KEY WW1 BATTLES:

From 1914–18, the Allies fought the German imperial army on the Western Front (land bordering France & Belgium) where trenches were built before no man's land.

July 1916: Battle of the Somme, worse day in British military history with 60,000 deaths due to British attempt to break through enemy lines

1917: Mines were built at Arras & Ypres to break through enemy lines, at the Ypres salient there were 200,000 British casualties & 300 deceased medical officers

April 1917: Battle at Calais (allies broke German defences using tanks), the 1st blood bank was set up there

Trenches: protected soldiers from enemy attacks with features e.g. barbed wire, sandbags & no mans land



TRENCH ORGANISATION:

Trench types:

Front line, Supervision trenches, Support trenches, Reserve trenches = in zig zag arrangements; rough terrain meant this arrangement was the IDEAL for protection but trench maps show more complicated designs

Underground warfare:

Both sides were tunnelled under no mans land, the allies built a tunnel network under Arras in 1917 (had electricity, heating & accommodation) but mine was blown up, causing 150,000 British casualties Messiness battle: 1917, mines were blown up to recalibrate Hill 60, instant death of 100,000 Germans was caused

Trench maps: Realistic, have bird-eye views but machine guns were purposefully hidden

Terrain:

Shelling & entrenchment meant terrain was hard to navigate across especially in the carrying of stretcher bearers at night in the midst of bullets being shot, making the job dangerous & delaying treatment of the wounded= increase mortality rates





RAMC:

Ran ambulances & set up mobile medical stations (included teams of: stretcher bearers, wagons, carts + motor ambulances in 1915.)

Chain of evacuation system:

Regimental aid posts gave 1st aid on front lines & casualty clearing stations were used for surgeries, advanced dressing stations collected the injured, base hospitals admitted up to 400 patients.

FANY:

Field ambulance team who gave 1st aid & treated the wounded, specialising in setting up transportation networks, accommodation + entertainment in trenches.



TRENCH CONDITIONS:

Frostbite was common, trench foot caused gangrene to develop (required amputations), dysentery was common & vermin spread disease

GAS ATTACKS: Tear gas: 1914 (blindness) Chlorine gas: 1915 (suffocation) Mustard gas: 1917 (a blistering agent)



Shell shock (PTSD) became awfully common upon a soldier's return home, as a result of the emotional trauma endured during the war

WOUNDS & INJURIES:

Head injuries proved fatal, so the 1915 Brodie helmet was used to prevent skull fractures & shrapnel from piercing through flesh to render soldiers unconscious

Trenches were waterlogged, so wound infections were common, bodies were left to rot & mud was contaminated so many suffered from gangrene & tetanus infections. Treatment options: anti tetanus creams, carbolic lotion to clean wounds, amputations.



DEVELOPMENTS IN SURGERY & MEDICINE:

Depage treated infected wounds by: removing shrapnel, leaving wounds open & closing them after applying antiseptic.

Fracture treatment:

UK had 528 x-ray units (14 were mobile), Thomas Splints were strapped around legs to stabilise them (preventing infection & further tissue damage) which lead to death rates from injuries decreasing by 60%!!

Blood transfusions:

Direct transfusions were slow so syringe-cannula techniques were developed (blood taken from donors & injected into victims.) 1917: 1st blood bank set up during the battle of Cambrai.





ANALYSIS:

War injuries & skyrocketing rates of infection during WW1 forced medical innovation to prevent casualties resulting in the deaths of British soldiers (seen drastically at the Battle of the Somme where 600,000 died.)

Trench organisation helped add extra lines of defence & protection.

Preventative measures e.g. the wearing of Brodie helmets & the stabilisation of bones with Thomas splints helped prevent further damage caused by shrapnel.

Mobile x-ray units and blood banks close to front line trenches decreased death rates as the RAMC could provide quicker medical care.

Overall, medical advancements made during WW1 helped support the recovery of injured soldiers on the front line, with the application of discoveries made in the industrial era e.g. the employment of Lister's aseptic techniques to reduce deaths from infection (with carbolic acid.)

