



The control of communicable diseases in schools and nurseries

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Control of communicable diseases in schools

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This guidance has been prepared by the Wiltshire Health Protection Team (HPT) for schools and nurseries.

1. General principles

This guidance

The Wiltshire Health Protection Team provides this guidance as a means of assisting schools and nurseries to manage the risks presented from communicable diseases effectively. It is not intended as a guide to diagnosis. That should be undertaken only by an appropriately qualified health professional. In all circumstances schools and nurseries should seek further advice if in any doubt as to the appropriate course of action.

School and nursery actions

Communicable diseases in humans result from the transmission of contagious agents, such as bacteria and viruses, from another infected person, animal or inanimate reservoir. In almost every case, success in managing communicable diseases follows early recognition and prompt action.

In most cases of a single child with a common childhood communicable disease, the only action necessary is to ensure that the infectious child stays away from school or nursery whilst infectious and to be vigilant for further cases developing.

This guidance should enable schools and nurseries to carry out these actions, but advice and clarification about communicable diseases should be sought whenever there is doubt about the management of a particular disease. Details of sources of advice are given in Section 2.

Wiltshire Council accepts the Wiltshire Health Protection Team as its principle source of advice in all communicable disease issues and has adopted this document as Wiltshire Council policy. Within community and voluntary controlled schools, Wiltshire Council is the employer and as such requires schools to meet the minimum standards defined within the policy. Other schools and nurseries are strongly recommended to do likewise when faced with apparent or potentially conflicting advice from parents, doctors (GPs) or other sources.

Children with communicable diseases

Children who are unwell with a communicable disease should not be at school or nursery. They should not return until they are feeling better and the risk of infection to others has passed.

Outbreaks of infection

If a school or nursery suspects that there is an outbreak of infection (an unusual number of cases of a communicable disease in a given time period) they should inform the Consultant in Communicable Disease Control (CCDC) (see Section 2 for contact details).

In addition, the Environmental Health Officer (EHO) should be informed of outbreaks of food poisoning and vomiting or diarrhoea (see Section 2 for contact details)

On confirmation from the Consultant in Communicable Disease Control (CCDC) or Environmental Health Officer that an outbreak has occurred, the school or nursery should also notify the council's health and safety service (see section 2 for contact details).

Immunisations

By the age of two most children should have received three doses of diphtheria/tetanus/whooping cough/Hib/MenC/polio and pneumococcus immunisations and at least one dose of measles, mumps, and rubella (MMR) immunisation. By age five most children should, in addition, have had a booster of diphtheria, tetanus, whooping cough and polio, and a second dose of MMR.

2. Useful contacts and sources of advice

2.1 Wiltshire Health Protection Team (for advice on communicable diseases)

Consultant in Communicable Disease Control or Senior Health Protection Nurse:

Wiltshire Health Protection Team

Courtyard Surgery

39 High Street

West Lavington

Wiltshire SN10 4JB

Tel: 01380 814000

Fax: 01380 814019

2.2 Environmental Health Officers – Public Protection Services

Wiltshire Council

Bradley Road

Trowbridge

Wiltshire

Tel: 0300 456 0100

2.3 Occupational Health and Safety Service

Wiltshire Council

County Hall

Bythesea Road

Trowbridge

Wiltshire BA14 8JN

Tel: 01225 713185

2.4 For advice about general child health issues – complete the following details

School nurse:

Telephone:

Further information

Background information supporting the advice in this booklet and a list of other sources of information can be found on the Health Protection Agency website at www.hpa.org.uk

Further information on infection control procedures is available in the community infection control guidelines available from the Wiltshire Health Protection Team.

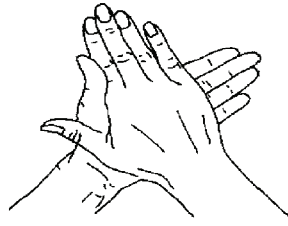
3. Basic hygiene rules to be observed

The risk of transmission of most communicable diseases can be reduced significantly by routine attention to basic hygiene. All staff and children should be encouraged to maintain the following simple and straightforward basic good practices. Infections can be passed on before a person is knowingly unwell.

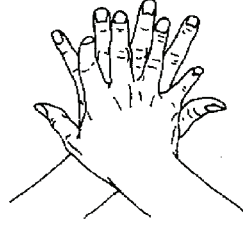
Hand washing – the simplest and most effective measure there is!

Effective hand washing is an important method of controlling the spread of infections, especially those that cause diarrhoea and vomiting. Here is how to do it and why!

How to do it	Why it is done
1. Always wash hands after using the toilet and before eating or handling food; use warm, running water and a mild, preferably liquid, soap.	To remove contamination. Liquid soap is less likely to become contaminated than bar soap.
2. Wet hands before applying soap	To help prevent skin dryness.
3. Rub hands together vigorously until a soapy lather appears and continue for at least 15 seconds ensuring all surfaces of the hands are covered, as shown below.	To remove dirt from all parts of the hands.
4. Rinse hands under warm running water and dry hands with a hand dryer or clean towel (preferably paper).	To prevent recontamination of the hands in standing water or from a used towel.
5. Discard disposable towels in a bin. Bins with foot-pedal operated lids are preferable.	To prevent recontamination of the hands from the bin lid.



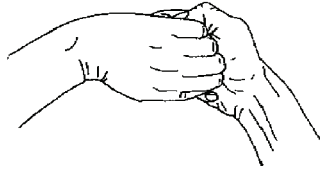
Wet hands and add solution. Rub palms together.



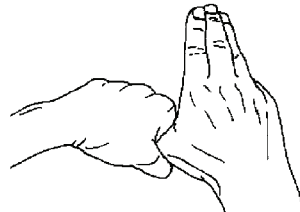
Right palm over back of left hand and left palm over back of right palm.



Palm to palm with fingers interlaced.



Rub backs of fingers with palms.



Wash each thumb by clasping and rotating in the palm of the opposite hand.



Rub each wrist with opposite hand. Rinse hands and dry.

Other good hygiene procedures	
<ul style="list-style-type: none"> Keep toilets clean. 	To reduce the risk of spread of gastrointestinal infections such as Norovirus.
<ul style="list-style-type: none"> Encourage the use of tissues, and proper disposal, when coughing and sneezing. 	To reduce the risk of spread of respiratory infections such as influenza ('flu).
<ul style="list-style-type: none"> Avoid shared drinking cups for children and wash all cups thoroughly and regularly. 	To reduce the risk of spread of infections spread via oral secretions, such as cold sores.
<ul style="list-style-type: none"> Monitor the cleanliness of food preparation areas. 	To reduce the risk of food contamination.
<ul style="list-style-type: none"> Encourage staff and pupils with diarrhoea or who are vomiting to stay off school until 48 hours after symptoms have resolved. 	Keeping people who are infectious away from school will reduce the risk of spread of infection in school.

If a food handler has diarrhoea or vomiting they must stay away from work until 48 hours after their last episode of diarrhoea or vomiting. If there is more than one food handler affected, the Food Team, Environmental Health, Public Protection Services, should be informed, as per contact details in section 2.2. It is even more important that they adhere to strict infection control procedures.

4. Risks to vulnerable children

Some medical conditions make children vulnerable to infections that would rarely be serious in most children. These include: those being treated for leukaemia or other cancers, on high doses of steroids by mouth and with conditions which seriously reduce immunity. Schools and nurseries and childminders will normally have been made aware of such children.

They are particularly vulnerable to chicken-pox or measles and, if exposed to either of these, the parent/carer should be informed promptly and further medical advice sought. It may be advisable for these children to have additional immunisations eg pneumococcal and influenza.

NB. Shingles is caused by the same virus as chickenpox virus; therefore anyone who has not had chickenpox is potentially vulnerable to the infection if they have close contact with a case of shingles.

5. Risks to new and expectant mothers and other female staff

In general, if a pregnant woman develops a rash or is in direct contact with someone with a potentially infectious rash this should be investigated by a doctor. The greatest risk to pregnant women from such infections comes from their own child/children rather than the workplace.

- Chickenpox can affect the pregnancy if a woman has not already had the infection. If exposed early in pregnancy (first 20 weeks) or very late (last three weeks), the GP and ante-natal carer should be informed promptly and a blood test should be done to check immunity. NB Shingles is caused by the same virus as chickenpox virus; therefore anyone who has not had chickenpox is potentially vulnerable to the infection if they have close contact with a case of shingles.
- German measles (Rubella): If a pregnant woman comes into contact with German Measles she should inform her GP and ante-natal carer immediately to ensure investigation. The infection may affect the developing baby if the woman is not immune and is exposed in early pregnancy. All female staff under the age of 25 years, working with young children, should have evidence of two doses of MMR vaccine.
- Slapped cheek disease (Parvovirus B19) can occasionally affect an unborn child. If exposed early in pregnancy (before 20 weeks) inform whoever is giving ante-natal care as this must be investigated promptly.
- Measles during pregnancy can result in early delivery or even loss of the baby. If a pregnant woman is exposed, immediately inform whoever is giving ante-natal care to ensure investigation. All female staff under the age of 25 years, working with young children, should have evidence of two doses of MMR vaccine.

6. Contact with blood or bodily fluids through accidents, first aid or other means

It is important to avoid contact with blood or other bodily fluids, as these can transmit disease. Contact could occur in the following circumstances:

- Providing first aid - dealing with cuts and grazes
- During fights between children or assaults upon staff
- Cleaning up spilt blood, vomit, faeces etc
- Children engaging in blood brother/sister rituals or attempting do-it-yourself body piercing or tattoos.

First Aid - general

The hygiene precautions that are recommended here are common sense precautions that should be used at **all times**, not just when knowingly caring for a child with a blood-borne infection such as HIV or Hepatitis.

- Cuts or sores that break the skin on the hands or arms of the First Aider should be kept covered with waterproof plasters or other suitable dressings. NB Some people are allergic to latex in waterproof plasters; a latex-free alternative should be used.
- Disposable gloves should be worn when carrying out First Aid. If heavily soiled material is being handled, household rubber gloves should be used then discarded. Gloves should be readily available.
- Hands should be washed thoroughly before and after carrying out First Aid procedures, especially those involving external bleeding and/or broken skin.
- Any waste should be contained in a plastic bag that is securely tied and discarded through the normal waste route.

First aid and the aftermath of accidents or assaults involving blood

- Disposable gloves must be worn. Advice on glove selection and care is given at the end of this section. An apron should also be worn if any significant amount of blood is involved.
- After putting on disposable gloves the wound should be washed immediately, using plenty of water. A suitable dressing should be applied or a pressure pad if needed.

Seek medical advice if required.

- If blood is splashed onto the skin it should be washed off immediately with soap and water.
- Splashes of blood into the eyes and the mouth should be washed out immediately with plenty of water.

If any staff member believes they have blood to blood/body fluid contact with a carrier of Hepatitis/HIV they should seek medical advice immediately, contacting either occupational health or the nearest accident and emergency department.

Cleaning up spilt blood and high-risk body fluids (containing blood)

- Spillages must be dealt with quickly and effectively.
- Disposable gloves and aprons must be worn.
- External surfaces, such as playgrounds, should be washed down with plenty of water to dilute the blood as much as possible.
- Other surfaces require more careful attention. The following options apply:
 - a) Detergent and water method (for soft furnishings and carpet)
 - Steam clean **or**
 - Wearing protective clothing, mop up organic matter with paper towels or disposable cloths
 - Clean surface thoroughly using a solution of detergent and water and paper towels or disposable cloths
 - Rinse the surface and dry thoroughly
 - Clean the bucket/bowl in fresh hot, soapy water and dry
 - Put protective clothing and any other waste into a plastic bag that is securely tied and discarded through the normal waste route
 - Wash hands.

b) Sodium dichloroisocyanurate (NaDCC) method (not carpets and soft furnishings)

- Wearing protective clothing, cover spillage with NaDCC granules
- Leave for at least two minutes
- Scoop up the debris with paper towels and/or cardboard
- Wash the area with detergent and water and dry thoroughly
- Clean the bucket/bowl with fresh soapy water and dry
- Protective clothing and any other waste should be put into a plastic bag that is securely tied and discarded through the normal waste route.
- Wash hands

c) Hypochlorite method (not carpets and soft furnishings)

- Wearing protective clothing, soak up excess fluid using disposable paper towels
- Cover area with towels which have been soaked in 10,000 parts per million of available chlorine (e.g. Haz Tabs) and leave for at least two minutes
- Remove organic matter using the towels
- Clean area with detergent and water and dry thoroughly
- Clean the bucket/bowl in fresh soapy water and dry
- Protective clothing and any other waste should be put into a plastic bag that is securely tied and discarded through the normal waste route.
- Wash hands.

Note: Chlorine-releasing agents can be a hazard especially if used in large volumes, in confined spaces or mixed with other chemicals or urine. Protective clothing must be worn and the area well ventilated. A prior assessment of the risk from exposure must be carried out if using these chemicals. Increased risk is related to the likelihood of infection.

Other blood situations

Children should be discouraged from do-it-yourself ear piercing and tattooing and from mixing blood in a blood brother/sister relationship.

Cleaning up low-risk body fluids (urine, faeces, vomit etc)

- Cover the (urine, faeces, vomit etc) affected area immediately with paper towels or similar to reduce the risk of the virus/infectious agent spreading.
- Wearing protective clothing, mop up organic matter with paper towels or disposable cloths.
- Clean surface thoroughly using a solution of detergent and water and paper towels or disposable cloths.
- Rinse the surface and dry thoroughly.
- Clean the bucket/bowl in fresh hot, soapy water and dry.
- Protective clothing and any other waste should be put into a plastic bag that is securely tied and discarded through the normal waste route.
- Wash hands.
- During outbreaks of viral gastroenteritis disinfect surfaces using 0.1% chlorine solution after cleaning.

Gloves

A range of appropriate gloves should be available and accessible to staff

- Gloves are to be worn whenever contact with body fluids, mucous membranes or non-intact skin is anticipated.
- Gloves are not to be worn as an alternative to hand hygiene.
- Gloves should be changed after each procedure and hands washed following their removal.
- Washing disposable gloves with soap and water or alcohol with the intention of re-using them should not be undertaken. Disposable gloves should be worn only once.
- Gloves should be seamless, well fitting and powder-free.
- Non-sterile, non-powdered vinyl or nitrile examination gloves should be used for non-invasive procedures involving exposure to blood or body fluids, or exposure to excreta, such as urine, faeces and vomit. Polythene gloves are not recommended.

Latex should not be used as there is a risk of allergic reaction to both first aider and the casualty when susceptible individuals are in contact or close proximity with latex or the powder from latex gloves.

7. Cleaning and disinfecting the environment during a viral gastroenteritis outbreak

Norovirus can cause diarrhoea and vomiting, which usually lasts for 1-3 days. The virus is easy to catch and is spread by contact with body fluids or contaminated environments, in particular toilets and door handles, if people have not washed their hands. Although these viruses are common in the community and can be picked up anywhere, they can cause particular problems in establishments such as schools and nurseries, as although the illness itself is not severe and will ease without treatment, it can spread quickly due to the number of people together in a close environment

Outbreaks can often spread from one establishment to another and for this reason affected areas are often closed during outbreaks to prevent other areas from becoming infected.

When the outbreak is over and there are no more cases of diarrhoea or vomiting (usually 72 hours after the last episode of illness) the area can be reopened. However, due to the projectile vomiting that is often seen with this illness, the environment can become heavily contaminated with the virus and may be a source of infection to new people attending the establishment, if all areas are not thoroughly cleaned. For this reason the affected area undergoes what is called a 'terminal clean' and this is where those involved in cleaning have a crucial role in preventing further outbreaks. The following is advice regarding daily cleaning during outbreaks of suspected Norovirus and terminal cleaning at the end of the outbreak, which if followed, should help to shorten outbreaks and prevent illness.

Disinfectants

The virus is **exceedingly** hardy, and able to withstand the action of many chemical disinfectants.

There are two methods of killing the virus that we recommend:

- **Hypochlorite** 1,000ppm (parts per million) solution: bleach/hypochlorite is the only chemical for which there is strong evidence, and it is therefore recommended that this is used to disinfect all hard surfaces, including all areas of the toilet, and any hand rails.
- **Heat**: there is evidence that the virus is killed at temperatures of 60° and above, and therefore steam cleaning at this temperature can be used to clean soft furnishings, ie, carpets and seat coverings.

Hypochlorite 1000ppm (0.1%)

The most economical method of obtaining a 1,000ppm hypochlorite solution is to use normal household bleach. Household bleach is approximately 5% sodium hypochlorite and, therefore, a 0.1% (1,000ppm) solution can be obtained by diluting in a ratio of one part bleach to 50 parts cold water, eg, 10ml bleach to 500ml cold water. Once diluted, it must be used within 24 hours, or disposed of.

You must ensure that the surface is cleaned first with detergent and water, as the disinfection process can be prevented by the presence of dirt and organic matter.

There are also other formulations, for example as tablets, which may be more convenient (because they clean and disinfect at the same time, so it is a one step process), but check with manufacturers regarding instructions to obtain a 1,000ppm solution., eg Chlorclean, Sanichlor.

Daily cleaning during the outbreak

- All areas should be cleaned using hot water and detergent (hot soapy water)
- In addition, hypochlorite 1,000ppm should be used to disinfect toilet areas and commodes and frequently handled items in the environment such as:
 - taps
 - door handles
 - light switches
 - call bells
 - telephones
 - all surfaces in rooms where people are suffering from vomiting and diarrhoea.

Hypochlorite is a bleach solution, which must be made up freshly to be effective (examples of chlorine releasing tablets are *Haztabs* and *Sanichlor*). Instructions on how to make the solution to the correct strength can be seen on the packet and some manufacturers provide a mixing container in which to accurately mix the solution.

Terminal clean before the establishment is re-opened

- In a residential environment, all linen should be removed from beds prior to cleaning (and not replaced until cleaning activities are complete).
- All curtains should be removed and sent for laundering prior to cleaning and replacements put up only after cleaning activities have been completed or curtains should be steam cleaned in-situ if they cannot be replaced.
- The whole area should be thoroughly cleaned using a freshly made up solution of hypochlorite 1000ppm.

The areas cleaned should include:

- All horizontal surfaces, high and low
- All areas of the toilet including rims, seats and handles
- Wash basins and taps
- Door handles, light switches, call bells
- All equipment (including bed frames, lockers, chairs etc)
- Frequently handled items such as telephones and computer keyboards
- Carpeted areas and soft furnishings should be cleaned as normal (hypochlorite will bleach carpets and soft furnishings), followed by a steam-clean, which may need to be arranged via an external agency.
- Soft plastics/vinyl (mattress covers) will only tolerate a detergent clean. Chemical disinfectants should not be use on these surfaces avoiding any degradation of the covers.

General advice during the outbreak

- Disposable gloves and aprons should be worn during cleaning.
- Cleaning staff should make sure they thoroughly wash their hands after cleaning, even if they have been wearing gloves.
- All the equipment used for cleaning should preferably be disposable or will need thoroughly disinfecting after use and should be stored dry.
- If cleaning staff develop vomiting or diarrhoea, they must inform their manager immediately and stay off work until 48 hours after their last symptom.

Further advice can be obtained from the Wiltshire Health Protection Team details of which are given in section 2.1 of this guidance.

8. Hepatitis B, C and HIV/AIDS

Hepatitis and HIV/AIDS are entirely different diseases, caused by different viruses. However, because they are spread from person to person in similar ways, it is convenient to group them together for the purposes of this guidance.

Children with Hepatitis B, C or HIV/AIDS in the School

It is safe to have children with these infections in school provided they are well. If they are ill they should be away from school because they are sick children rather than because they are a great health risk to anyone else. They can play outside with other children and take part in sports and outdoor pursuits, including swimming, provided there are no other medical problems to prevent this.

Confidentiality

The decision of whether or not to let the school know their child has these infections, particularly HIV, is a very difficult one for parents. On the one hand they may worry that their child will be discriminated against if other people know about the infection and also that this information may be passed on more widely than they would like. On the other hand, they may feel it is appropriate for the school to know about their child's health problems. The school will then understand why their child may be frequently off sick and can offer the extra support that is needed. Schools must respect complete confidentiality and agree with parents/carers what this actually means in practice.

Staff with Hepatitis B, C or HIV/AIDS

School staff, and other people who work at the school such as volunteers, are encouraged to inform the Head teacher or the Occupational Health Advisers at County Hall if they have any of these infections, so that confidential support may be offered.

How Hepatitis B and C and HIV/AIDS are spread

They are spread to others in three main ways:

- Blood-borne ie infected blood gets directly into the bloodstream of another by sharing needles, toothbrushes, razors, surgical instruments, tattoo and acupuncture needles etc; by blood transfusion using untreated blood; needle-stick injury; or bites that break the skin.
- Sexual ie sexual intercourse with an infected partner without the use of a condom,

- Perinatal: ie from infected mother to baby.

Kissing, touching, hugging, coughing, sneezing, sharing crockery and cutlery, or via the toilet or food do not spread these infections.

Sensible precautions

Since we do not usually know who has the infection, we should treat all blood from **anyone** as potentially infectious. Prevention and transmission of this type of infection can be prevented in the following ways:

- Cover all cuts with a waterproof dressing
- Wear gloves when contacting (touching) someone else's blood
- Clean up blood spills quickly and thoroughly wearing gloves. See section 6.
- Wash hands after contacting (touching) blood and removing gloves
- Take action quickly if a bite breaks the skin or an injury with a bloodstained sharp object (eg a needle) occurs. In the case of a bite, rinse the wound and biter's mouth with lots of fresh water. Discuss any further action with a doctor.
- A vaccine is available and recommended for certain recognised groups of people who are at special risk of Hepatitis B infection. School staff in general are not considered to be at particular risk of infection. Anyone concerned about his/her individual risk should discuss it with his/her own GP and line manager in the first instance.
- If any staff member believes they have blood to blood/body fluid contact with a carrier of Hepatitis/HIV they should seek medical advice immediately, contacting either occupational health or the nearest accident and emergency department.

General points

Children should not give blood at school eg in biology lessons.

Children should be discouraged from do-it-yourself ear piercing and tattooing or from mixing blood in a blood brother/sister relationship.

9. Meningitis and Septicaemia

Meningitis means inflammation of the membrane lining the brain. It has many causes, including different bacteria and viruses, and is not uncommon. Public health action is only required where there is suspicion or confirmation that the meningitis and/or septicaemia is caused by the bacterium *Neisseria meningitidis* (known as meningococcus).

No public health action is required in cases where other bacteria or viruses are thought to be the cause, but parents, staff and others may require reassurance and information to allay their concerns. The Health Protection Team is informed of all known or suspected cases of meningococcal disease and will co-ordinate the public health response. Contact the HPT for further information about suspected cases. See Section 2 for contact details.

Meningococcal infection

(a) Clinical Features and Incidence

Meningococcal meningitis and septicaemia are systemic infections caused by the bacterium *Neisseria meningitidis* (or meningococcus). The main symptoms of infection are fever, rash, neck stiffness, headache and dislike of bright lights. Meningitis is not easy to identify at first because the symptoms are similar to those of 'flu'. The disease may progress over one or two days but it can develop quicker and sometimes in just a few hours the patient becomes seriously ill. Not all the symptoms may show at once. Children may also have joint pains and vomiting. A rash need not always be present, but when, in an ill child, a rash of red or purple spots or bruises appears anywhere on the body that does not go white when pressed (blanche), it should be taken as a serious sign. The overall incidence of meningococcal disease in the population is about three cases per 100,000 population, but this varies considerably with age. Infants and young children aged less than five years have the highest incidence of infection. Meningococcus also causes septicaemia (blood poisoning). The bacteria enter the body from the throat and travel via the blood. In some cases the germs multiply uncontrollably in the bloodstream and this results in septicaemia before bacteria can infect the meninges. In other cases, infection in the bloodstream and in the meninges develop at the same time, causing septicaemia and meningitis.

(b) Transmission of Infection

Transmission from case to case is rare and most cases acquire infection from healthy carriers in the population: about 10 per cent of the population will carry the organism in the back of the nose and throat at any one time, although carriage rates vary with age. The meningococcus bacterium spreads between people coughing, sneezing and kissing, but the

germs do not live for very long outside the body. Carriers of the meningococcus bacterium do not usually develop any disease and being a carrier of the germ helps to boost immunity. Only very rarely does someone who is particularly vulnerable to developing meningococcal meningitis or septicaemia acquire the germ and become ill. We do not know why some people are more susceptible to developing meningococcal infection than others.

(c) Contacts

(i) Household contacts

People who live in the same household as a case of meningococcal disease are at higher risk of developing disease than other members of the community. A short course of antibiotics is given to these contacts.

(ii) Contacts outside the household

After a single case of meningococcal disease, the risk of further linked cases outside the household is low. After one case in a school, antibiotics would not usually be advised for other children and staff, but it is most important to give out information about the signs and symptoms of meningitis to parents of children in the same class, or more widely throughout the school if appropriate. The CCDC will advise head teachers when a case has occurred and assist in the preparation of a letter to parents.

(iii) Management of clusters

If more than one case occurs in a school, further action will be required.

Appropriate action may include taking throat swabs and/or giving antibiotics and/or giving vaccine. The specific action taken will vary according to circumstances and will be the responsibility of the CCDC. See Section 2 for contact details.

10. Some common communicable diseases

A 'quick-check' summarised version of the information in this section along with details of appropriate periods of exclusion from school is given in Section 11.

Chickenpox/Shingles (Varicella-zoster virus)

Chickenpox is an acute, generalised viral infection, commonly affecting children. It features a rash that tends to affect exposed parts of the body and may affect the scalp, mucous membrane of the mouth and upper respiratory tract and eye. It is contagious from about two days before, to five days after, the rash appears. Crops of lesions may appear at different times.

Shingles occurs only in people who have previously had chickenpox infection. Following chickenpox, the virus remains dormant in the body, usually in a sensory nerve root. In later months or years the virus reactivates and causes a shingles rash at the skin site supplied by the nerve. Therefore anyone with shingles must have had chicken pox in the past, even if they don't remember it.

Shingles causes a rash of tiny blisters, usually affecting a clearly defined area of the body. After a few days, the blisters crust over and form scabs. The rash is not itchy, but it can be very painful. The pain may start a day or so before the rash appears. It is contagious for about a week after the blisters appear.

How are they spread?

Chickenpox is spread by contact with infected respiratory droplets or fluid from the blisters. It is very contagious to people who have not have chickenpox before.

Shingles cannot be spread from person to person. However, the blister fluid contains the varicella virus and can transmit chickenpox to those who have never had chickenpox. Therefore people who have never had chicken pox should avoid contact with cases of both chickenpox and shingles.

Is anyone at extra risk?

Certain individuals have additional risks if infected, including the immuno-compromised (eg those receiving steroids or cytotoxic drugs) and non-immune pregnant women. If they have contact with a case during the contagious phase they may need immunoglobulin. Discuss the situation with occupational health or GP.

How is spread avoided?

- People with chickenpox should stay off school for five days after the rash's appearance
- People who are not immune to chickenpox should avoid contact with cases of chickenpox and shingles

Conjunctivitis

This means inflammation of the outer lining of the eye and eyelid. It causes a sore or itchy red eye, with a dislike of bright light and a watery or sticky discharge. It may be caused by bacteria or viruses or may be an allergy (as in hay fever). It is spread by contact with discharges from infected eyes through contaminated fingers (child rubbing the sore eyes), shared towels etc. Prevention of spread is by adhering to personal hygiene, and prompt treatment of the eyes.

Diphtheria

Infection affects the throat by producing a greyish membrane on the tonsils. Lymph glands are enlarged and there is swelling of the neck and interference with breathing. The diphtheria bacteria also produce a toxin that affects the heart and nervous system. Diphtheria is rare in this country and is almost always seen as an imported disease.

Food poisoning

A wide range of viruses or bacteria may cause gastro-enteritis or food poisoning. Bacteria include campylobacter, salmonella, *E coli* 0157; viral causes include small round structured viruses (SRSV) or Norovirus.

The symptoms vary depending upon which infectious agent has caused the illness. Some cause mainly vomiting whereas others cause mainly diarrhoea. Other possible symptoms may include abdominal pain, nausea or fever. Disease may begin within a few hours of eating the contaminated food, but some infections do not develop for several days. Some infections improve naturally, while others need to be treated.

How is it spread?

Many raw foods such as meat, poultry and raw eggs contain harmful microbes. Inadequate cooking or reheating or the use of contaminated utensils can all contribute to the risk. A food handler who has gastro-enteritis, or who does not practice good hygiene, can also spread germs onto the food. Infection can be spread by contact with infected diarrhoea or vomit; or indirect contact with the contaminated environment - the germs being passed to the mouth and ingested.

How can it be prevented?

Prevention of infection involves good food hygiene, hand hygiene and decontamination of

equipment and the environment.

- Good hygiene standards are very important.
- The induction and training of those in the food preparation/handling chain is essential.
- A thorough cleaning regime must be in place including all food preparation areas and toilet facilities.
- Clean and disinfect spills of diarrhoea and vomit. Remember that virus particles can land several feet away from the spillage, so clean a large area.
- Inform the Food Team, Public Protection Services of Wiltshire Council, and the Health Protection Team if you have concerns. See Section 2 for contact details.

Hand, foot and mouth disease

This is a viral disease caused by the Coxsackie virus. Anyone can be infected, but the infection most frequently affects children under three years of age.

Cases often occur in the spring and autumn and outbreaks of infection may occur especially in pre-schools and nurseries. The disease lasts about 5 - 7 days and is usually self-limiting, ie it gets better without treatment.

What are the symptoms?

Three to five days after contact with the virus a runny nose, sore throat, fever and loss of appetite may develop. This can be mistaken for a cold. A few days later the child usually develops a blister-like rash on the hands, feet and in the mouth.

How is it spread to others?

It is contagious from the very first symptoms. The virus is present in the discharges from the nose and throat, and in the faeces. It can be present in faeces for several weeks after the child has recovered. The infection is spread by contact with these discharges and faeces via paper tissues, handkerchiefs, nappies, saliva on hands and toys etc.

Is there any treatment?

Treatment is not usually required other than to ease the symptoms of sore throat and fever etc, and to avoid dehydration. Complications are rare, but medical attention should be sought if the temperature is not reduced by medication, if the child develops pain in the head, neck, arms or legs or if they become dehydrated (dry skin, weight loss, dark urine,

irritability). The child will develop immunity to the infecting virus, but a second episode can also occur following contact with a different sub-type of the virus.

Should an affected child stay away from school?

Since the disease is contagious before a diagnosis can be made it is likely that the infection has already spread to others in the class. The disease is typically mild with rare complications. Therefore there is no need for children to stay away from school once their temperature is normal and they feel well.

How can the spread of hand, foot and mouth disease be avoided?

Hand washing is most important, especially after going to the toilet or handling tissues etc. Toys that are likely to be in contact with saliva should be laundered or cleaned thoroughly with soapy water on a regular basis.

If there is an outbreak these hygienic procedures are even more important, and surfaces, such as tables and chairs, should also be cleaned thoroughly at least daily.

Head lice

Head lice are tiny insects, which live on the head, most commonly behind the ears and at the back of the neck and feed off blood by biting the scalp. Head lice can affect anyone but are common in children under 11 years and their families.

Nits are the empty eggs that remain after the lice have hatched. They are cemented to hairs close to the scalp and can be difficult to see. The eggs hatch after seven to 10 days and then turn pearly white. As the hair grows the nits become more obvious and can be seen further from the scalp surface. Nits that are a few centimetres from the scalp are empty having hatched several weeks before.

How are head lice spread?

They are only spread by head to head contact, they cannot hop or jump. They do not willingly leave a head except to walk directly onto another head. If a louse falls onto a hat, hairbrush or chair back, it will be dead within 48hrs and will not usually cause problems.

How are they treated?

Treatment should only be carried out if live, moving lice are seen in the hair or on the scalp. Any insecticidal lotion may be used. An aqueous solution may be preferred (Derbac-M liquid or Full Marks liquid) for people with asthma. Most of these can be bought from a chemist or obtained on a doctor's or health visitor's prescription. Shampoo treatments are not

recommended. Treatment involves two applications of the lotion seven days apart; the second application will ensure that any remaining or newly hatched lice are killed.

What about schools?

Although head lice are quite common in childhood and are often noted amongst children in school, spread occurs wherever children socialise. It is not recommended that schools send out letters to parents whenever a teacher suspects a case of head lice infection. The reason for this is that it is likely that there will always be some cases of head lice infection in school; this is normal. Sending out letters can give the impression that an outbreak is occurring rather than an expected and normal number of cases. Schools are not responsible for detecting, treating or excluding children who are thought to have head lice infection. This is a family duty. Therefore regular detection combing is recommended within families to ensure early detection and treatment of cases. Schools should provide parents with information periodically, for instance a reminder in newsletters or at the beginning of term..

Hepatitis A

This is a viral infection that causes inflammation of the liver resulting in jaundice (yellowing of the skin) and dark urine. People with hepatitis often feel generally unwell, with fever, nausea or abdominal pain, for a week or two before the jaundice starts. Many people, especially children, may have no symptoms at all and do have jaundice, but adults often feel very unwell.

How is it spread to others?

Hepatitis A is caught by eating food contaminated with the virus (eg shellfish). An infected person excretes the virus in their faeces for one or two weeks **before** starting to feel ill; this continues for about one week after symptoms start. They can pass on the infection to others if they do not wash their hands after using the toilet. The virus contaminates their fingers and surfaces. Others acquire the infection by eating food prepared by an infected person or by the shared use of contaminated items, including equipment for injecting drugs.

By the time a person with hepatitis A infection has had jaundice for a week they will no longer be contagious to others, even if they still have symptoms. They develop antibodies that protect them from future infection.

How is the spread prevented?

Children should be excluded from school for seven days from onset of jaundice.

Impetigo

Impetigo is a skin infection caused by bacteria such as Streptococcus or Staphylococcus.

Impetigo causes skin blisters, which sometimes become golden crusted. The fluid in the blister is contagious and spread occurs by contact with this fluid as the blister bursts. Sometimes nasal carriers spread the infection too.

Treatment is usually by cream or ointment. School should not be attended until the lesions are crusted or healed. Antibiotic treatment may speed healing. If lesions can be covered by a plaster/dressing the exclusion period may be reduced. Inform the HPT if there is a cluster of cases.

Influenza

Influenza is an acute viral disease of the respiratory tract characterised by fever, headache, sore throat and a cough. It is spread by the respiratory route particularly amongst those in close contact. The incubation period is one to five days and the person may remain contagious for up to seven days, particularly in young children. A vaccine is available to those of all ages and especially the elderly. Routine immunisation for children and adults is not recommended.

Measles

Measles is characterised by fever, runny nose, red eyes, a cough and dark purple spots. The children are often poorly and will be too ill to attend school. The rash appears about three to four days after the child is first ill. The risk of infection is greatest during the days before the rash appears.

Methicillin Resistant *Staphylococcus aureus* (MRSA)

Staphylococcus aureus is commonly found on the hair, skin and in the nostrils of about 30 per cent of the population. It usually causes no harm, but it can sometimes cause infections such as boils, sties, infected cuts and abscesses. These infections may improve without treatment, or may need a course of antibiotics. Patients in hospital can develop more serious infections such as surgical wound infection and septicaemia (blood poisoning) because they have deep surgical wounds, drips, drains or catheters.

In recent decades some strains of *Staph. aureus* have developed a resistance to certain antibiotics. They are called methicillin-resistant *Staphylococcus aureus* (MRSA). Infection with MRSA is more difficult to treat because there is less choice of antibiotics and they may be expensive.

Patients in hospital, especially those in intensive care, special care baby units, orthopaedic wards, burns units, cancer and transplant wards are most at risk.

Healthy people may pick up MRSA for a short time, but are not usually at risk of developing serious infection. MRSA is more likely to be found in damaged skin, such as eczema, chronic wounds and the insertion sites of invasive devices such as urinary catheters.

How is it spread?

MRSA can live on skin and in skin folds, such as the armpits, groins and navel, and in dust. It is passed by contact with the skin or dust containing the bacteria, but is easily removed by hand washing and general cleanliness. Carriage of MRSA is not a reason for exclusion from school. Contact the Health Protection Team if you have any concerns.

Mumps

Mumps is a viral disease that causes fever, pain and swelling of the salivary glands, which are found just in front of and below the ear. It may affect the other organs such as the testes and less occasionally the ovaries in post-pubertal individuals, but sterility is an extremely rare consequence. The nervous system may be affected resulting in meningitis or one-sided permanent nerve deafness. Mumps is spread by droplets from the nose and throat and by saliva. Prevention is by encouraging parents to ensure their children are vaccinated.

Pharyngitis/Tonsillitis

Pharyngitis/Tonsillitis is usually caused by a virus, but if severe, it may be a bacterial infection requiring antibiotics. A child or member of staff who is unwell should stay at home, but may return as soon as they are well.

Ringworm (Tinea)

Ringworm or Tinea is caused by a fungal infection.

Ringworm of the scalp (head) begins as a small papule and spreads peripherally leaving scaly patches of temporary baldness. Infected hairs become brittle and break off easily. It is spread by direct skin-to-skin contact or indirectly through hairdressers' scissors, combs and hairbrushes.

Ringworm of the body characteristically appears as flat, spreading, ring-shaped lesions, the periphery usually being reddish, or dry and scaly, or moist and crusted.

Ringworm of the feet (Athletes Foot) appears as scaly or cracked skin, especially between the toes; blisters containing a thin watery fluid are characteristic. It is commonly called 'athletes' foot'. Adults are more affected than children and males more than females. Infections are more frequent and more severe in hot weather. It is spread by direct contact with skin lesions of infected persons or via contaminated floors, benches and similar articles.

Athletes Foot remains contagious as long as lesions are present and viable spores persist on contaminated materials.

Treatment is by application of antifungal powders and creams and in some instances medicines by mouth need to be taken.

Rubella (German Measles)

Rubella is a mild viral disease with fever and skin rash appearing on the first day. The glands at the back of the neck may be enlarged. There is a slight feeling of being unwell, with a headache, pain in the limbs and joints. This may be followed by symptoms of cold in the head. German measles occurring in women during the early months of pregnancy may cause congenital defects (eg deafness, cataracts, glaucoma, mental retardation and heart defects) in the unborn child. Also please refer to Section 5 on new and expectant mothers and other female staff. It is spread by droplets or direct contact with discharges from the nose or throat. It remains contagious for about one week before and at least four days after onset of the rash.

Severe Acute Respiratory Syndrome (SARS)

SARS is a newly recognised type of pneumonia that was first reported in 2003. The World Health Organisation has reported that SARS is caused by the SARS coronavirus (SARS CoV) a new member of the coronavirus family. For up-to-date information see www.hpa.org.uk

What are the symptoms?

The main symptoms are a high fever (over 38⁰C), cough, shortness of breath or difficulty in breathing. The incubation period is short, about 2-7 days and cases may be contagious to others while the symptoms remain.

How is it spread?

SARS is spread by respiratory droplets, either by direct contact with a case or indirectly via the contaminated environment. Spread within households, or from patient to health care worker, have been reported.

How is spread prevented in schools?

People with SARS should be excluded from school until they are well and their temperature has been normal for 48 hours.

Close contacts are at risk until 10 days after their last contact with a symptomatic case.

Contact the Health Protection Team if you have any concerns.

Scabies

Scabies is a condition of the skin caused by a tiny mite called *Sarcoptes scabiei*. Symptoms are caused by an allergic reaction to the by-products of the mite. Scabies occurs worldwide and outbreaks in the UK often occur in care homes, elderly care wards and schools. Most cases have only around 10 mites on their body. There are two main ways that scabies manifests:

Classical scabies features itching two - six weeks after a first infestation or one to four days after re-infestation. The itching is often severe and worse at night or after a bath. There may be raised flesh-coloured, or grey, burrows with a sinuous ridge. A symmetrical allergic rash appears from the axillae to the calves and around the waist, but not the upper back.

Crusted scabies features dry, flaky lesions that may be present on the palms, soles and nail beds of the hands, feet, wrists, buttocks and penis. The lesions can flake off and may contain hundreds of mites. Consequently it is very contagious.

How is scabies spread?

Direct, prolonged or frequent skin-to-skin contact. Holding hands is a common route. Bedding and clothing do not contain scabies mite unless the individual has crusted scabies.

How is spread avoided?

All family and very close contacts, whether symptomatic or not, of an infected person should be treated and any other close contacts thoroughly checked for signs of scabies. Scabies cannot be caught from bed linen or clothing in a typical case of scabies in a healthy person. Treatment is by application of lotions or creams all over the body, including the soles of the feet.

People are usually non-contagious after treatment (24 hours) and can resume their normal life. Children may return to school. However, a second treatment is recommended for symptomatic cases one week after the first treatment, as eggs are more resistant than mites to the treatment.

Scarlet Fever (Scarlatina)

Scarlet fever is due to a bacterial infection and may result in a high fever, vomiting and sore throat. However, the main symptom is a red skin rash, which turns white when pressed and may feel like sandpaper when touched. The rash tends to appear on the neck, chest, inner surfaces of the thighs, and the folds of the armpits, elbows and groins.

The rash does not usually affect the face, although the cheeks may be flushed and the area

around the mouth may be paler than usual. The tongue may also appear red and coated. As the patient improves, the skin on some parts of the body, especially the tips of fingers and toes, may begin to peel.

What causes scarlet fever?

Scarlet fever is caused by a common bacterium called *Streptococcus pyogenes* (also known as Group A Streptococcus). This germ can cause a wide variety of infections, most commonly causing tonsillitis, impetigo and wound infections. This germ is easily spread from person to person and so outbreaks can occur, especially within families and communities such as schools. Outbreaks need to be investigated by the Health Protection Team and/or the Food Team, Public Protection Services of Wiltshire Council.

How is scarlet fever spread?

Scarlet fever is spread by contact with an infected person, close contact with throat secretions or contaminated objects. The incubation period is one to three days.

How is scarlet fever treated?

Streptococcal infections usually respond well to a course of antibiotics. Therefore it is important to inform the GP if scarlet fever is suspected. Remember that the full course of antibiotics should be completed.

Spread of infection to others can be avoided by keeping those with the infection away from others until they have been taking antibiotics for a couple of days. Washing your hands frequently after contact with a person with scarlet fever can also help.

Should people with scarlet fever stay away from school?

Scarlet fever can make people feel quite ill. It is recommended that children are kept off school for five days from the start of antibiotics.

Slapped cheek disease

Slapped cheek disease, sometimes called fifth disease, is caused by human parvovirus B19. It is a mild disease that commonly affects children. The ill child typically has a rash on the face, which looks like slapped cheeks. There may also be a lacy rash on the trunk and limbs. The child may have a slight fever or a cold before the rash breaks out. The rash lasts for up to about 10 days.

Is slapped cheek disease contagious?

A person infected with parvovirus is contagious in the early part of the disease, before the rash appears. By the time a child develops the rash he or she is no longer contagious and so may continue to attend school or pre-school. Outbreaks can occur in schools and pre-schools because spread occurs before the symptoms develop. However, they quickly resolve.

How is slapped cheek disease spread?

The virus is present in the respiratory secretions (saliva, sputum, nasal mucus) before the rash appears. It is spread from person to person by contact with the secretions; such as sharing drinking cups, eating utensils, handling used hankies etc. Spread of the infection can be reduced by avoiding sharing these items and by washing hands after handling hankies or helping children to blow their noses.

Is slapped cheek disease a serious infection?

The infection is usually mild and improves without treatment among children and adults who are otherwise healthy. Some adults may develop joint pain, which eventually improves.

People with chronic diseases such as sickle-cell disease, similar chronic anaemia, immune deficiency, leukaemia, cancer or HIV can develop a more serious infection and should see their GP if they have been in contact with a case of slapped cheek disease.

Is slapped cheek disease serious during pregnancy?

About 50 per cent of women are immune to parvovirus, even though they may not realise they have been infected in the past. Most women who are infected during pregnancy will develop only a mild disease and the unborn child will usually not have any problems. Infection in a few women (about five per cent) may result in complications including miscarriage. This occurs most often when infected in the first half of the pregnancy. Most babies do well, but the pregnancy may need to be closely monitored.

Pregnant women who are in direct contact with a case should visit their GP to discuss the risks. They may be offered a blood test to check for current immunity. **There is no need for pregnant staff in schools or pre-schools to stay away from work.**

Tuberculosis

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. It usually affects the lungs, although it can occur elsewhere in the body. TB infection occurs when the bacteria are inhaled. The bacteria are usually overwhelmed by the body's immune system, but may become active again later in life. In the UK the elderly may develop TB after catching the infection earlier in life.

People with TB infection generally complain of a bad cough lasting more than one month, and may have chest pain, sputum which may be blood-stained, loss of appetite, weight loss, tiredness and weakness and sometimes night sweats.

How is TB spread?

Only people with 'open' TB infection affecting the lungs are contagious to others. These individuals expel the bacteria into the air during coughing; others may inhale the bacteria. People with 'open' pulmonary TB may pass the infection on to others, particularly members of their household with whom they have close contact over a long period of time. However, TB is difficult to catch and the disease develops slowly and may take several months for symptoms to appear. Many people are immune to TB, especially if they have had BCG vaccination.

Some people are at greater risk including children, the elderly, diabetics, people taking steroids, people taking other drugs affecting the immune system, people living in overcrowded or poor housing, people who are dependent upon drugs or alcohol, people with chronic bad health, people with HIV infection or leukaemia.

Children with TB are rarely contagious to others. They should resume normal activities including school attendance as soon as the specialist advises. The usual incubation period is 4-12 weeks. The length of disease is variable. Once antibiotic treatment is started contagious cases become non-contagious quickly. They must continue treatment and have regular medical reviews for several months to ensure full recovery.

How is spread avoided?

The Health Protection Team is notified of cases of TB and ensures that contacts are identified and followed up if necessary. Occasionally it may be necessary to screen school

contacts of a TB case if they are contagious to others. The Consultant for Communicable Disease Control (CCDC), school nurses, and the TB team will be involved in advising schools if screening is necessary and in co-ordinating it. As TB is slow growing, follow-up is not a matter of urgency

Typhoid and Paratyphoid Fever

These are largely imported diseases. The bacteria are transmitted by food and water contaminated by faeces and urine of patients and carriers. Preventive action and a period of exclusion of cases and contacts is at the discretion of the CCDC and the Food Team, Public Protection Services of Wiltshire Council.

Verrucae (warts)

Verrucae are warts on the feet caused by a viral infection, often human papilloma virus. Warts can also affect other parts of the body, such as the fingers. Verrucae are hard, flat skin lesions on the soles of the feet and are often quite painful. They tend to affect teenagers and school children, though they can affect all ages. About five per cent of school children have warts or verrucae at any one time. They are sometimes known as plantar warts. Verrucae have a limited life span and usually heal by themselves, but this can take up to two years. Unfortunately just as an old wart disappears, a new wart may begin to develop.

How are verrucae spread?

Verrucae usually take two or three months to develop, but can take up to 20 months. They can be spread to other people by direct contact with the lesion. They can also spread to other parts of the body, often by touch. Warts shed large numbers of contagious particles and contaminated floors, such as in changing rooms, have been implicated in spread. However, verrucae are not easily spread from person to person.

How are they treated?

- Wart removal creams can be bought from pharmacists
- If painful the verruca can be filed down with an emery board or the doctor may offer treatment with liquid nitrogen

How can spread be avoided?

There is no scientific evidence that using a verrucae sock is effective. Avoiding direct contact with verrucae where practicable may reduce spread, as well as maintaining environmental hygiene in changing rooms.

Worms

In the UK this almost always refers to threadworms (pinworms), a common infection of the bowel with a tiny worm. Threadworm infection is not serious or dangerous but causes itching around the bottom, where the eggs are laid. Because of this itching the affected child will scratch his/her bottom, picking up the eggs under the fingernails and passing them on to the next person (or re-infecting himself/herself) usually via food. Treatment is by medication that may be bought via the chemist or obtained via the doctor - all members of the family require treatment. The child must also pay special attention to basic hygiene - washing hands and scrubbing the nails before eating and after going to the toilet is essential. A bath or shower in the morning will remove any eggs laid during the night. The treatment works very quickly and so there is no need for children to stay away from school. Prevention is by strict attention to hygiene as above.

11. Glossary

Carrier – A person who or animal that harbours a contagious agent (bacteria, virus etc) without suffering from disease themselves, but serves as a potential source of infection to others.

Chemoprophylaxis – The administration of a medication including antibiotics, to prevent the development of an infection eg Rifampicin for contacts of Meningitis patients.

Contact – A person who has been in contact with an infected person or contaminated environment that might provide an opportunity to acquire the infective agent.

Contagious disease – A clinically manifest disease of man or animal from an infection.

Disinfection – A process used to reduce the number of viable infectious agents, but which may not necessarily inactivate some infectious agents, such as certain viruses and bacterial spores.

Epidemic – The occurrence in a community of a disease clearly in excess of expectancy.

Immunity – The ability of the body to resist particular infections.

Incubation period – The time interval between initial contact with a contagious agent and the appearance of the first sign or symptoms of disease.

Infection – The entry and development or multiplication of a contagious agent in the body of man or animals.

Infectious disease – A clinical state of man or animal caused by an infectious agent.

Personal hygiene – Those protective measures primarily within the responsibility of the individual, which promote health and limit spread of contagious disease.

1. Washing hands immediately after opening bowels or bladder, and always before handling food or eating.
2. Avoiding use of common or unclean eating utensils, towels, handkerchiefs, combs and hairbrushes.
3. Avoiding exposure of other persons to spray from nose and mouth as in coughing, sneezing, laughing or talking.
4. Washing hands thoroughly after handling a person or their belongings.

12. Exclusion from school

Children should not attend school if acutely ill. Once they feel better they can usually return to school providing they pose no serious risk of infection to others. Further advice may be sought from the local Health Protection Team (HPT) – see Section 2 for contact details. To minimise the risk of transmission of infection to other children and staff, the following guidelines should be applied:

Condition	Exclusion from school or nursery once the child is well	Comments
Athletes Foot	None	Athletes Foot is not a serious condition. Treatment is recommended.
Chickenpox	Five days from the onset of the rash	SEE: vulnerable children and female staff – pregnancy.
Cold sores (herpes simplex)	None	Avoid kissing and contact with the sores. Cold sores are generally a mild self-limiting disease.
Conjunctivitis	None	If an outbreak/cluster occurs consult HPU.
Cryptosporidiosis (Cryptosporidium)	Until 48 hours after symptoms cease	Immune suppressed are most at risk. Drinking water and recreational pools can contribute to outbreaks
Cytomegalovirus	None	Pregnant women should avoid contact with body fluids from known cases. See 'gloves' (page 11).
Diarrhoea and/or vomiting with or without a specified diagnosis	48 hours from last episode of diarrhoea or vomiting (48hr rule applies).	Exclusion from swimming should be for 2 weeks following last episode of diarrhoea.
Diphtheria	Exclusion is important. Always consult with HPU.	Preventable by vaccination. HPU will organise any contact tracing necessary.
E. coli O157 and haemolytic uraemic syndrome	Exclusion is important for some children. Always consult with HPU.	Exclusion applies to young children and those who may find hygiene practices difficult to adhere to. Local HPU will advise. Exclusion from swimming should be for two weeks following last episode of diarrhoea.

Condition	Exclusion from school / nursery (once the child is well)	Comments
Food poisoning	Until 48 hours after symptoms cease	Inform the HPT and EHO if there is a cluster of cases.
German measles (rubella)	Five days from the onset of the rash	Preventable by immunisation (MMR x 2 doses). SEE: female staff - pregnancy.
Giardiasis	Until 48 hours after symptoms cease	Especially important for young children. Inform the HPT and EHO if there is a cluster of cases.
Glandular fever	None	About 50% of children get the disease before they are five and many adults also acquire the disease without being aware of it.
Hand, foot & mouth disease (Coxsackie virus)	None	Contact HPU if a large number of children are affected. Exclusion may be considered in some circumstances.
Head lice or nits	None	Treatment is recommended only in cases where live lice have definitely been seen. Close contacts should be checked and treated if live lice are found. Regular detection (combing) should be carried out by parents.
Hepatitis A	Exclusion may be necessary. Always consult with HPU.	Good personal and environmental hygiene will minimise any possible danger of spread of hepatitis A. SEE: cleaning up body fluid spills and glove information.
Hepatitis B & C	None	Hepatitis B and C are not infectious through casual contact. Good hygiene will minimise any possible danger of spread of both hepatitis B and C. SEE: cleaning up body fluid spills and glove information.
HIV / AIDS	None	HIV is not infectious through casual contact. There have been no recorded cases of spread within a school or nursery. Good hygiene will minimise any possible danger of spread of HIV. SEE: cleaning up body fluid spills and glove information.

Condition	Exclusion from school / nursery (once the child is well)	Comments
Impetigo	Until lesions are crusted or healed	Antibiotic treatment may speed healing and reduce infectious period. If lesions can be covered by a plaster/dressing exclusion period may be reduced. Inform the HPT if there is a cluster of cases.
Influenza (flu)	Until recovered.	Flu is most contagious just before symptoms appear. See vulnerable children.
Lyme Disease	None	This disease cannot be spread from person to person.
Measles	Five days from the onset of the rash	Preventable by vaccination (MMR x 2). SEE: vulnerable children and female staff – pregnancy.
Meningococcal meningitis / septicaemia	None	Meningitis C is preventable by vaccination. There is no reason to exclude siblings and other close contacts of a case. The HPU will give advice on any action needed and identify contacts requiring antibiotics.
Meningitis (non-meningococcal)	None	Hib meningitis and pneumococcal meningitis are preventable by vaccination. There is no reason to exclude siblings and other close contacts of a case. Always contact the HPU who will give advice on any action needed and identify contacts requiring antibiotics.
Molluscum contagiosum	None	A mild condition
Mumps	Five days after onset of swollen glands	Preventable by vaccination. (MMR x 2 doses).
Paratyphoid fever	Exclusion is important for some children. Always consult with HPU.	Exclusion applies to young children and those who may find hygiene practices difficult to adhere to. Local HPU will advise. Exclusion from swimming should be for 2 weeks following last episode of diarrhoea.
Ringworm (tinea)	Until treatment commenced.	Treatment is important and is available from pharmacist. N.B. For ringworm of scalp treatment by GP is required. Also check and treat symptomatic pets.

Condition	Exclusion from school / nursery (once the child is well)	Comments
Scarlet Fever (Scarlatina)	Five days from commencing antibiotics	Treatment recommended for the affected child
Shigella (bacillary dysentery)	Exclusion may be necessary.	Exclusion (if required) applies to young children and those who may find hygiene practices difficult to adhere to. Local HPU will advise. Exclusion from swimming should be for 2 weeks following last episode of diarrhoea.
Slapped cheek (Fifth) disease	None	SEE: vulnerable children and female staff – pregnancy.
Threadworms	None	Transmission in school is uncommon. Treatment if recommended for the affected child and their household contacts,
Tonsillitis	None	There are many causes, but most cases are due to viruses and do not need an antibiotic.
Tuberculosis	Always consult with HPU.	TB is only contagious if the case has the bacteria in their sputum. Two weeks of treatment usually renders the patient non-contagious. Generally requires quite prolonged close contact for spread. Contacts within the household are followed up and the HPT will inform if any further action needs to be taken. Not usually spread from children.
Typhoid fever	Exclusion is important for some children. Always consult with HPU.	Exclusion applies to young children and those who may find hygiene practices difficult to adhere to. Local HPU will advise. Exclusion from swimming should be for 2 weeks following last episode of diarrhoea.
Verrucae and warts	None	Verrucae should be covered in swimming pools, gymnasiums and changing rooms.
Whooping cough (pertussis)	Five days from commencing antibiotic treatment or 21 days from onset of illness if no antibiotic treatment.	Preventable by vaccination. After treatment non-infectious coughing may continue for many weeks. HPU will organise any contact tracing necessary.

References

- Department of Health and the Health Protection Agency (2006). Guidance on Infection Control in Schools and other childcare settings. Hard copies of this poster are available free from: Prolog on telephone number 08701 555 455 or email hpa@prolog.uk.com. Quote item number 50367. On line version available at http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1194947358374
- Salmon R et al (2004) Preventing person-to-person spread following gastrointestinal infections: guidelines for public health physicians and environmental health officers. *Commun Dis Public Health* 2004; 7(4): 362-384. Available at: http://www.hpa.org.uk/cdph/issues/CDPHvol7/No4/guidelines2_4_04.pdf
- Subcommittee of the PHLS Advisory Committee on Gastrointestinal Infections (2000) Guidelines for the control of infection with Vero cytotoxin producing *Escherichia coli* (VTEC) Communicable Disease Public Health 3: 14 – 23. Available at: <http://www.hpa.org.uk/cdph/issues/CDPHvol3/No1/vtec.pdf>
- UK Health Departments (1998) Guidance for Health Care Workers: Protection Against Infection with Blood-borne Viruses. London: Department of Health. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4014474.pdf

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