

**State of Kuwait
Ministry of Health
Infection Control Directorate**

**Infection Control Guidelines
at Ambulance setting**

December 2005

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Introduction

Infection control is an important part of everyone's daily life and is achieved through common sense and basic hygiene procedures. During the course of their working lives ambulance personnel may be unknowingly exposed to a number of infectious diseases which could potentially cause them harm or be passed to other patients. Therefore, extra precautions need to be practiced and adhered to. This working document is written with this in mind. As it is not possible to identify all patients/clients who have an infection it is important for everyone to have a safe method of working at all times: this will help to protect patients, staff and members of the public from infection.

This Policy will cover all the aspects of infection control measures at the ambulance setting that are required to protect all staff and patients.

I. Immunization Guidance

Ambulance staff should be vaccinated against the following:

- a. Tetanus
- b. Hepatitis B
- c. Rubella
- d. Poliomyelitis
- e. Diphtheria
- f. Tuberculosis (BCG)

The majority of staff should have had life long immunity conferred by their normal childhood vaccination programs. These include diphtheria, tetanus, and BCG. If there is any doubt then staff should discuss their vaccination status with preventive medicine department.

Advice on the need for immunization including booster doses is available from preventive medicine department.

II. Staff Illness And Reporting

It is important that staff remember that infection can be passed in either direction, i.e. patients to staff or staff to patient and relatives.

Staff in direct contact with patients should inform their in charge person to take the suitable action, if they develop any of the following diseases, and should not report for duty unless advised to do so:

- Skin infection or infestation;
- Severe respiratory infection (e.g. pneumonia, TB, NOT self limiting viral infections or the common cold);
- Severe diarrhoea;
- Jaundice;
- Hepatitis;
- Infectious diseases, such as chicken pox, measles, mumps, rubella or scarlet fever;
- Any other infectious disease (e.g. TB, or HIV).

III. Infection control measures

A. General Infection Control Considerations

Many patients have an unknown medical history. It is therefore important that personal contact with patients be compatible with the health and safety of patients and staff. In the case of a known or a suspected infectious disease staff will, where possible, be forewarned and they must don appropriate protective clothing provided. Ambulance personnel should ascertain from anyone requesting transport whether the patient is considered an infection or decontamination risk. In the case of an unknown diagnosis ambulance personnel must take appropriate precautionary measures as indicated by the patient's symptoms or clinical presentation. In considering infection control and decontamination issues it is important that all personnel maintain a sense of proportion when considering risks to themselves. Staff must keep all cuts, abrasions and open skin lesions covered with a waterproof dressing. If a member

of staff is injured or contaminated during the treatment of a patient, then those injuries should be attended to before continuing the care of the patient. All incidences of accidental contamination, either from an open cut, abrasion, needle stick injury, or through mucus membrane contact must be reported and needle stick and accident forms completed. Blood and body fluids must be handled with the aim of minimising contact with skin or mucus membranes. Normal accepted hygiene precautions, of washing hands after contact with EVERY patient should be observed at all times. Resuscitation aids should be used wherever possible to avoid direct patient contact during resuscitation (e.g. use mouth piece and resuscitation bags instead of mouth to mouth resuscitation).

B. Ventilation Requirments

The ventilation of an ambulance is critical for the safety and health of members operating inside the vehicle. NFPA 1581 includes the following criteria for adequate and effective ventilation. The ventilation system must provide complete ambient air exchange in both the driver and patient compartments on a regular basis. Control of the ventilation system should be possible from both compartments. Fresh air intakes should be located towards the front of the vehicle to afford maximum intake of fresh air. Exhaust vents should be located in the upper rear of the vehicle. To reduce the risk of tuberculosis, high efficiency particulate arresting (HEPA) filters should be integrated in the patient compartment ventilation system. All seats, mounted cushions, cots, floors, counters, shelves, bulkheads, and container linings must be made of or covered by nonabsorbent, washable material. These surface materials should be inert to detergents, solutions, and solvents, for disinfecting and cleaning as described by OSHA or CDC.

C. Standard precautions

This term summarizes all infection control measures which have to be observed for patient care activities independent of known infection and which normally offer sufficient protection against most infectious diseases. These precautions are:

1. Personal Hygiene & Hand Washing

Wash hands:

- Prior to and after duties involving direct patient contact wherever possible. If hands are contaminated with blood or body fluids, wash first with soap and water and then decontaminate with alcohol gel or wipes. If access to soap and water is not possible, remove as much blood, or body fluids, as possible, with disposal paper towels and then apply waterless alcohol based hand rub (Hibisol) and upon arrival to hospital wash hands with antiseptic detergent and a single use nailbrush.
- When hands are visibility dirty.
- After removing protective equipment.
- When using toilet facilities.
- After performing dirty tasks.
- Before eating.

In the event of contamination of eyes or mucus membranes with blood or body fluids staff should rinse or irrigate the affected area with normal saline eye wash, or sterile water. Running tap water can be used if necessary. Rinse mouth with water and spit out. Always wear non-latex gloves to protect your hands when dealing with a patient or contaminated equipment.

Ensure that alcohol based hand rub are available on all vehicles.

2. Use of Personal Protective Equipment (PPE)

If you work in a situation where you come into contact with other people's blood or body fluids you could be at risk. The Control of Substances Hazardous to Health (COSHH) regulations 1999 requires employees to undertake their own risk assessment and to bring into effect measures necessary to protect workers and others who may be exposed, as far as is reasonably practicable. Avoid contamination of person and clothing with blood and body fluids. Always use appropriate protective clothing in any situation when contact is possible. All staff must wear protective eyewear and all other appropriate personal protective equipment when dealing with a patient where there is a risk of contamination from blood or other body fluids. Vehicles must be equipped with adequate supplies of non-latex gloves, aprons, masks, safety spectacles, paper disposable coveralls. Protective gloves and glasses should be worn when carrying out cleaning procedures. see table (1).

Table (1) The use of Personal Protective Equipments in different situations

| Activity | Gloves | Eyewear | Mask | Gown |
|---|--------|---------|------|------|
| Uncontrolled bleeding | Yes | Yes | Yes | Yes |
| Controlled bleeding | Yes | No | No | No |
| Childbirth | Yes | Yes | Yes | Yes |
| Endotracheal intubation | Yes | Yes | Yes | No |
| Oral / Nasal suctioning, manually cleaning airway | Yes | Yes | Yes | Yes |
| Handling / cleaning possibly contaminated instruments | Yes | Yes | Yes | Yes |
| Measuring blood pressure | No* | No | No | No |
| Giving an injection/ starting an IV | Yes | No | No | No |
| Measuring temperature | Yes | No | No | No |
| Cleaning patient compartment after a call | Yes | No** | No** | No** |

* Unless the patient's arm is contaminated with blood or body fluids or unless required by department policy.

** Unless heavily contaminated by blood or body fluids or unless required by department policy.

3. Management of Sharps

Sharps are defined as any article that can cut or puncture the skin by having a fine edge or point. (e.g. needles, glass ampoules)

- When using sharps it is the personal responsibility of staff using those sharps to dispose of them safely in the sharps container provided.
- Staff must not leave sharps for other personnel to dispose of.
- Unsheathed sharps must never be carried in hands or pockets.
- Sharps must not be passed from hand to hand.
- Resheathing of needles should never be attempted.
- Used needles should not be removed from the syringe unless a specific clinical procedure requires it.

In the event of a sharps injury:

- Encouragement of bleeding
- Wash wound with soap and water
- Cover wound with waterproof dressing
- Seek urgent medical advice, within two hours of the injury to assess risk of Hepatitis, or HIV infection.
- Report all incidents to duty manager.
- Complete needle stick and incident report form approved by Kuwait Ministry of Health giving all essential or relevant information.

Follow Up After Needle Stick Injury

Staff should expect to be assessed, with regard to the risk of HIV or Hepatitis infection. Blood samples for Hepatitis B should be taken from all injured staff. The source patient in the incident, if known, will be asked to supply blood samples for Hepatitis B and possibly Hepatitis C and HIV testing if clinical circumstances dictate.

All staff must make contact with the preventive medicine department so that appropriate follow up can be arranged. This follow up will include a review of the blood tests taken. Follow up testing for Hepatitis C will also be arranged.

4. Clinical Waste Including Disposal of Sharps

All clinical waste, which is any item contaminated with blood or body fluids, must be disposed of in a yellow plastic sack or sharp disposal container. In general, when considering the disposal of clinical waste staff should not over fill clinical waste sacks and should ensure that they are sealed after use. Clinical waste should be disposed of as quickly as possible, at the receiving hospital, to minimise the risk of contamination. All sharps must be disposed of in yellow sharps container. Sharps containers should never be overfilled and must always be securely sealed when full. All clinical waste sacks and containers must be labeled with their station of origin.

All clinical waste must be stored in a locked bin or approved storage container (not a station cupboard) to which the public have no access.

5. Linen

Each patient should be provided with a clean blanket. Used blankets should be placed in the laundry bins provided. Blankets contaminated with blood or body fluids should be regarded as infected and processed in the biodegradable laundry bag provided. It should be stored in a secure location whilst awaiting collection.

Laundry from MRSA patients should be regarded as infected.

There are several steps that the provider should take to reduce the risk:

- Dirty clothes should be changed as soon as possible and the provider should shower before donning clean clothes. Providers should keep at least one extra uniform at the station while on duty.
- Dirty linen and clothing should be handled as little as possible. Soiled items should be bagged, with blood-contaminated clothing/linen placed in a separate, leak-proof bag marked with a biohazard label.

- Soiled clothing/linen should be washed in the normal laundry cycles with regular detergent following label instructions.
- Gloves should be used when handling, bagging, and placing dirty items in the washing machine.

6. Spillages of Blood & Body Fluids

Always wear appropriate protective clothing and gloves for cleaning up spills.

Small Spills

Use disposable paper towels to remove the spill.

Disinfect area with (hypochlorite tablets 7 in 1 litre of water for a t least two minutes.

Place materials used in yellow clinical waste sack for disposal.

Wash hands on completion.

Large Spills

Contain spills with absorbent paper towels, which should be placed in a yellow sack for disposal after use.

Where possible a mop can be used for a large spill.

Clean contaminated area with water containing either 10% bleach solution as above or other approved proprietary cleaning agent. Place all contaminated materials in a yellow waste sack.

Wash your hands after completing cleaning tasks.

Bleach must not be used to treat large urine spills. Instead a hand hot water and detergent solution should be used.

Mop heads should be sent for laundering immediately if contaminated with body fluids

7. Cleaning, Repairs And Servicing Of Medical Devices And Vehicles

Single used equipments are preferred than multiuse ones. Medical devices and equipment marked for single use only must never be reused. Equipment requiring repair or servicing must be cleaned of all organic material before it is sent away. All contaminated reusable medical devices must be handled, collected and transported to the designated area for cleaning or for disposal in a manner that avoids the risk of contamination to patients, staff and any area of the health care facility. All reusable medical devices must be decontaminated in accordance with manufacturers instructions .

Vehicle Cleaning

Routine cleaning of vehicles should be carried out:

- daily – for internal and external structure whenever practicable during a shift.
- weekly – for all removable fixtures and equipment unless visibly contaminated. Where this is not possible, a rotational cleaning schedule should be undertaken.

External Cleaning

Use hot water and general purpose detergent.

Internal Cleaning

Using a designated mop, floor should be cleaned with a hot water and soap . If mop becomes contaminated with body fluids, it should be laundered immediately. Otherwise, mops should be laundered daily.

Furniture and equipment should be washed as above using a disposable cloth and dried thoroughly with a disposable paper towel.

When ambulances become contaminated, cleaning of surfaces and equipment must take place after dispatch of the patient prior to the next call of duty. Decontamination should normally be carried out at the relevant health care setting, however if this is not possible then vehicles should be decontaminated at the nearest ambulance station. Vehicles should have all moveable equipment removed and contaminated surfaces and floors should be cleaned with a solution of hot water and general purpose detergent, then wiped over with a bleach (hypochlorite) solution.

Disposable cloths and mops should be used for widespread spillages. All surfaces should be allowed to dry thoroughly before the ambulance is put back into use.

It is important that an adequate supply of single use equipment is always available and replenished when used. Re-usable equipment must remain out of service contained in closed container until it is sent for cleaning, disinfection or sterilization.

8. General Cleaning For Ambulance Stations

The role of domestic cleaning in ensuring that the work place environment is not a source of infection is a very important one. It must be remembered that DUST, DIRT and MOISTURE are the three factors in the environment that favour the survival and growth of microbes.

Cleaning techniques are designed to prevent the spread of these microbes and if techniques are poor they will be spread around rather than being removed. Most microbes die rapidly when areas are clean and dry. All surfaces should be dried after cleaning and mop buckets and bowls stored inverted. Cleaning means the removal of dust and dirt from the environment, not just the redistribution that occurs with dry dusting and sweeping. Hot water and general-purpose detergent are sufficient for routine cleaning.

Cleaning Equipment

Mops and buckets should be suitably marked or colour coded to indicate the area where they are to be used.

There should be one mop and bucket available for each of the following areas:

- Kitchen and food area
- Toilets and washroom
- Vehicle interior

Buckets and Bowls

- After emptying, they must be washed with hot water and general purpose detergent. They must then be rinsed and dried thoroughly and stored inverted.

Mop

- Mops must have detachable heads. These must be changed and sent to be laundered at high temperature on a daily basis and when not in use mops should be hung on hooks with mop head downwards over buckets so that dirty infected water cannot contaminate the handles. Mops contaminated with body fluids must be laundered immediately.

Paper Towels

- When replacing paper hand towels, these must be put into the holder, and not placed on top. Paper towel and liquid soap dispensers of the cartridge type must be cleaned regularly.

Toilet Brushes

- Toilet brushes should be thoroughly washed using general purpose detergent and hot water and stored dry.

Vacuum Cleaners

- The bags must be changed as necessary and the brush cleaned of hair and fluff before storage.

General Cleaning

Crockery and Cutlery

- Hot water and general-purpose detergent should be used. Wherever possible, dry with disposable heavy-duty paper towel.

Floors

- It is usually sufficient to clean floors by removing dust with a properly maintained filtered vacuum cleaner. They can then be cleaned by washing with hot water and general purpose detergent, using mops or suitable scrubbing machine.

Food Preparation Areas

– All food preparation surfaces should be cleaned regularly with hot water and general-purpose detergent. These areas should be kept in good repair to facilitate cleaning. Ovens and microwaves must be cleaned after use.

Hands & Hand- washing

– Hands must be washed thoroughly following any cleaning session. Communal nailbrushes must not be used.

Refrigerators

– All fridges should be defrosted and cleaned regularly. Should a spillage occur or food become stale, the whole interior of the fridge should be cleaned with hot water and general purpose detergent and dried thoroughly.

Shower Mats

– Anti-slip shower mats must be washed with hot water and general-purpose detergent after use. (Cork type shower mats are not to be used).

Shower Room and Hand Basins

– Shower rooms and hand basins must be cleaned regularly with a detergent, using a piece of disposable cloth and be disposed of into a domestic waste sack.

Toilets

– Toilets should be cleaned with a toilet brush daily, more often if soiled using a toilet de-scaling liquid. Toilet brushes should be cleaned after use in hot water and general-purpose detergent and stored dry in brush holder.

Waste Bins

– Waste bins must be cleaned at least weekly inside and outside with hot water and general purpose detergent. Sack holders should also be cleaned regularly as above.

IV. Transmission based precautions for known infection status

The necessity of individual measures depends on the kind of transmission possibilities.

- Reduce transport to the absolutely necessary.
- Inform staff including staff of destination hospital.
- Plan and make arrangements so that the vehicle can be appropriately decontaminated following transport of an infected patient.
- Clear the vehicle as far as possible, deposit emergency equipment with the driver.
- Keep driver compartment separated – close separating window, communication via intercom.
- Do not use interior air conditioning with closed air cycle.
- Use disposable drapings and covers in case adequate laundry disposal is not possible.
- For transfer of infected patient, use only the absolutely necessary personnel and material.
- Only personnel that has direct contact with the infected patient protects themselves with the necessary protective clothing. Since the interior of the vehicle can be contaminated, the protective clothing must only be removed at the headquarters and safely disposed of.
- In the presence of secretions, excrements, blood and so on, ensure immediate disinfection.
- After completion of the transport, disinfect the vehicle's interior and used objects including work surfaces by chlorine releasing agent.

V. The management of some of the more commonly encountered infection

- ***Methicillin Resistant Staphylococcus aureus (MRSA)***

It is necessary to wear masks and other protective clothing when dealing with an MRSA patient. “special” vehicle cleaning procedures are required. MRSA patients with open wounds or lesions infected with MRSA should not be transported with other patients, unless the wounds are adequately covered After patient contact, staff should wash their hands carefully as detailed in section above.

- The receiving hospital should be notified before transport.
- The skin must be disinfected before transport.
- The patient must be kept covered during transport.
- The accompanying staff must be aware of the necessary preventive measures during transport (contact precautions).
- A patient of carrier of MRSA should not be transported in the same ambulance with other patients.
- The ambulance should be cleaned and disinfected after transport and before it is used for other patients.
- trolley or wheelchair used for patient transport must be cleaned and disinfected.
- Bed sheets used during transport should be treated as infected linen.
- Stretchers must be wiped down after each patient use with an approved disinfectant (rubbing alcohol or bleach solution).

- ***Tuberculosis***

Tuberculosis is spread by airborne transmission. Patients with cough should wear a surgical mask and cough into disposable tissue. In the event that resuscitation of the patient is required, staff should never carry out direct contact mouth-to-mouth resuscitation. They should always use a pocket mask or bag, valve, mask

device. Routine cleaning of the vehicle is required after carrying a patient with tuberculosis.

- ***Meningitis***

The bacteria and viruses, which cause the various types of meningitis are in the main, transmitted by the faecal-oral route and droplet routes. Thus staff involved in transfer should apply standard and droplet precautions (hand hygiene-gloves –surgical mask)

Staff who carry out airway management or whose mouth or nose have been directly exposed to respiratory secretions from a patient with Meningococcal Disease should seek expert advice as soon as possible. These staff will require a short course of prophylactic antibiotics. Advice should be sought in the first instance from the admitting hospital, however, if the diagnosis is not immediately known then at a later date advice can be sought from the preventive medicine. Direct mouth-to-mouth resuscitation should never be carried out in such patients.

- ***Hepatitis A***

Hepatitis A virus is transmitted by the faecal-oral route and generally provides no risk to health care workers. Proper attention to universal procedures and personal hygiene will provide adequate protection.

- ***Hepatitis C***

Hepatitis C is a blood borne virus and is contracted in the same way as Hepatitis B. There are increasing numbers of patients with a carrier state of the virus. It poses a risk to health care workers, as there is no available vaccination. Staff are at most risk from Hepatitis C from needle stick injuries. They should observe the precautions set out in the “Management of sharps” section in this policy. All staff sustaining sharps injuries will be offered a six-month follow up Hepatitis C test routinely. If the source patient is known to be Hepatitis C positive ,staff will be offered a more rigorous testing regime.

- **“Human Immunodeficiency Virus” (HIV) and “Acquired Immune Deficiency Syndrome” (AIDS)**

HIV is transmitted by blood or blood borne in other body fluids. There is no evidence that HIV infections can be transmitted by contact with the saliva or tears of an infected patient. Personal protection equipment should be used if there is a risk of exposure to the patient’s blood. Care should be taken to avoid sharps injuries. The prime risk of infection for staff is by an accidental inoculation through a needle stick injury or entry of infected material through broken skin or mucus membranes. Where possible, aseptic and non-touch techniques should be used as these and the appropriate use of PPE offer the best protection. In the event that a member of staff is contaminated with the blood or body fluids of a patient known or suspected to have the HIV virus they must immediately contact the nearest Preventive Department .

- **Miscellaneous Infectious Diseases**

A table of infectious diseases, their incubation period, mode of transmission and duration of infectivity is given at table (2).

TABLE (2) :Examples of infectious diseases

| INFECTION | INCUBATION PERIOD | MODE OF TRANSMISSION | DURATION OF INFECTIVITY | GENERAL MANAGEMENT |
|--|---|---|--|--------------------------------|
| ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) | May be years. Sero-conversion usually takes up to six months. | Sexual contact, blood or blood products, or blood stained body fluids. | Unknown | Standard precautions. |
| ANTHRAX | 2 – 7 days. Usually within 48 hours. | Transmissible from infected soil and animal products such as bone meal. | Not transmitted from person to person (unless it is sporating) | SPs. Ensure lesion is covered. |
| CHICKEN POX | 2 – 3 weeks. | Respiratory | From 5 days | SPs. |

| | | | | |
|--|---|---|--|--|
| (Varicella Zoster) | Commonly 13 – 17 days. | transmission and direct contact with lesions. | before the appearance of the rash until 5 days after. | |
| CHOLERA | Several hours to 5 days. Usually 2 – 3 days. | Infected water or seafood. | Until diarrhoea stops | SPs. Caution: diarrhoea may be profuse. |
| CREUTZFELD-JAKOB ENCEPHALOPATHY Spongiform encephalopathy | 1 – 20 years but not exactly known. | Transmissible via brain/nervous tissue or pituitary extracts. | Unknown. | SPs. |
| DIARRHOEA Amoebic dysentery Campylobacter Clostridial Giardia Rotavirus | 2 – 4 weeks. 3 – 5 days. 6 – 24 hours. 7 – 10 days. 48 hours. | Ingestion/faecal. Ingestion/faecal. Usually from meat products. Ingestion/faecal. Faecal/oral. Possibly respiratory. Ingestion/faecal | As long as organism is present. Ditto. Not directly transmissible from person to person. As long as organism is present. Up to 2 days. | SPs. |
| Salmonella Shigellosis | 6 – 72 hours. 1 – 7 days | Ingestion/faecal. | As long as organism is present. | |
| DIPHTHERIA | 2 – 5 days usually. | Direct | 2 – 3 weeks or whilst organism is present. | SPs. Use a good quality surgical (filtering) mask. |
| HEPATITIS A | 15 – 50 days. Average one month. | Faecal/oral route, food, water borne. | From before onset of symptoms until a few days after jaundice develops. | SPs. |
| HEPATITIS B | 45 – 180 days (average 60 to 80). | Via blood and sexual contact. | From many weeks before onset of symptoms until serologically negative. | SPs. |
| HEPATITIS C | 2 weeks – 6 months. | Blood. Small risk of sexual transmission. | From one week before onset of first symptoms and | SPs. |

| | | | | |
|---------------------------------|----------------------------------|---|---|--|
| | | | indefinitely in the chronic carrier stages. | |
| IMPETIGO | 4 – 7 days. | 1 Respiratory route or direct contact (hands). | Until effectively treated (usually 24 hours). | SPs. |
| 1 LEGIONNAIRES' DISEASE | 2 – 3 days. | Respiratory transmission from environmental sources (water). | Spread from person to person unknown. | SPs. |
| LEPTOSPIROSIS Wiel's Disease | 4 – 19 days. Usually 10 days. | Transmitted via water or food contaminated with rodent urine. | May be excreted for months but person to person spread is rare. | SPs. |
| LEPROSY | 9 months – 20 years. | Transmissible by direct skin/lesion contact. | Until receiving treatment. | SPs. Ensure gloves are worn for direct contact. |
| MALARIA | Variable (dependent on species). | Mosquito borne. | Not transmissible from person to person. | SPs. |
| MEASLES | 7 – 18 days. Usually 10 days. | Respiratory borne. | From many weeks before symptoms appear to four days after the appearance of the rash. | SPs. |
| MEINGITIS HAEMOPHILUS | 2 – 4 days | Respiratory route. | As long as organisms are present. | SPs. |
| MENINGOCOCCAL NEONATAL | 1 – 7 days. | Respiratory route. From birth canal. | Until 48 hours after effective treatment. Mothers need prophylactic antibiotics if there is premature rupture of membranes. | You will be advised directly if you need prophylaxis. (Only those involved in intubation generally require prophylaxis.) |
| PERTUSIS (Whooping Cough) | 7 – 10 days. | Respiratory route and hands. | Until 3 weeks after onset of symptoms. | SPs. |
| PLAGUE | 1 – 7 days. | Pneumonic – respiratory route. | Many months. | SPs. |
| PNEUMONIA | 1 – 3 days | Possible | Until 48 hours | SPs. |

| | | | | |
|---------------------------------|--|--|---|--------------------------------------|
| PNEUMOCOCCAL PNEUMOCYSTIS | | respiratory transmission but usually endogenous. Endogenous infection in immuno-suppressed patients. | after effective treatment. Unknown. | SPs. |
| POLIOMYELITIS | 7 – 14 days. Up to 35 days in paralytic cases. | Usually faecal-oral spread. | Faeces can remain infected for up six weeks. This includes post-immunisation in children. | SPs. |
| PYREXIA TRAVEL NON-TRAVEL | - consider tropical disease. - treat as other Group One illnesses | | | SPs. |
| RABIES | Usually 2 – 8 weeks. Occasionally more than one year. | From infected persons, dogs, cats, foxes, bats, etc. | Transmission via saliva. During the course of the disease. | SPs. |
| RUBELLA | 14 – 23 days | Respiratory route | 1 week before rash until 4 days after. | SPs. |
| SCABIES | 2 – 6 weeks. | Transmitted by prolonged skin-to-skin contact. | Until all mites and eggs have been destroyed. | SPs. Wear gloves for all contact. |
| SHINGLES | 13 – 21 days. | Direct contact with lesions | Whilst blisters remain. Can cause Chicken Pox in susceptible individuals. | SPs. |
| SMALLPOX | | | | SPs |
| TETANUS | 3 – 21 days. | Transmission from soil. | Not transmitted from person to person. | SPs. |
| TUBERCULOSIS | 4 – 12 weeks. | Respiratory transmission | Until effective chemotherapy renders culture negative. | SPs. |
| TYPHOID FEVER | 1 – 3 weeks. 1 – 10 days. | Faecal oral. Food and water. | Until all bacteriology | SPs. |

| | | | | |
|--|---|---|--|------|
| | | | cultures are negative. (If untreated, up to 3 months.) | |
| VIRAL HAEMORRHAGIC FEVERS Lassa Ebola Marburg | 6 – 21 days. 2 – 21 days. 3 – 9 days. | Direct and indirect contact with infected secretions. | Whilst organism remains present. | SPs. |
| YELLOW FEVER | 3 – 6 days. | Mosquito borne. | Not person to person. | SPs. |

*SPs: Standard precautions