

SARS – CONTINUED

On 12 March 2003, the World Health Organization issued a global warning following reported cases of atypical pneumonia of unknown aetiology, SARS (Severe Acute Respiratory Syndrome). Considerable progress has been achieved on both the disease epidemiology and virology since the start of the outbreak. An update on the situation since last week's issue of EPI-NEWS 12/03 hereby follows.

Status of the outbreak

As of 26 March, there has been no suspected cases in Denmark. In the period 1 February to 25 March 2003, the WHO has received reports of 487 possible cases, of whom 17 died. This represents a mortality of 3.5%, the same level as for the whole outbreak. Cases have now been reported from 12 countries on three continents. Most cases are from Hong Kong (286), Singapore (69) and Vietnam (58). In addition to this there is an outbreak in the Guangdong province of China being investigated for a possible link with the current outbreak. Even though an increasing number of countries are reporting possible cases, there are no reports of local infection in new areas.

According to the WHO, the source of infection for most, if not all patients can be traced back via an infection chain to either a family member, a direct contact with a symptomatic person or a particular hotel in Hong Kong. Most patients were previously healthy adults, aged 25-70 years. Few cases of suspected SARS have been reported among children under the age of 15. Most cases by far, are hospital staff or family members with close person-to-person contact with patients. Health authorities and hospital staff all over the world are now aware of SARS and suspected cases are quickly reported. Isolation and other control measures of suspected cases have reduced the spread of infection.

Clinical picture

As more patients have been assessed, the clinical picture of SARS has become clearer, even though the case definition is still broad and non-specific, EPI-NEWS 12/03. The incubation period is usually 2-7 days, but may be up to 10 days.

The illness starts with a prodromal phase of fever above 38°C, often accompanied by rigors and muscle stiffness, possibly followed by headache, malaise and myalgia. Some patients also develop mild respiratory symptoms. Patients generally do not have a rash, neurological or gastrointestinal symptoms. After 3-7 days, they experience lower respiratory tract symptoms in the form of dry, unproductive cough or dyspnoea, possibly with hypoxia. Severe symptoms requiring mechanical ventilation occur in 10-20% of such patients. Chest x-ray is, so far, the investigation that best distinguishes between possible or suspected cases. After the prodromal phase, a large proportion of patients develop x-ray changes with focal infiltrates, which may develop into more generalised, disseminated interstitial infiltrates. In the late phases of SARS, consolidated areas can be seen. Lymphocytopenia is often present at the outset of the illness. When the respiratory phase is at its peak, up to half of the patients develop leukopenia and thrombocytopenia. Creatine kinase and transaminases may be elevated, while renal function is usually normal. To date, there is no known effective treatment.

Cause of SARS

Investigations to identify the aetiology of SARS are focusing on paramyxovirus and/or corona virus. The WHO has established a network of 11 laboratories in nine countries, which are collaborating to investigate the causation and to develop diagnostic methods.

Foreign travel

Until further notice, the WHO is maintaining its recommendation that no travel restrictions be imposed. Denmark is following this recommendation.

Handling

Up-to-date information on the outbreak situation, case definition, notification, management of patients and specimens can be found at www.ssi.dk. The WHO web site, www.who.int, is updated daily with a status report on the outbreak and other relevant information. (K. Mølbak, S. Samuelsson, Dept. of Epidemiology)

MYCOPLASMA GENITALIUM

Mycoplasma (M.) genitalium is a recently recognised cause of sexually transmitted urethritis and cervicitis. The bacterium was first discovered in 1981. Since isolation by culture is very difficult, it has not been possible to clarify its significance until the development of the PCR technique.

Symptoms

Symptoms of M. genitalium infection cannot be differentiated from infection with Chlamydia trachomatis. Thus, about half of those infected are asymptomatic. Among males with non-gonococcal urethritis, 15-20% have chlamydia and 10-15% M. genitalium. Only a few males have both chlamydia and M. genitalium. Similar conditions apply to women with cervicitis, however, the proportions with chlamydia or M. genitalium are lower. Patients with recurrent symptoms more often have M. genitalium than chlamydia. Women with tubal infertility have antibodies to M. genitalium more often than women with male factor infertility. However, it has not been conclusively demonstrated that M. genitalium is the cause of the constriction.

Diagnosis and treatment

M. genitalium can be detected by applying the PCR technique to swabs from the urethra, and in females from the cervix. In both sexes, M. genitalium can also be detected in the first 10 ml. of a urine specimen, which should be collected without prior washing. In females, a cervical swab should supplement the urine sample. For both chlamydia trachomatis and M. genitalium, more infections are detected in men by investigation of urine than of swab specimens. Investigation for M. genitalium should not be undertaken without simultaneously or previously investigating for chlamydia. The optimal treatment has not yet been established. In open studies, azithromycin 500 mg day 1 followed by 250 mg for the following four days has had good effect. Tetracycline is not effective. Azithromycin 1 g x 1, which is effective against chlamydia, has not yet been evaluated, but will probably be effective in most cases. (J. Skov Jensen, Dept. of Respiratory Infections, Meningitis & STIs)

Patients with laboratory-diagnosed chlamydia, by sex and county

4th quarter of 2002 compared with the corresponding period in 2001

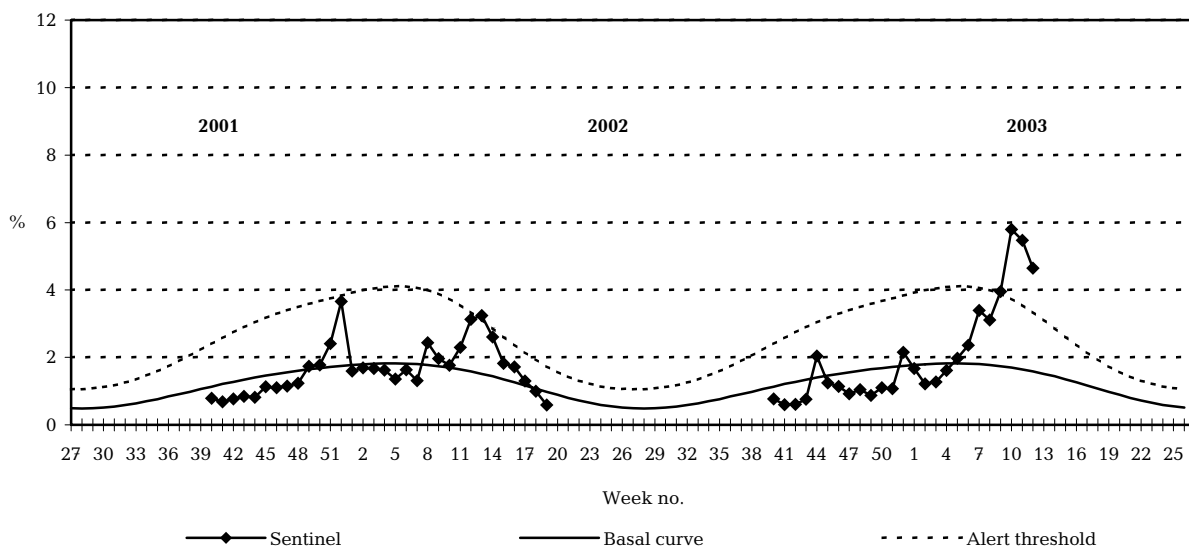
County	4th quarter 2002			4th quarter 2001		
	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	264	413	679 *	243	484	728 *
Copenhagen	112	254	366	133	259	392
Frederiksborg	62	154	217 *	50	128	178
Roskilde	55	86	141	32	100	132
West Zealand	60	103	163	54	151	205
Storstrøm	35	81	117 *	43	77	121 *
Bornholm	4	14	18	1	14	15
Funen	110	228	338	73	207	280
South Jutland	53	109	162	36	88	124
Ribe	50	110	160	30	93	123
Vejle	71	165	237 *	70	165	235
Ringkøbing	64	115	179	64	118	183 *
Aarhus	204	389	594 *	194	369	563
Viborg	38	105	145 *	37	109	147 *
North Jutland	127	286	414 *	128	251	379
Total	1309	2612	3930 *	1188	2613	3805 *

* In an unidentified number of persons gender was unknown

(Dept. of Respiratory Infections, Meningitis and STIs)

Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2001/2002/2003



- Sentinel:** Influenza consultations as percentage of total consultations
Basal curve: Expected frequency of influenza consultations under non-epidemic conditions
Alert threshold: Possible incipient epidemic

(Dept. of Epidemiology)