Antibodies to SARS-like virus hint at repeated infections

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A virus similar to that responsible for severe acute respiratory syndrome (SARS) infected people in Hong Kong 18 months before SARS reared its head, a recent study says. But some experts say the result is tentative and needs to be confirmed by larger studies.

In a finding published online on 2 January, a team led by Bo Jian Zheng, a microbiologist at the University of Hong Kong, analysed nearly 940 blood samples that had originally been collected in 2001 for a research project on hepatitis B (B. J. Zheng et al. www.cdc.gov/nidod/eid/vol10no2/03-0533.htm; 2004). SARS first arose in ferrets, can harbour closely related viruses. Animals and pets, including palm civets and mal markets of Guangdong province, China. Animals to humans, probably in the live-animal markets of Guangdong province, China. The researchers now hope to analyse blood from 10,000 healthy people for SARS antibodies. Such studies to flag up hotspots where many people carry antibodies might indicate areas where SARS or related viruses can readily move between animals and humans, says Zheng.

Zheng looked for SARS antibodies in a relatively large, healthy population, and says that similar investigations are under way in China. A 2003 study showed that 40% of people trading in wild animals in the Chinese markets also carried antibodies to SARS (Y. Guan et al. Science 302, 276–278; 2003).

Some experts caution that the results are not conclusive, however. "We have a small numbers of samples to work on," says Christian Drosten of the Bernhard Nocht Institute for Tropical Medicine in Hamburg, Germany.

The researchers now hope to analyse blood from 10,000 healthy people for SARS antibodies. Such studies to flag up hotspots where many people carry antibodies might help scientists to track down the animal source of SARS, says Osterhaus.