

How is the influenza vaccine developed each year?

Alt-text Figure 3 - Diagram of the individual steps in the selection of candidate vaccine viruses and development of standardizing reagents for seasonal influenza and for a potential H5N1 influenza pandemic.

Flowchart depicting the process of influenza vaccine virus selection and development. Both seasonal and H5N1 vaccines are shown. In summary, there is a collection of specimens and disease/epidemiological data. Then, diagnosis, virus isolation and preliminary analysis are conducted. Antisera are produced and antigenic and genetic analyses are conducted. The selection of candidate viruses for vaccine use differs for Seasonal and H5N1 vaccines. For the seasonal the classical reassortment is employed, while H5N1 is developed using reverse genetics and full safety testing. This is followed by the antigenic and genetic characterisation of reassortments and vaccine-standardised reagent development for both vaccines. At the end of the process, there is the availability of vaccine viruses and standardized reagents. Details in the figure legend