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Severe acute respiratory syndrome spreads worldwide

WHO is frantically trying to find the source of the outbreaks and a cure for infected patients

WHO issued a global health alert on March 13 after several outbreaks of severe acute respiratory syndrome (SARS) were reported across the world.

The SARS outbreaks began in Asia and since then 167 suspected cases have been reported in Canada, Hong Kong, Indonesia, Singapore, Thailand, Vietnam and most recently Germany. Suspected cases in the USA, UK, Israel, Australia, and France have not been confirmed and two cases in Geneva, initially thought to be SARS have now been discounted.

So far SARS has killed two people in Canada, two in Hong Kong, and one in Vietnam. Five people have died in mainland China although WHO says it it is not yet clear if those cases are related.

The causative agent has not yet been identified. Pat Drury from WHO’s Global Outbreak Alert and Response Group told The Lancet that “there is intense global activity to identify the responsible pathogen with WHO coordinating some 11 laboratories and infectious disease networks worldwide to identify the causative agent. The Centers for Disease Control (CDC) are also involved and are checking for a variety of pathogens and a WHO team is working closely with the Chinese authorities to re-investigate the initial series of cases.”

The usual spectrum of causative agents has not been identified in tested samples.

The initial outbreaks occurred in the Chinese province of Guangdong, Vietnam, and Hong Kong Special Administrative Region.

In mid February, Chinese health authorities reported 305 cases (including five fatalities) in Guangdong. In four of the fatal cases, chlamydia was isolated. According to China’s Ministry of Health: “laboratory tests conducted by China CDC and Guangdong province CDC have excluded causes such as plague, leptospirosis, and haemorrhagic fever. There is no evidence to suggest that the pathogenesis is H5N1 bird flu virus. Chlamydia was found in the lung tissue of four patients who died and current identification work is being done on chlamydia psittaci and para-chlamydia. More time is needed to identify this pathogen.”

In Vietnam the outbreak began with a single case who was admitted to hospital for treatment of “severe, acute respiratory syndrome of unknown origin. The patient felt unwell during his journey and fell ill shortly after arrival in Hanoi from Shanghai and Hong Kong. Following his admission to the hospital, approximately 20 hospital staff became sick with similar symptoms”. WHO has issued guidelines stating that suspected cases of atypical pneumonia be isolated and immediately reported to national health authorities. WHO has said that there is a high risk of nosocomial transmission and hospital staff caring for patients have been quickly infected.

Gro Harlem Bruntland, WHO’s director general said that “SARS is now a worldwide health threat... Conventional antibiotics have proven ineffective against the infection and clinicians are trying new combinations of medications. There is some indication that secondary and tertiary cases may be less severe than primary cases. This remains to be confirmed.”

The WHO Global Outbreak Alert and Response Network is coordinating an international, multicentre effort, and has recruited laboratories from 11 countries. WHO hopes that the collaboration will aid the quick development of a diagnostic test and will help identify an effective treatment for SARS.

Julie Hall from WHO said this collaboration “has been intensified with increased epidemiological and hospital support and increased cooperation with the Chinese authorities.”

WHO teams in Hanoi and Hong Kong, where the most new cases are presently concentrated, are helping health authorities manage the outbreak while collecting as much clinical and epidemiological data as possible.

Meanwhile WHO’s regional office in Manila, Philippines, has set up a logistics base and a supply chain to “ensure rapid provision of protective equipment and medicines needed for outbreak response.”

Although considered unlikely, bioterrorism hasn’t been ruled out and national health authorities, governments, airlines, physicians, and travellers have been told to be on alert.

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