

# Avian flu update: lull in new H7N9 cases

Epidemic has spread to three more Chinese provinces, but no new cases reported since 7 May.

Declan Butler

14 May 2013

An update to Nature's exclusive [map of the H7N9 avian influenza](#) shows how the virus expanded its geographical range in mainland China in late April. Since then, however, the epidemic has gone into a lull, with just one person falling ill with H7N9 since the start of May. The drop might reflect that authorities's control measures, such as the closure of live bird markets, are working, but it is also possible that the epidemic will rear its head again later.

The cases that occurred after 14 April (blue circles) show how the H7N9 has spread compared to cases that occurred between 1 February and 13 April (green circles). Most cases have appeared in areas designated as at higher risk for the earlier H5N1 avian flu (dark yellow) rather than in areas at lower risk (light yellow)<sup>1</sup>. This seems to be consistent with the current thinking that birds — particularly poultry — and live-bird markets may be the main source of human infection. Comparing the two epidemics may help researchers to target efforts to track and control H7N9.

In late April, the first five cases of H7N9 were reported in Fujian province, far south of the main outbreak area around Shanghai and neighbouring regions on the eastern seaboard of China. Two cases were also reported in Hunan province, and six in Jiangxi province, both southwest of Shanghai.

Human cases of the virus had already been reported in Beijing to the north, and in Henan province in the centre of the country. The total area where human cases have been reported now spans some 1,700 kilometres north to south and 1,000 kilometres east to west.

One case of H7N9 was reported in Taiwan on 24 April. However, the 53-year-old man is thought to have caught the disease in Suzhou in Jiangsu province in mainland China, so that is where his case is shown on the map.

As of 8 May, China has reported to the World Health Organization a total of 131 lab-confirmed cases, including 32 deaths — and newspaper and other reports suggest that those numbers had not changed as of 13 May. What's striking is that daily reports of new cases, which flooded in during April, slowed near the end of the month — and just four new cases have been reported since the start of May. No new cases have been reported from Shanghai province, the epicentre of the epidemic, since 20 April.

It is unknown whether, and to what extent, the drop-off may have been caused by the closing of live-bird markets and other control measures. Another possibility is seasonality. Past avian flu virus outbreaks have often tended to show seasonal patterns of occurrence, with most outbreaks occurring during the colder months of the years and fewer in the warmer months. But after just a week-long lull, is too soon to speculate on what turn the epidemic of H7N9 flu will take next.

[Download map as Google Earth file.](#)

See "[Mapping the H7N9 avian flu outbreaks](#)" for further details of map methodology.

Nature | doi:10.1038/nature.2013.12910

## References

1. Martin, V. *et al.* *PLoS Pathog.* **7**, e1001308 (2011).