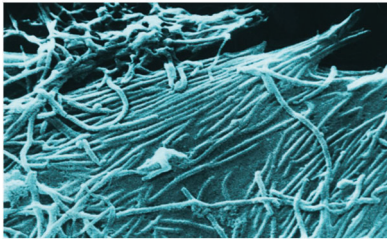


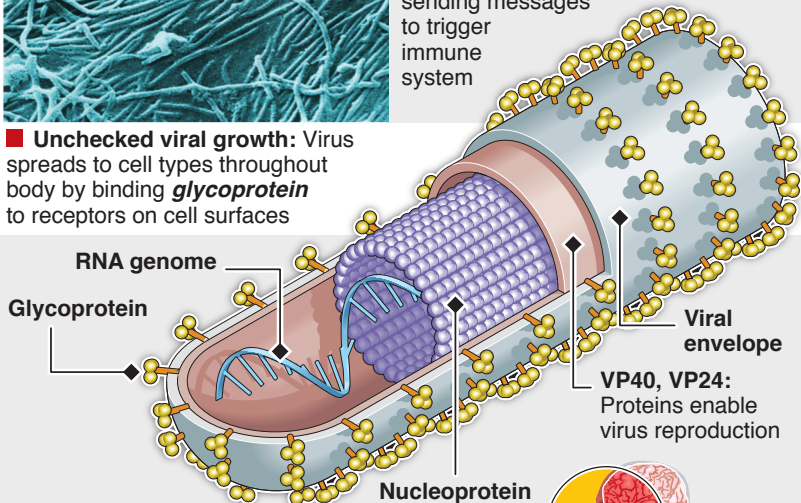
What makes Ebola so deadly

Ebola is a viral illness which infects through direct contact with blood or bodily fluids of a sick person or animal, or with contaminated objects. It leads to haemorrhage and organ failure and kills up to 90% of victims



■ **Infection:** Ebola genome contains four genes which together prevent **dendritic cells** – in skin, nose, lungs and digestive system – from sending messages to trigger immune system

■ **Unchecked viral growth:** Virus spreads to cell types throughout body by binding **glycoprotein** to receptors on cell surfaces

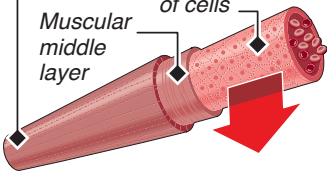


1. Symptoms: Onset of illness is abrupt and is characterized by fever, headache, joint and muscle aches, sore throat, red eyes, and weakness

2. Cytokine storm: Immune cells get caught in endless loop, releasing extreme levels of **cytokines** – proteins within cells which cause inflammation – and attracting yet more immune cells

Blood vessel

Outer layer
Inner coat of cells
Muscular middle layer



3. Septic shock: Infected cells detach from blood vessels, causing massive haemorrhage. Loss of blood leads to kidney and liver failure

