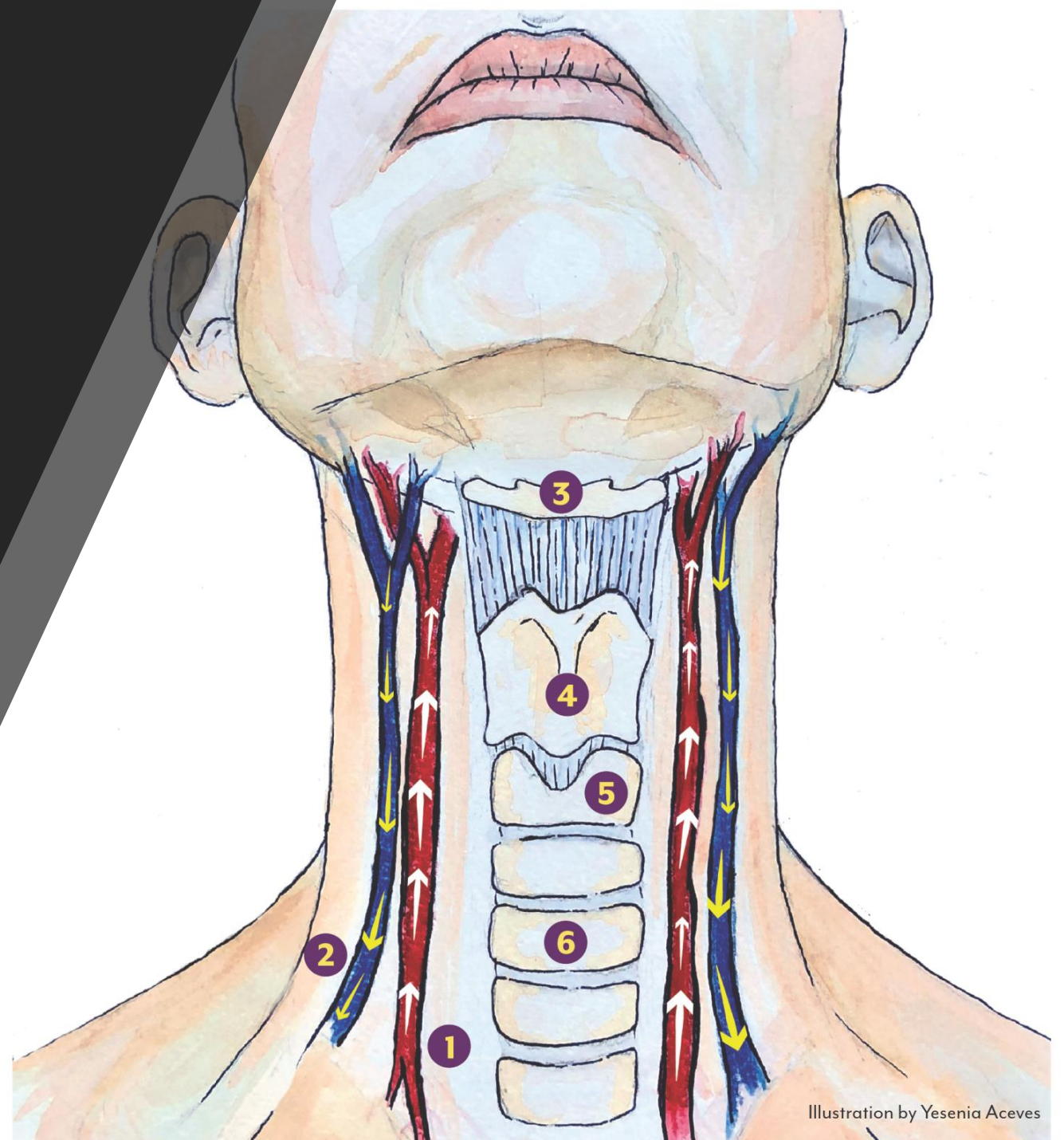
# Neurological

- **Memory loss**
- **Loss of consciousness**
- **Weakness, dizziness**
- **Incontinence**
- **Vomiting**
- **Headaches**



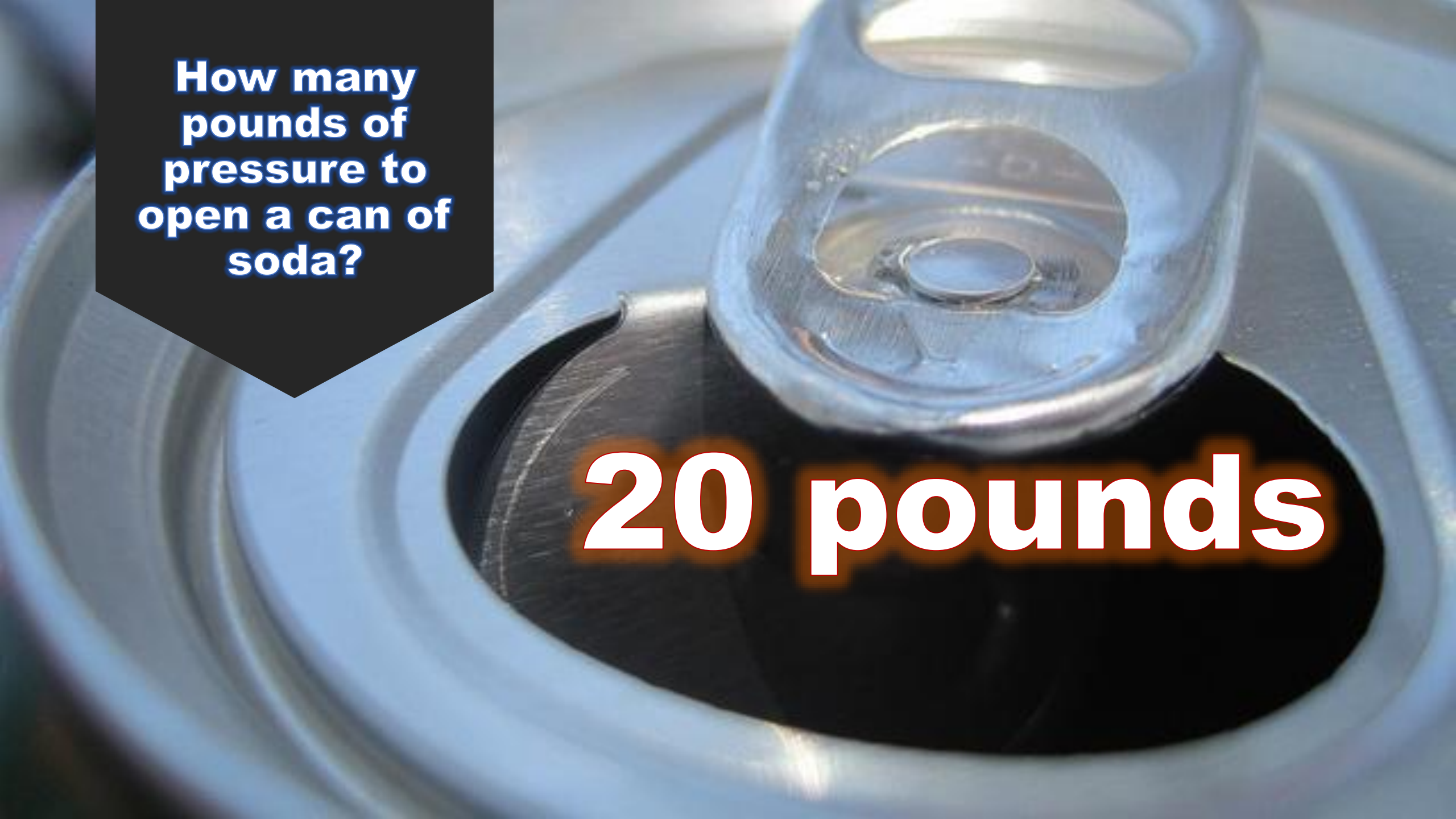
# Voice and throat

- **Raspy/hoarse voice**
- **Unable to speak**
- **Painful/difficult swallowing**
- **Sore throat**
- **Stridor**






Unconsciousness, fractured trachea/larynx, internal bleeding, artery damage, dizziness, nausea, sore throat, voice changes, throat and lung injuries, swelling of the neck, breathing and swallowing problems, ringing in the ears, vision change, miscarriage, facial droop, eyelid droop, right side weakness, loss of sensation, loss of memory, paralysis, psychological injuries, PTSD, depression, suicidal ideation, memory problems, nightmares, anxiety, severe stress reaction, amnesia, psychosis, delayed fatality, carotid artery dissection, respiratory complications, pneumonia, blood clots. **DEATH.**



**How many  
pounds of  
pressure to  
open a can of  
soda?**

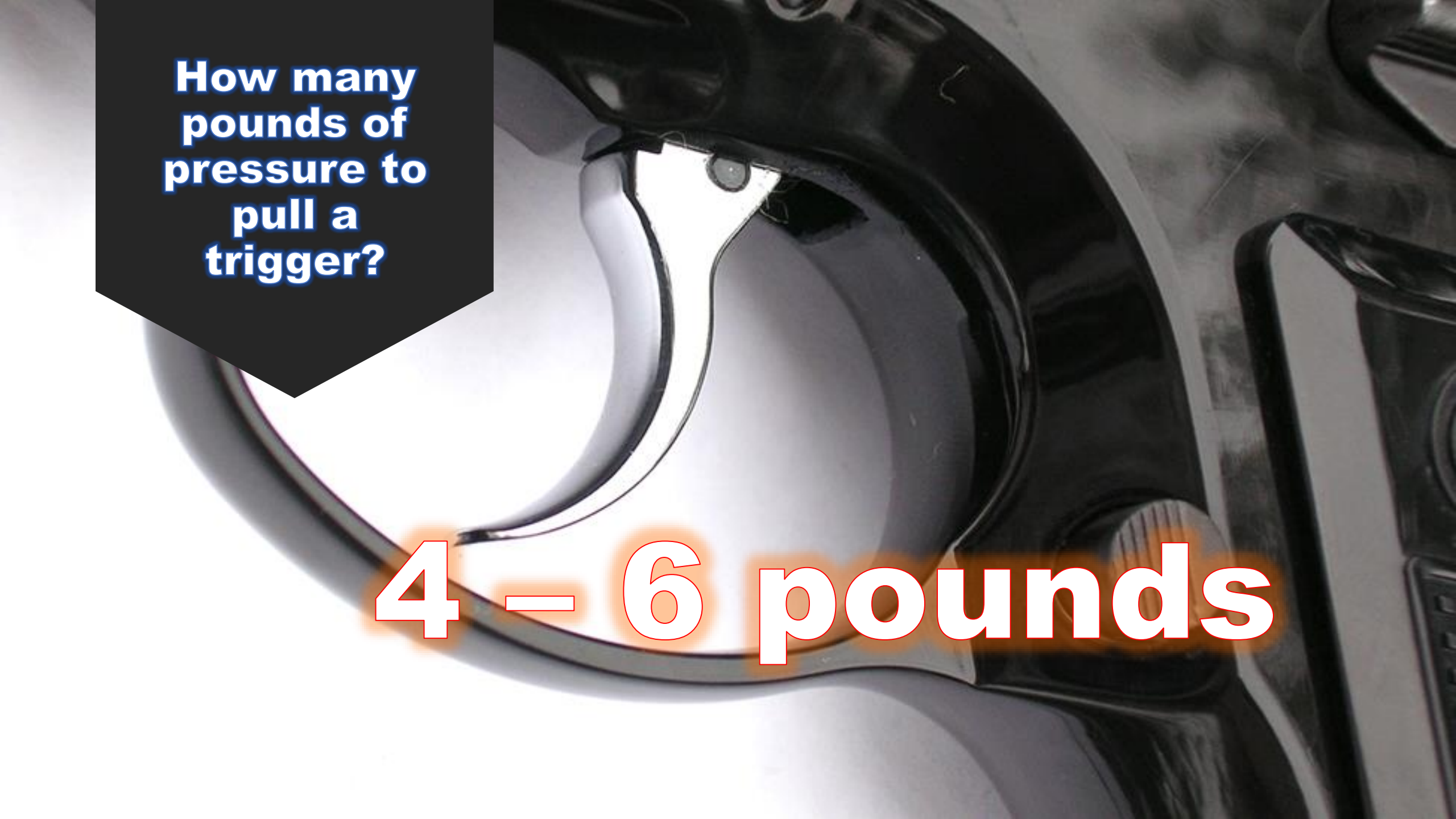
**20 pounds**





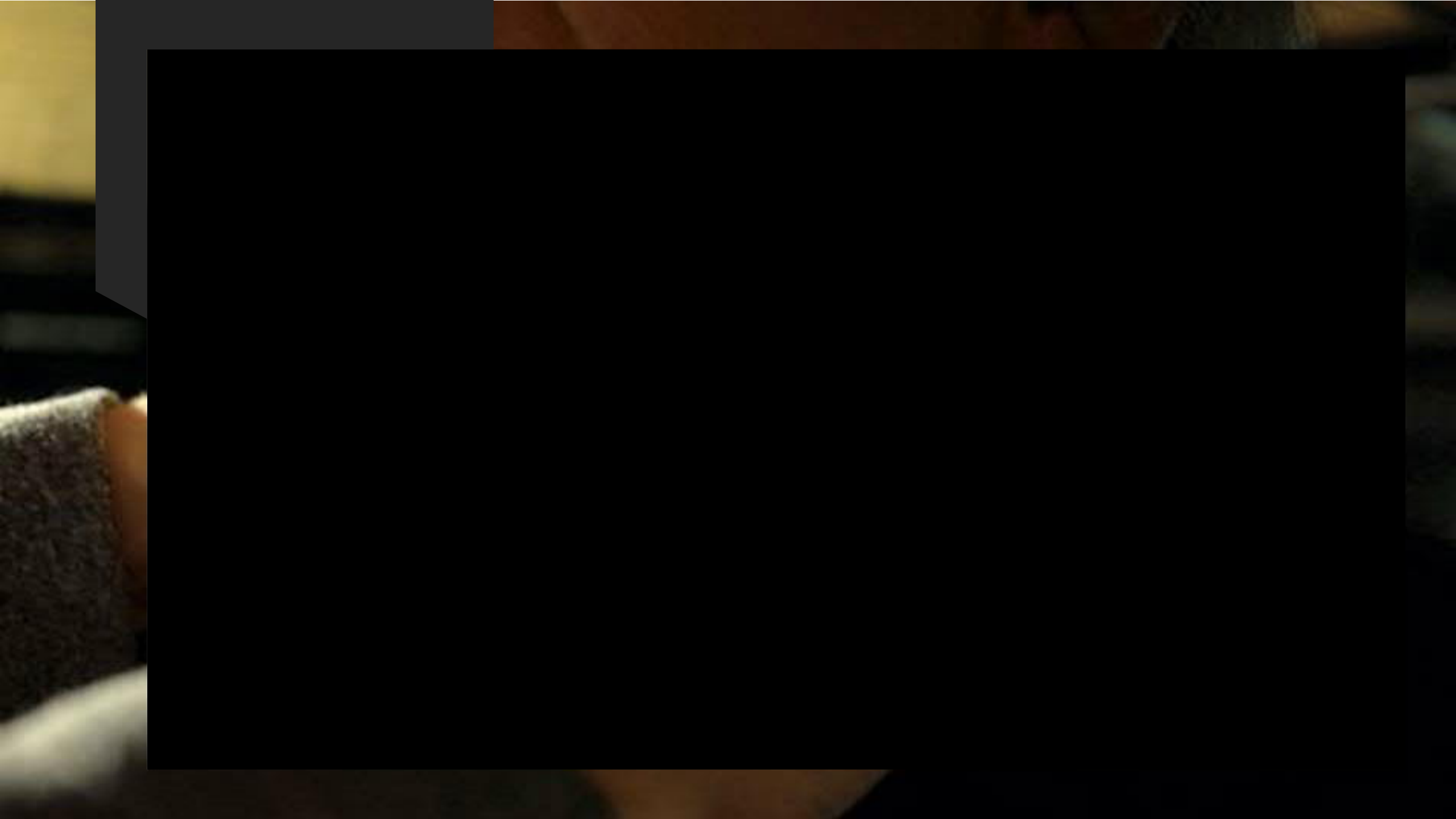
**How many  
pounds of  
pressure for  
a handshake?**

**60 – 80 pounds**

A close-up photograph of a handgun's trigger mechanism. The trigger is a curved, metallic piece with a small notch at the tip. It is surrounded by a dark, polished metal housing. The background is slightly blurred, showing other parts of the firearm.

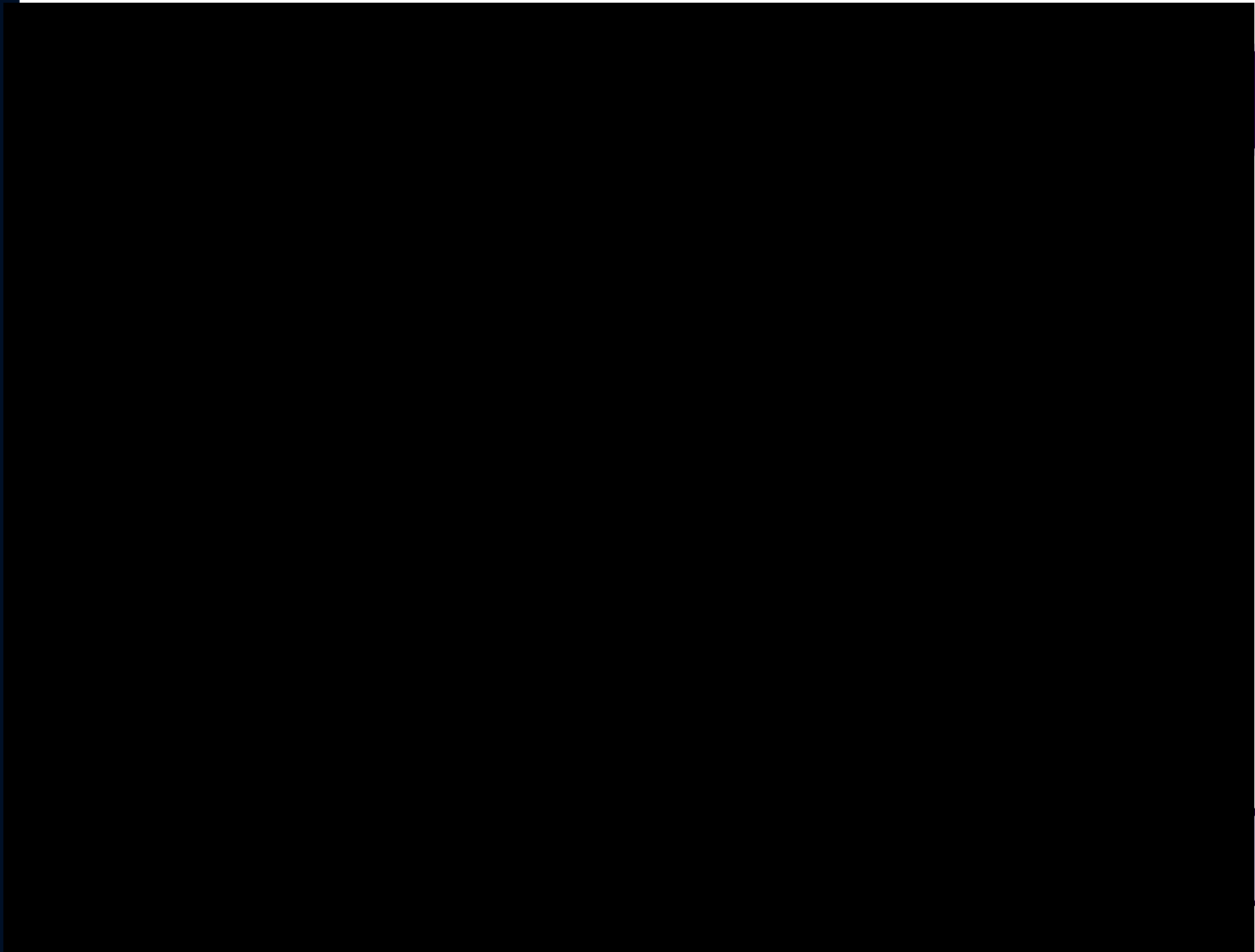
**How many  
pounds of  
pressure to  
pull a  
trigger?**

**4 – 6 pounds**





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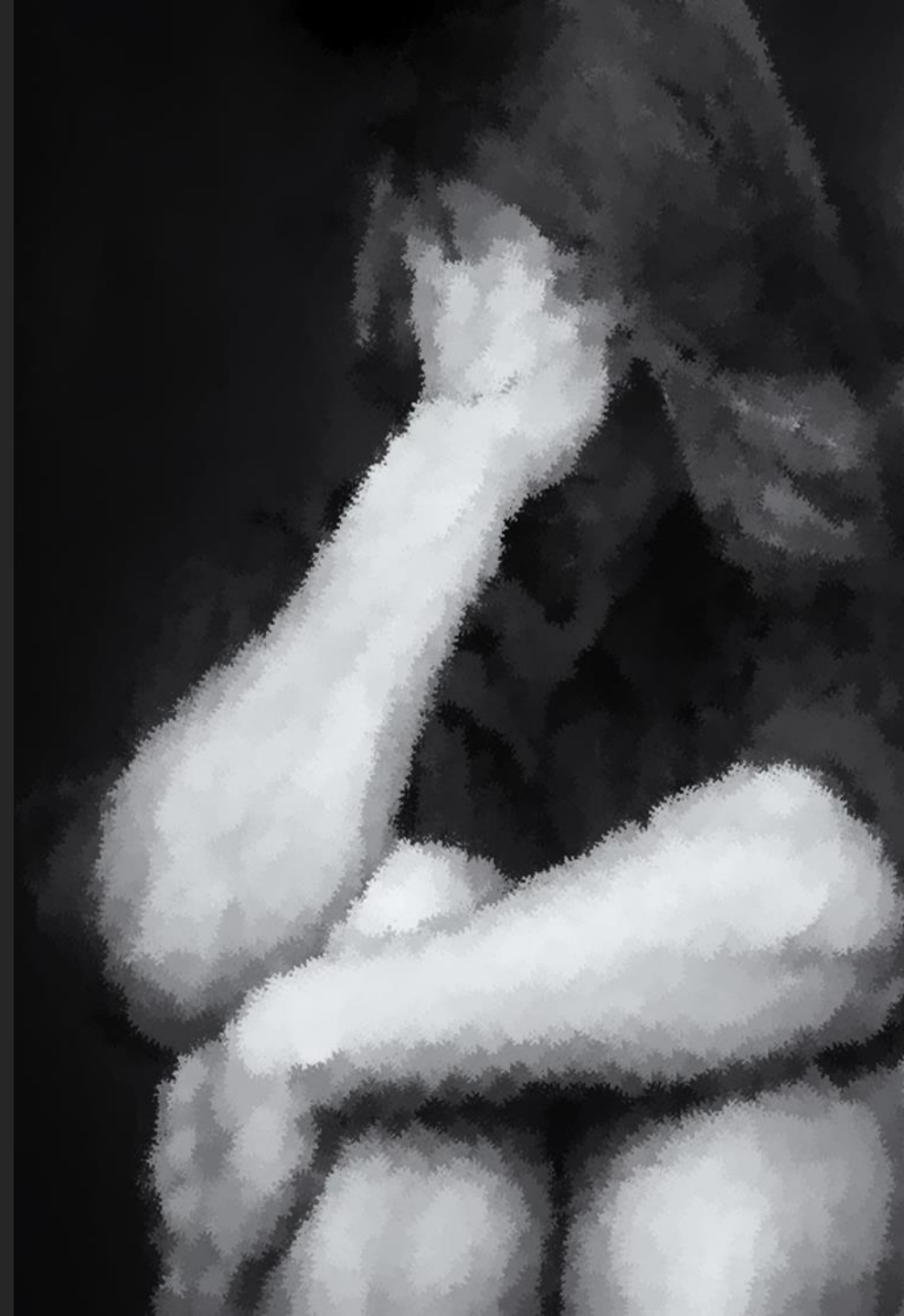


# **Strangulation is DANGEROUS**

- **Strangulation can kill minutes, hours, or days after the event**
- **Victims are **750%** more likely to be killed by their abuser**
- **Abusers who strangle are more likely to have deadly confrontations with their families, law enforcement, and the public.**

# Improved Investigations

- **Strangulation investigation card and form**
- **Trauma**-informed interviews
- **911 calls**
- **Photography**
- **Medical evaluations/records**
- **Follow-up photography and voice recordings**





# Improved Victim Safety

- **Call EMS if any sign/symptoms are present**
- **Develop relationships with your medical providers and educate them.**

# Questions

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