

# Health Issues Associated with Pill Injection

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# Pill injection

- Injecting pills can lead to a unique set of health issues including :
  - chalk lung (talcosis)
  - cotton fever
  - abscesses, cellulitis
  - necrotizing fasciatis
  - embolism – heart attack, stroke, pulmonary embolism
  - endocarditis

# Talcosis

- “Talc particles cause extensive organ damage, predominately in the lungs. It also causes irreversible damage to heart and other vital organs by direct and indirect mechanisms”

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# Talcosis

- When pills are not filtered, particles of chalk found in the pills will enter the bloodstream and lodge themselves in the alveoli of the lung, making it difficult for oxygen to be exchanged for carbon dioxide.
- The lungs become stiff and fibrotic
- Called chalk lung

# Talcosis

- Symptoms (lung) – shortness of breath – often gets worse as time goes on and happens with less and less exertion, cough, wheeze
- Over time with continued inadequate filtering, breathing becomes increasingly difficult leading to the need for supplemental oxygen.

# Talcosis

- Often misdiagnosed as asthma, bronchitis, or emphysema
- Talc can also affect heart tissue. 40% of people with chalk lung also have deposits in the back of their eye (retinopathy) and possibly other sensitive blood vessels.

# Cotton fever

- The cause of the condition is believed to be endotoxin shed by the bacteria *Enterobacter agglutrans*, which lives on cotton plants. A condition very similar to cotton fever was described in the 18th century among cotton-mill workers. The term *cotton fever* was coined in 1975 after the syndrome was recognized in intravenous drug users.

# Cotton fever

- However, some sources have attributed the symptoms of cotton fever with simple infection caused by unsafe and unsanitary drug injection practices. This is borne out by the fact cotton fever occurs in equal spread with all injectable drug users, irrespective of if they used cotton as a filter or not.

# Cotton fever

- Other theories include accidentally injecting cotton fibers into the blood stream. Other proposed causes include dirt and fiberglass in cigarette filters.

# Cotton fever

Symptoms include –

- Chills
- Hot flashes
- Fever - 38.5–40.3 °C within the first hour
- Uncontrollable shaking
- Headaches
- Nausea
- Vomiting
- Shortness of breath

# Cotton fever

- The symptoms occur immediately or soon after an injection. Cotton fever will usually resolve itself within a few hours to a day with no medical intervention, but a fever that persists needs attention.

# Abscesses, Cellulitis

- All occur because germs end up under the skin. Can be caused by any germ including Group A strept, MRSA etc.
- Abscesses become pus-filled boils
- Often need to be drained, ideally by a doc. Many need antibiotics
- Cellulitis presents with brilliant red, hot skin usually with distinct lines.
- Often need IV antibiotics

# Necrotizing Fasciitis (flesh-eating disease)

- Affects the deeper tissues and rapidly progresses
- People develop fever and become ill very quickly
- Red, swollen, hot skin
- Skin may become violet in colour and develop blisters
- Often have vomiting and diarrhoea

# Necrotizing Fasciitis

- Draw a line in ink around the redness and write the date and time
- If symptoms are evident, suggest/beg/plead for the person to go to a ER or a physician
- Can lead to amputation or death if untreated

# Embolism

- A clot, or chunk of pill can move and lodge itself in the heart, brain, or lungs. Can have serious consequences – heart attack, stroke, pulmonary embolism

# Myocardial Infarction

- Sudden chest pain (typically radiating to the left arm or left side of the neck), shortness of breath, nausea, vomiting, palpitations, sweating, and anxiety (often described as a sense of impending doom). Women may experience fewer typical symptoms than men, most commonly shortness of breath, weakness, a feeling of indigestion, and fatigue. Approximately one quarter of all myocardial infarctions are "silent", without chest pain or other symptoms.

# Stroke

- Stroke symptoms typically start suddenly, over seconds to minutes
- the symptoms depend on the area of the brain affected
- Maybe muscle weakness of the face and/or limbs, numbness, decreased sensation, visual disturbances, drooping eyelids etc.

# Pulmonary Embolism

- Occurs when a blockage happens to a main artery of the lung or one of its branches
- Symptoms include difficulty breathing, chest pain on inspiration, bluish skin, rapid breathing, and a rapid heart rate
- Severe cases can lead to collapse, abnormally low blood pressure, and sudden death

# Endocarditis

- An inflammation of the inner lining of the heart, usually involves the valves. Vegetations (a mass of platelets, fibrin, microcolonies of germs) grow on the valves. There is little blood supply to the valves so antibiotics are less effective
- Fever, chills, fatigue, aching joints and muscles, night sweats, shortness of breath, paleness, persistent cough, swelling in your feet, legs or abdomen
- People need IV antibiotics and can be hospitalized for months

# Questions?

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11<sup>th</sup> Alberta Harm Reduction Conference June 1  
and 2. CATIE satellite training day May 31

[www.albertaharmreduction.ca](http://www.albertaharmreduction.ca)