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Série S

Sujet n°38

Avian flu virus learns to fly without wings

Potentially fatal bird flu viruses can spread on the wind, a hitherto* suspected but unproven route of transmission.

Usually, people catch bird flu through close physical contact with each other or, much more commonly, with infected poultry.

5 The newly identified capacity for wind to spread it opens up a potential route by which the viruses can spread between farms.

The finding came about after Dutch researchers studied an outbreak* of the avian flu strain H7N7 in poultry on Dutch farms in 2003, which resulted in 89 confirmed human infections including one death.

10 Computer models showed that wind patterns at the time of the outbreak explain how different genetic variants of H7N7 ended up on different farms (...)

Other researchers agreed that by implication, H5N1* could spread in the same way. "Because we don't know, we should assume the worst case – and the worst case is that H5N1 travels on the wind as well," says John McCauley, a bird flu researcher at the MRC National Institute for Medical Research in London.

15 He says it's well known that the virus that causes foot and mouth disease in cattle and pigs travels many kilometres on the wind, but it's lighter than avian flu and is produced in huge amounts by infected animals. McCauley says the most likely scenario for bird flu is that the virus hitches a ride on airborne particles from farms, especially particles of infected faeces* from poultry farms.

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by Andy Coghlan
New Scientist

*Hitherto: until now.

*Outbreak: sudden increase.

*Faeces: excrement

*H5N1 is the most harmful strain of avian flu, having killed 360 of 610 infected people since it was discovered in 2003

Sum up this article and explain the main ideas using your scientific knowledge