

History, Medicine through time

Lesson 27 of 30

Worksheet:

What medical conditions were there on the Western Front?

Miss Holland



Conditions in the trenches

When both sides began to dig trenches, the Germans got the advantage with higher ground, meaning the British trenches were lower in the ground and therefore often waterlogged and muddy and would become flooded when it rained. It also made trenches more difficult to dig and trenches could collapse in on themselves.

One of the health issues that was caused by the poor conditions was **dysentery**. Contaminated water and a lack of sanitation in the trenches were the main causes of this illness.

The trenches were also infested with rats and lice. Rats were attracted by the corpses left on the ground and the food stored in the trenches. Most soldier's clothes were lined with lice and lice eggs which were incredibly itchy and nearly impossible to get rid of completely.



Trench foot

Trench foot was caused by standing in the waterlogged trenches for long and the tight boots worn by soldiers that restricted blood flow. This led to swelling of the feet and when the condition developed, it could lead to **gangrene** which is when the flesh began to die and turn black. Once gangrene had set in, this would often have to be treated with amputation to stop it from spreading.

Trench foot was a huge problem for the British Army; they tried to prevent it by ordering every man to have 3 pairs of socks, change them twice a day and rub **whale oil** on their feet to act as a waterproof layer and protect them.



Trench fever

Trench fever was an illness spread by lice living on soldier's clothes and caused flu-like symptoms. Common symptoms included headaches, a high temperature, aches in the joints and muscles, and a rash.

Trench fever didn't kill, so arguably not as serious as other medical conditions. However, it was still a big problem for the British Army because it affected so many men and those with trench fever were often unfit to fight and could spend up to a month in hospital recovering.

Men tried to pick out the lice or even burn them using a candle. The Army did try to prevent the spread of trench fever by disinfecting soldiers' clothing once they came out of the trench lines. They set up **delousing stations** and although numbers did decrease, it remained a big problem.



Shell shock

Shell shock was a psychological condition caused by the nature of trench warfare; the artillery bombardments, witnessing horrific injuries, the food, the lice. Symptoms of shell shock could range from headaches and nightmares to shaking, loss of speech and complete mental breakdowns. Depending of the severity of the case, it could take months or even years for men to recover.

At first, shell shock was view by some as cowardice and around **300** men were shot as a punishment. This shows that the condition was not well understood, the army even thought it was contagious. However, many men were sent to hospitals to recover.

It is estimated that around **80,000** men suffered from shell shock during the First World War.



Injuries from bullets and explosions

Soldiers were faced with the danger of death or serious injuries from a range of explosives and bullets:

- Most injuries were caused by exploding shells which could kill or cause a loss of limb, major internal damage and rapid blood loss
- Bullets from rifles and machine guns could break major bones and pierce internal organs and the impact could destroy tissue around the actual point of impact.
- **Shrapnel** was very dangerous and caused serious injury. It could also be very small, and so hard to find in the body.
- There were high numbers of head injuries and fatalities from head injuries at the start of the war. To combat this, the army brought in **Brodie helmets** which were in 1915 for British troops. This made a difference at reduced fatalities from head injuries by as much as 80%; but soldiers still suffered from facial injuries.



Wound infection

Wounds from shrapnel and bullets could easily become infected in the trenches. The soil had been farmland with fertiliser and the soil that went into wounds contained microscopic amounts of manure. Shrapnel and bullets carried this material, as well as pieces of dirty clothing, into wounds which led to dangerous infections.

Infections like **gas gangrene** developed quickly, so when injured soldiers were left laying in the mud in no-man's-land, there was a high risk of death from infection. Medical accounts describe wounds hugely swollen which turned white, then green and made a bubbling sound when pressed.

Tetanus was another type of infection that could be caused by the bacteria in the soils. By 1914, there were anti-tetanus injections, but no cure for gas gangrene.



Gas attacks

Gas attacks were a huge source of fear for soldiers in the trenches. When gas attacks first began, they could cause little injury as soldiers protected themselves by holding a urine-soaked pad to their faces.

However by **1915**, gas masks and respirators were introduced and gas attacks were not a major cause of death.

The main types of gas used were:

- **Chlorine gas** - First used by the Germans in 1915, it irritated the lungs causing soldiers to cough. It could also kill by suffocation, depending on how much gas was inhaled.
- **Phosgene gas** - This had similar effects to chlorine gas but was faster acting and could kill a soldier in 2 days.
- **Mustard gas** - This was the most dangerous gas that took 12 hours to take effect. It caused both external and internal blistering and ate away at the flesh and could cause blindness. It could take soldiers weeks to die from mustard gas poisoning. It also clung to clothes, making it dangerous for those treating soldiers too.



Glossary

- **Brodie helmets** - Steel helmet with chin strap
- **Dysentery** - Severe diarrhea
- **Gas gangrene** - A severe infection, wounds became swollen swollen, turned white, then green and made a bubbling sound when pressed (hence the name gas gangrene).
- **Shrapnel** - Fragments of metal inside a hollow shell casing that would scatter on explosion.



Comprehension and source Questions

1. Can you describe 2 conditions faced by soldiers as a result of the conditions in the trenches?
2. Can you describe 2 conditions faced by soldiers as a result of the weapons on the Western Front?
3. Explain 2 ways the British Army tried to prevent the medical problems we have studied today.
4. Read source B. Write down 2 things you can learn about medical conditions on the Western Front and support each with a quote.
5. Challenge question: Why is source B useful for finding out about medical conditions on the Western Front? **HINT**: Remember the questions from the source practice.
 - **What does Source B tell you about medical conditions on the Western Front?**
 - **How can you support source B with your own knowledge?**
 - **Where does the source come from and how does this affect the usefulness of the source?**

