

Here's the virus particle with its envelope and proteins and genome. And you're going to see this represented as being within a pipette that's going to be dropped onto a petri dish containing human cells that are going to be susceptible to infection. Here's a blow up of a single cell. Keep your eye here, these are the cell surface receptors, here comes the virus part that's going to bind, here comes the disassembly stage. The genomes will in this case enter the nucleus, not all viruses have to do that, and now you see replication. Here comes the assembly reaction, and these cells are now capsids are going to now go to the cell surface and bud. So what we've just witnessed is a single cycle of viral infection, a single particle infects a single cell and gives rise to many progeny. On average, a hundred or so progeny per cell some viruses up to one thousand or even more.