

FOREWORD

SARS – A multi-country outbreak or a new viral disease

by Professor Richard Smallwood



SARS (Severe Acute Respiratory Syndrome), an atypical pneumonia of (initially) unknown aetiology, was first identified in late February this year in Vietnam by Dr Carlo Urbani from World Health Organisation's (WHO) Hanoi office. Tragically, he later succumbed to the disease.

It appears that the first cases occurred in China in Guandong Province in November last year. Between November 2002 and early February 2003 over 300 cases had occurred, with five deaths. One third of the patients were health care workers. In late February and early March it became clear that Hanoi and Hong Kong were seeing SARS cases, so that on 12 March WHO issued a global alert about an outbreak of cases of severe atypical pneumonia of unknown cause which seemed to put health workers in particular at grave risk.

After reports from Canada (14 March) and Singapore (15 March) of SARS cases, the

global alert was upgraded to include a case definition, based on clinical features, travel history and/or contact with a SARS patient; advice was also given to passengers from SARS affected areas that should they develop SARS-like symptoms they should notify health authorities immediately. By 27 March it was evident that spread was still occurring through international travel, so that new advice was brought forward. First, anyone showing symptoms of SARS who was seeking to fly out of a SARS-affected country should not travel but be referred for medical advice and, second, that non-essential travel to affected countries should be postponed.

It seems probable that SARS is primarily spread through close personal contact, although other modes of spread e.g. via faeces or urine, via blood or via aerosols are not entirely ruled out. Amongst those who become seriously ill (about 10–15 per cent of those affected) there appear to be 'super spreaders' who have infected a large number of others. Infection control in wards housing such a patient has to be absolutely meticulous and sustained; the risk to health care workers makes that crystal clear. Three or four per cent of SARS patients will die of the disease; those at greatest risk of dying appear to be older people or those suffering from some other condition, and heavy smokers.

Australia has been fortunate. Unlike Hong Kong, Toronto, Hanoi and Singapore we were not exposed to SARS in the early days before everyone was alerted to this condition, and before there was any understanding of its transmissibility.

We have been able to watch the evolution of this condition globally, and to institute measures to minimise the chance of it arriving undetected and spreading within Australia. These measures have included:

- daily teleconferences of public health officials from all jurisdictions and communicable disease experts;
- providing information to the public and health professionals through direct mailouts, the web, a 1800 number and the media;
- issuing travel advisories consistent with those from WHO through the Department of Foreign Affairs and Trade;
- instituting 'positive pratique' i.e. pilots of incoming flights have to contact quarantine authorities to discuss whether or not there is any ill health amongst passengers before landing in Australia, in order to obtain quarantine clearance;
- giving written information about SARS and what to do if symptoms develop to passengers leaving and arriving in Australia;
- ensuring that pilots on incoming flights remind passengers to report any symptoms to flight attendants;
- making SARS a quarantinable disease, which allows various quarantine measures to be put in place which might be needed to control the spread of the disease in Australia;
- ensuring that blood donors returning from a SARS-affected country do not donate blood for 14 days from the time of leaving that country;
- issuing infection control guidelines for the different environments in which SARS may be encountered or

introduced eg in aeroplanes, at the border, in health care facilities. This includes advice to those returning from SARS-affected countries who are well and who wish to return to work, to university or to school; and

- working with the National Health and medical Research Council to tackle the important research questions for Australia.

The number of cases worldwide of SARS has continued to increase steadily in the two months since its identification to a total of over 3,500 at the time of writing. The seriously affected countries – those to which our travel advisories and other guidelines are directed – are those in which there have been local chains of transmission. These countries are Canada, China, Hong Kong, Singapore and Vietnam. Three other countries have apparently had limited local

transmission – UK, US and Taiwan. Between 15 and 20 other countries, including Australia, have reported a small number of imported cases to WHO.

While globally the epidemic can not be said to have come under control, there has been an astonishing amount learned about SARS in a very short time. Through an unprecedented level of cooperation amongst the 11 WHO-linked laboratories around the world, the likely cause of SARS has been identified as a new Coronavirus and its genome completely sequenced. There is every likelihood that a sensitive and specific test for SARS will be widely available within weeks and this will mean, amongst other things, precise diagnosis of cases and a much clearer understanding of the epidemiology of the disease e.g. what exactly are the various modes of transmission; when in the

course of their illness are infected individuals infectious; what is different about the super-spreaders. Work can now begin on developing a vaccine and further possibilities for treatment can be canvassed.

For the moment, however, we have to rely on our public health expertise and infrastructure and on the clinical skills of those who might be called upon to care for the ones unlucky enough to come down with SARS. While we can't guarantee to keep SARS out of Australia, we have a good chance of keeping its spread here to a minimum. Whether SARS will disappear from human populations as quickly as it came, or whether it settles in to become yet another of our endemic infectious, remains to be seen.

Professor Richard Smallwood
Commonwealth Chief
Medical Officer

AMNESTY ON AJEM SUBSCRIPTIONS

The November and February editions of AJEM carried notices asking subscribers to reconfirm their intention to remain on the AJEM mailing list.

Again we are asking subscribers to indicate your desire to remain on the mailing list by:

Emailing: ajem@ema.gov.au

OR

Return the mailing label contained in this edition by fax to (03) 5421 5273

BY NO LATER THAN 1 AUGUST 2003

If we do not received confirmation by 1 August, your name will be removed from the AJEM mailing list. The removal will take effect from 31 August edition.

(If you have already responded to our previous requests, there is no need for you to confirm however you may like to inform your colleagues of our amnesty).

RESPONSES MUST REACH THE AJEM OFFICE BY
5 PM ON 1 AUGUST 2003

AJEM Quality Assured

The Commonwealth Department of Education, Science and Training has recently listed the Australian Journal of Emergency Management on its Register of Refereed Journals. Listing on the Register ensures Universities that articles published in AJEM may be included in the research income and research publications data submitted by universities to the Department each year. The data will then be used to determine allocations to universities under performance based funding schemes. See <http://www.dest.gov.au/highered/research/herdc.htm>.