

# First pre-pandemic vaccine to fight bird flu

The world's first wide-spectrum pre-pandemic vaccine against bird flu is intended for use in the early stages of a flu pandemic. Developed by GlaxoSmithKline, Prepandrix triggers an immune response to several strains of the H5N1 virus which could precipitate a human flu pandemic

**How H5N1 virus can mutate and infect humans**

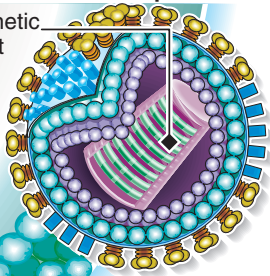


**Genome:** Virus has its genetic blueprint contained in eight segments of RNA (*ribonucleic acid*)

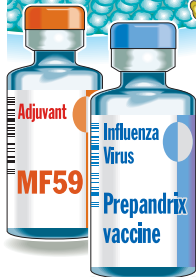
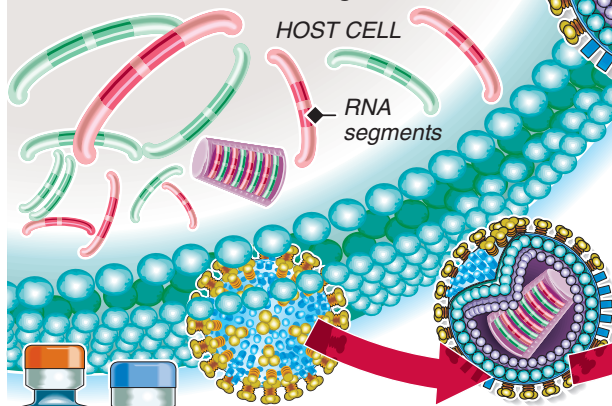
**When two different viral types infect same host cell RNA can reassort, creating new strain**

HOST CELL

RNA segments



New strain has potential to spread between humans



**Prepandrix vaccine uses special additive, an adjuvant, which allows very low dose of active ingredient to be used in each shot**

In trials, vaccine offered protection against four distinct H5N1 strains, Vietnam, 96%; Indonesia, 77%; Anhui (China), 75%; and Turkey, 85%

