

Clear and present danger

This category covers taxa containing viruses that are well-recognised public health threats and where (better) vaccines are needed.

Filoviridae, including the ebolaviruses and Marburg virus. These cause haemorrhagic fevers and are transmitted by contact. Most, but not all, are associated with severe disease in humans.

Coronaviridae, including the severe respiratory infections SARS CoV and MERS CoV. We note that although there are not currently any vaccines available against human coronaviruses there are vaccines for animal coronaviruses (canine CoV and porcine epidemic diarrhoea virus).

Orthomyxoviridae, the human influenza viruses, plus the avian influenzas. Vaccine reformulation is a long-standing issue. Antivirals have the advantage of being effective against a broader spectrum of influenza viruses than strain-specific vaccines.