



Avoiding Respiratory Illness Outbreaks



GENERAL

Outbreaks of respiratory illnesses occur regularly throughout the world. These can be associated with many different types of 'bugs' including **viral illnesses** (Influenza, Measles, Mumps, Whooping Cough etc), **bacterial illnesses** (Pneumonia, Meningitis, Tuberculosis, Legionnaires, Anthrax, Diphtheria etc) and **fungal diseases** (Histoplasmosis, Aspergillosis etc).

CURRENT ISSUES

Over the past decade the world has seen a number of specific illnesses which have moved very rapidly from the initial location to a distant country within a matter of days due to the ease of international travel and the lack of specific symptoms in the first few days of an illness. This was particularly evident with SARS in 2003 and more recently with the emerging problems associated with what is referred to as 'Avian Influenza' (H5N1). The current outbreak of Swine Influenza (H1N1) appears to have moved into a human to human pattern and cases have been confirmed in a number of countries where travellers have returned home from their time in Mexico.

SWINE INFLUENZA

The current outbreak in Mexico is still evolving at this time and so it is very uncertain what will happen over the coming days and weeks. What appears to be clear at present is that the disease has moved from the pig population, where it has been present for some time, and has now mutated to become a human to human illness. The illness has an incubation period of a few days and during this time the infected individual appears well which means that they can very easily travel to another region of the world before the illness strikes. Early detection and the isolation of the individual (with appropriate treatment) are the main crucial elements of limiting spread.

SIGNS & SYMPTOMS

The incubation period for Swine Influenza is quite short and usually over 2 to 5 days following exposure. The main signs and symptoms are similar to that found in any severe Influenza illness with fever, cough, congested nasal passages, muscular aches and pains and general significant malaise with lethargy. In this current outbreak many of the cases appear to be among 20 to 40 year old previously healthy individuals rather than the very young and old as is frequently seen in outbreaks of respiratory diseases.

PROPHYLAXIS & TREATMENT

The availability of specific treatment depends greatly on which actual pathogen is involved in the outbreak. As a general rule there are a wide range of antibiotics which are of use for bacterial outbreaks (and can also be of value when treating secondary problems associated with viral illnesses). However, with pure viral outbreaks the available medications are greatly in demand and supplies can become very limited. Part of the problem is associated with the 'panic buying' which occurs as massive stockpiles of treatment medications are purchased by governments in low risk regions to protect their populations. This is often to the detriment of supplies being available for the higher (and usually poorer) risk areas of our planet.

INTERNATIONAL CONTROL

Once a significant respiratory illness is identified as a potential global threat there are now well tried and tested procedures which are very rapidly put into action to control the outbreak. This includes seeking to limit travel in and out of an infected region and also early detection and isolation of potential cases

as authorities seek to limit the spread of the disease. Some illnesses are significantly more contagious than others and so the level of international response is dependant on what specific pathogen is involved.

INTERNATIONAL RESTRICTIONS

In the midst of any major global outbreak (whether real or potential) there is always an increased awareness by international health authorities and typically stringent screening measures may be introduced to protect specific countries. This can entail screening all arriving passengers for any signs of a febrile illness (temperature screening by automatic scanners or through manual means), signs of flushing, sweating etc. Those displaying any suspicious symptoms are likely to be segregated from other travellers and put into isolation while they are investigated further. This of course may very seriously affect travel plans for those involved and any companions.

VACCINES

Vaccines are usually manufactured for viral illnesses rather than bacterial and fungal diseases. However, at the start of any 'new' outbreak it is unlikely that supplies will be available. The specific strains need to be very carefully identified and only then can the vaccine manufacturers change their production facilities to cope with the international demand. The expected supply date is typically considered to be 3 to 6 months after a human to human outbreak is confirmed and so specific vaccines will not be available early into the disease process.

INFLUENZA VACCINE

The yearly vaccination against the 'normal' Influenza may have very limited beneficial effect against other viral illnesses (and certainly no specific effect against bacterial and fungal outbreaks). However it is usually worth considering for certain travellers as it should protect against a febrile illness associated with the usual influenza and thus lessen the chance of being stopped at immigration.

PERSONAL PROTECTION

To lessen the risk of contracting a respiratory illness international travellers should;

- **Avoid the use of crowded areas (eg public transport - buses & taxis, cinemas etc)**
- **Avoid busy market places**
- **Increase personal hygiene (regular washing of hands and the use of antiseptic gels etc)**
- **Where possible try not to hold bannister rails (on escalators, stairs etc) and avoid opening doors etc**
- **try not to wipe your hands against your mouth or eyes as this may increase the risk of infection**

CURRENT INFORMATION

Detailed information on the current Swine Influenza outbreak can be found at;

- ✦ <http://www.foreignaffairs.gov.ie/home/index.aspx?id=452>
- ✦ <http://www.who.int/csr/disease/swineflu/en/index.html>
- ✦ http://www.cdc.gov/swineflu/swineflu_you.htm
- ✦ <http://news.bbc.co.uk/1/hi/health/8020125.stm>

TMB ADVICE LINE

TMB provides a 24/7 emergency advice service for our registered patients via <http://www.tmb.ie> or +353-86-0728999

National Travel Vaccine Appointment Tel 1-850-48 76 74

Web Address: www.tmb.ie

This leaflet has been prepared using information supplied from WHO, the Center for Disease Control (US) and other international sources.

- ✓ Travel Accessories *respiratoryillness/TMB/27Apr09*
- ✓ Tropical Diagnostic Laboratory
- ✓ Tropical Disease Screening Centre
- ✓ W.H.O. registered Yellow Fever Vaccination Centre
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