News Release
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Infections that pose greatest pandemic risk identified by experts

Experts have pinpointed more than 30 infections that are likely candidates for the next major pandemic.

The team used a method that already predicted the threat of both the Ebola and Zika viruses before they emerged to cause major epidemics.

Their analysis identifies a further 37 different viruses that have already shown some ability to spread between people – but have not so far caused major epidemics.

Some of these – including MERS coronavirus, relatives of the Ebola virus and several mosquito-borne viruses – have caused disease outbreaks in the past and are of greatest concern.

These infections are all zoonotic, meaning that they mostly affect animals at present. They could, however, pose a major threat to human health if they become able to spread more easily between people.

Surveillance of these viruses should be stepped up to avoid major public health crises, such as that seen in West Africa during the recent Ebola outbreak, the researchers say.

Researchers at the University of Edinburgh reviewed characteristics of the viruses, including what species they can infect and how easily they can adapt to new hosts. They also considered the severity of the illnesses they cause.

Professor Mark Woolhouse said: "Monitoring these infections should be prioritised because relatively minor changes in their ecology could lead to major changes in the threat they pose to public health."

The study, published in the journal *Emerging Infectious Diseases*, was funded by the Wellcome Trust's Vietnam Initiative on Zoonotic Infections and by the European Union COMPARE project.

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