

High

Hazard/threat category	Sub-category
Human health	Emerging infectious diseases
Hazard and threat description, plus scale	Risk reference number
Based on US figures, between 220-2000 casualties	H24
Date of revision	Next review
NOVEMBER 2007	NOVEMBER 2008
Author	Health representative to TVLRF

1. Overview of hazard or threat

Severe Acute Respiratory Syndrome (SARS)

The main symptoms of SARS are high fever (>38° C), cough, shortness of breath or difficulty in breathing. Symptoms should be severe enough to warrant hospitalisation and chest X-ray changes should show pneumonia or respiratory distress syndrome.

SARS appears to be less infectious than influenza. The incubation period is believed to be short, around two to seven days (maximum 10 days)

Based on data from affected countries, the overall case fatality is 15%, though this is dependent on the age of the patient and co-morbidity.

The case fatality is estimated to be less than 1% in persons aged 24 years or younger, 6% in persons aged 25 to 44 years, 15% in persons aged 45 to 64 years, and greater than 50% in persons aged 65 years and older.

At present there are no early tests for SARS, and no vaccine or specific treatment, though scientists and clinicians around the world are working together on these issues.

2. Key historical evidence

It was first recognised in Guangdong Province in China in November 2002, and spread worldwide before being contained by 5 July 2003. By July 2003 the international spread of SARS resulted in 8098 cases in 26 countries, with 774 deaths. The possibility of SARS re-emergence remains and there is a need for continuing vigilance.

Hospital admitted SARS cases experience a relatively high case fatality ratio (average 15%) and, because of the high need for intensive care and the potential infection of health care staff, can quickly overwhelm healthcare facilities. Spread can be very rapid through international travel. After China the initial cases were first identified in Hong Kong but nearly 30 countries, including the UK, were affected during the outbreaks from February to August 2003. Due to the serious nature of SARS, its potential to severely disrupt

health care services and its ability to spread rapidly, it is a disease that every country must prepare for.

2008

In the countries of high risk there is now some immunity, and all countries now have SARS plans in place and good diagnostics.

3. Likelihood

Hazard	Outcome description	Likelihood
Emerging infectious diseases	Based on US figures, between 220-2000 casualties	2

4. Impact

Summary

Hazard	Outcome description	Impact			
		Health	Social	Env	Econ
Emerging infectious diseases	Based on US figures, between 220-2000 casualties	5	4	2	5

Details

Impacts
Primary
Significant social and economic disruption
Health services overwhelmed
Secondary
Travel and tourism industry
Hospitality and entertainment industry

5. Vulnerability and resilience

The UK approach to SARS provides for an escalating response based on Alert Levels from 0 (no known cases internationally) to 5 (post outbreak and de-escalation of outbreak), with level 4 being the worst case (extensive community transmission). The format of the Alert levels has been chosen to be consistent with the approach taken in other Outbreak Plans e.g. those for Influenza and Smallpox.

Infection Control Measures required:

Strict infection control measures need to be imposed from the outset.

Staff attending to patients meals, washing patients, changing clothes, changing bed pans and portering duties, will all need to wear goggles, gown, mask and gloves.

Health care workers have their temperatures checked regularly in order to prevent staff from becoming ill. When the first sign of fever was spotted that person was isolated

Any visitors to the hospital need to wear gowns, masks and gloves which will need to be given on arrival into the hospital and removed on departure followed by hand washing.

Staff in A&E also need to wear gowns, masks and gloves

Triage is conducted away from A&E where patients are given a questionnaire to complete.

Specialist outpatient clinics and elective surgery will be closed/cancelled

Consider that SARS patients may not be allowed visitors, only children could be allowed visitors, (for 10 minutes) and will need to wear mask, gloves and gowns and were supervised for staff

Command and control structures need to be established

Each new admission should be reviewed, to establish if there has been contact, who the contact was, etc. and this information needs to be recorded on and cases linked to each other. Contacts need to be traced and surveyed.

6. Overall assessment

Category	Sub-category		
Human health	Emerging infectious diseases		
Outcome description	Impact	Likelihood	Risk
Based on US figures, between 220-2000 casualties	4	2	HIGH
Controls in place			
Health Protection Agency Contingency Plan Health Protection Unit – Berkshire, Buckinghamshire and Oxfordshire Department of Health Contingency Plan WHO guidelines Buckinghamshire, Milton Keynes Health Protection Team and & Local/Unitary Authorities in Buckinghamshire Royal Berkshire Hospital NHS Trust Major Incident Plan Heatherwood and Wexham Park Hospitals NHS Trust Major Incident Plan Berkshire Primary Care Organisations Major Incident Plan and Operational Response Manuals Berkshire Healthcare Trust Major Incident Plan Buckinghamshire Hospitals NHS Trust Major Incident Plan			

Controls in place (continued)

Milton Keynes Hospital NHS Trust Major Incident Plan
Buckinghamshire Mental Health Trust Major Incident Plan
Buckinghamshire Primary Care Organisations Major Incident Plan
Oxford Radcliffe Hospitals NHS Trust Major Incident Plan
Oxford Mental Health Trust Major Incident Plan
Nuffield Orthopaedic Clinic Major Incident Plan
Oxfordshire Primary Care Organisations Major Incident Plan
South Central Strategic Health Authority Major Incident Plan
Berkshire Integrated Emergency Planning Structure
Wokingham District Council Emergency Plan
Reading Borough Council Emergency Plan
West Berkshire Council Emergency Plan
Bracknell Forest Borough Council Emergency Plan
Royal Borough Council of Windsor and Maidenhead Emergency Plan
Slough Borough Council Emergency Plan
Milton Keynes Council Major Incident Guide
Environment Agency Incident Management Plans
Environment Agency 24/7 Incident Response
South Central Ambulance Service NHS Trusts Major Incident Plan
Oxfordshire County Council Emergency Plan
Thames Valley Police Emergency Procedures Manual
ACPO Emergency Procedures Manual

Additional risk treatment required