

## First H5N1 outbreak in humans associated with dead wild birds: Azerbaijan, February-April 2006

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In February and March this year, die-offs in wild swans due to high pathogenic avian influenza H5N1 occurred in numerous countries in the European region, signalling the spread of the virus across western Europe and triggering control measures to prevent introduction of the virus into poultry. In February in Azerbaijan, unusual events in wild bird migration were noted: migration of swans from Siberia was earlier than usual, the number of birds was unusually high and there were mass die-offs of swans.

Coinciding with these die-offs, human cases of H5N1 infection were detected, the most likely source of exposure being the de-feathering of dead swans in a community largely dependent on hunting for its income. At least seven confirmed cases in a large extended family, four of whom died, were linked to this source of exposure.

Phylogenetic comparison of viruses isolated from three patients show all genes are of avian virus origin and are closely related to the other 'Qinghai Lake' H5N1 viruses isolated from avian species, including a virus isolated from a swan in Azerbaijan in February 2006, A/swan/Italy/179/06 and A/swan/Iran/754/06. This outbreak therefore distinguishes itself from the outbreak in Turkey where humans became infected after exposure to ill or dead poultry. It underlines the need for continued research on transmission patterns of the H5N1 virus, a broad understanding of risky human behaviour and comprehensive messages to reduce the risk of exposure.

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