

# Ysgol Caergeiliog Foundation School



## Health protection - The School's Guidance on managing cases of infectious diseases

### Chapters 1 and 2: introduction and infections in childcare settings

Updated 27 March 2019

#### Chapter 1: introduction

Schools and nurseries are common sites for transmission of infections. Children are particularly susceptible because:

- they have immature immune systems
- have close contact with other children
- sometimes have no or incomplete vaccinations
- have a poor understanding of hygiene practices <sup>1</sup>

These guidelines aim to provide information for staff about managing a range of common and important childhood infections in settings including schools and nurseries.

The guidance is not intended to be used as a tool for diagnosing infectious disease but to help and direct staff about where and when to seek further advice. It can also be used as a tool to help develop local policy and training.

The way to prevent and manage infectious disease in your setting is to:

- promote immunisation
- promptly exclude the unwell child or member of staff

- check that effective handwashing is being carried out routinely

If you are notified of a case of infectious disease in a pupil or staff member, please report it to your local [Health Protection Team \(HPT\)](#) as soon as possible as not all infections require exclusion. Your local team can also give you additional advice and support as needed.

## **Chapter 2: infections in childcare settings**

Micro-organisms such as bacteria, viruses and fungi are everywhere and commonly do not cause infection (and can even be beneficial). However, some do cause infection resulting in symptoms such as fever and sickness <sup>2</sup>.

Infections in children are common. This is because a child's immune system is immature. Added to this, young children often have close contact with their friends, for example through play, and lack good hygiene habits, making it easier for infections to be passed on <sup>3</sup>.

Many diseases can spread before the individual shows any symptoms at all (during the infectious period). For example a pupil with chickenpox is infectious to others 1 to 2 days before the rash appears.

Infection prevention and control measures aim to interrupt the cycle of infection by promoting the routine use of good standards of hygiene so that transmission of infection is reduced overall. This is usually through:

- immunisation of pupils and staff
- good hand washing
- making sure the environment is kept clean

Where a case of infection is known, measures aim to reduce or eliminate the risk of spread through information and prompt exclusion of a case.

### **How infections spread**

Infections are spread in many different ways but the most important of these are through:

#### **Respiratory spread**

Contact with cough or other secretions from an infected person, like influenza. This can happen by being near the infected person when they cough and then breathe in the organism; or by picking up the organism from an infected item, for example, a used tissue or on an object in the environment, and then touching your nose or mouth.

## Direct contact spread

By direct contact with the infecting organism, for example, contact with the skin during contact sports such as rugby and in gyms, like impetigo or staphylococcal infections.

## Gastrointestinal spread

Resulting from contact with contaminated food or water (hepatitis A), contact with infected faeces or unwashed hands after using the toilet (typhoid fever).

## Blood borne virus spread

By contact with infected blood or body fluids, for example, while attending to a bleeding person or injury with a used needle (hepatitis B). Human mouths are inhabited by a wide variety of organisms, some of which can be transmitted by bites. Human bites resulting in puncture or breaking of the skin are potential sources of exposure to blood borne infections, therefore, it is essential that they are managed promptly.

There is a theoretical risk of transmission of hepatitis B from human bites, so the injured person should be offered vaccination. Although HIV can be detected in saliva of people who are HIV positive there is no documented evidence that the virus has been transmitted by bites <sup>4</sup>.

## References

1. Lawrence J and May D (2003) Infection Control in the Community. Churchill Livingstone: Edinburgh [↗](#)
2. Wilson J (2001) Infection Control in Clinical Practice (2nd Edition) Bailliere Tindall: Edinburgh [↗](#)
3. Cleary,V, Slaughter,R, Heathcock,R. (2003) An infection control programme in primary schools and wider public health impact. British Journal of Infection Control 4 (5), 11 to 16 [↗](#)
4. [The Health Protection \(Local Authority Powers\) Regulations 2010](#)



# Chapter 3: prevention and control

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## Exclusion

Prompt exclusion is essential to preventing the spread of infection in childhood settings. There should be a local policy for exclusion of staff and children while they are infectious and a procedure for contacting parents or carers when children become ill at school.

When pupils are suffering from infectious diseases they should be excluded from school on medical grounds for the minimum period recommended. Formal exclusion of pupils from school on medical grounds is enforceable by the Head Teacher only, acting on behalf of the local authority or the managers or governors of a school<sup>1</sup>. In exceptional cases, when parents insist on the return of their child to school when the child still poses a risk to others, the local authority may, by serving notice on the child's parents or carers, require that they keep the child away from school until they no longer pose a risk to others<sup>1</sup>.

Exposure to infectious disease is not normally a reason for medical exclusion. However, your local HPT can advise.

## Exclusion table

See [exclusion table](#) attachment.

## Handwashing

Hand washing is one of the most important ways of controlling the spread of infections, especially those that cause diarrhoea and vomiting and respiratory disease. Liquid soap, warm water and paper towels are recommended.

Advise all staff and pupils to wash their hands after using the toilet, before eating or handling food and after touching animals.

Cover all cuts and abrasions with a waterproof dressing.

## Coughing and sneezing

Coughs and sneezes spread diseases. Children and adults should be encouraged to cover their mouth and nose with a disposable tissue and wash hands after using or disposing of tissues. Spitting should be discouraged.

## **Personal protective equipment (PPE)**

Wear disposable gloves and plastic aprons if there is a risk of splashing or contamination with blood or body fluids during an activity. Gloves should be disposable, non-powdered vinyl or latex-free and CE marked. Wear goggles if there is a risk of splashing to the face.

## **Managing cuts, bites and nose bleeds**

Staff should be aware of the school health and safety policy and manage situations such as cuts, bites and bleeds according to that policy. This includes the identification and training of nominated first aiders for the school.

If a bite does not break the skin:

1. Clean with soap and water.
2. No further action is needed.

If a bite breaks the skin:

1. Clean immediately with soap and running water.
2. Record incident in accident book.
3. Seek medical advice as soon as possible (on the same day):
  - to treat potential infection
  - to protect against hepatitis B
  - for reassurance about HIV

## **Managing needle stick injuries**

Occasionally children or staff may injure themselves with discarded used hypodermic needles which they have found. Dispose of the needle safely to avoid the same thing happening to someone else. This can be done by either contacting your local authority or school nurse. If someone pricks or scratches themselves with a used hypodermic needle:

- wash the wound thoroughly with soap and water
- cover it with a waterproof dressing
- record it in the accident book and complete the accident form
- seek immediate medical attention from your local Accident and Emergency department

## **Cleaning blood and body fluid spills**

All spillages of blood, faeces, saliva, vomit, nasal and eye discharges should be cleaned up immediately, wearing PPE.

Clean spillages using a product which combines detergent and disinfectant (and ensure it is effective against both bacteria and viruses). Always follow the manufacturer's instructions. Use disposable paper towels or cloths to clean up blood and body fluid spills, and dispose of after use. A spillage kit should be available for bodily fluids like blood, vomit and urine<sup>2</sup>.

## **Sanitary facilities**

Good hygiene practices depend on adequate facilities. A hand wash basin with warm running water along with a mild liquid soap, preferably wall mounted with disposable cartridges, should be available. Bar soap should not be used.

Place disposable paper towels next to basins in wall mounted dispensers, together with a nearby foot-operated waste paper bin.

Toilet paper should be available in each cubicle (it is not acceptable for toilet paper to be given out on request). If schools or nurseries experience problems with over-use, they could consider installing paper dispensers to manage this.

Suitable sanitary disposal facilities should be provided where there are female staff and pupils aged 9 or over (junior and senior age groups).

## **Managing nappies**

Children in nappies must have a designated changing area, away from play facilities and from any area where food or drink is prepared or consumed. Hand washing facilities must be available in the room so that staff can wash and dry their hands after every nappy change, before handling another child or leaving the nappy changing room. Soiled nappies should be wrapped in a plastic bag before disposal in the general school waste.

Clean children's skin with a disposable wipe. Flannels should not be used to clean bottoms. Label nappy creams and lotions with the child's name and do not share with others.

Wipe changing mats with soapy water or a baby wipe after each use. Mats should be cleaned thoroughly with hot soapy water if visibly soiled and at the end of each day. Check weekly for tears and discard if the cover is damaged.

A designated sink for cleaning potties (not a hand wash basin) should be located in the area where potties are used. Wear household rubber gloves to flush contents down the toilet. The potty should be washed in hot soapy water, dried and stored upside down.

The rubber gloves should be washed whilst wearing them and then wash and dry hands after taking them off.

Nappy waste can sometimes be produced in large quantities in places such as nurseries. Although considered non-hazardous, in quantity it can be offensive and cause handling problems. Where the premises produce more than one standard bag or container of human hygiene waste over the usual collection interval, it is advised to package it separately from other waste streams. Organisations that produce significant amounts of used nappies should contact their local authority to discuss appropriate disposal arrangements.

### **Children with continence aids**

Pupils who use continence aids (like continence pads, catheters) should be encouraged to be as independent as possible. The principles of basic hygiene should be applied by both pupils and staff involved in the management of these aids.

Continence pads should be changed in a designated area. Disposable powder-free non-sterile latex gloves and a disposable plastic apron should also be worn. Gloves and aprons should be changed after every pupil. Hand washing facilities should be readily available. Contact your school health team for further advice.

### **Laundry**

There should be a designated area on site if there is a need for laundry facilities. This area should:

- be separate from any food preparation areas
- have appropriate hand washing facilities
- have a washing machine with a sluice or pre-wash cycle

Staff involved with laundry services should ensure that:

- manual sluicing of clothing is not carried out as this can subject the operator to inhale fine contaminated aerosol droplets; soiled articles of clothing should be rinsed through in the washing machine pre-wash cycle, prior to washing
- gloves and aprons are worn when handling soiled linen or clothing
- hands are thoroughly washed after removing gloves

## Dealing with contaminated clothing

Clothing of either the child or the first-aider may become contaminated with blood or body fluids. Clothing should be removed as soon as possible and placed in a plastic bag and sent home with the child with advice for the parent on how to launder the contaminated clothing. The clothing should be washed separately in a washing machine, using a pre-wash cycle, on the hottest temperature that the clothes will tolerate.

## Vulnerable groups at particular risk from infection

Some children have impaired immune defence mechanisms in their bodies (known as immuno-compromised) and hence will be more likely to acquire infections. Also, the consequence of infection in the immuno-compromised is likely to be significantly more serious than in those with a properly functioning immune system (known as immuno-competent).

Impaired immunity can be caused by certain treatments such as those for leukaemia or other cancers, like cytotoxic therapy and radiotherapy. Other treatments such as high doses of steroids, enteral feeding and others, may also have a similar effect. Children and carers will have been fully informed by their doctor.

There are also some rare diseases, which can reduce the ability of a person to fight off infection. Usually nurseries and schools are aware of such vulnerable children through information given by their parents or guardians.

If a vulnerable child is thought to have been exposed to a communicable disease, chickenpox or measles in the school setting, parents or guardians of that child should be informed promptly so that they can seek further medical advice from their GP or specialist, as appropriate.

It is important that these children are also made known to the school nurse on entry to the school.

## References

1. Lawrence J and May D (2003) Infection Control in the Community. Churchill Livingstone: Edinburgh  
2. Health Protection Agency (2010) [Guidance on Infection Control in Schools and other Child Care Settings](#) 

## Chapter 4: what to do if you suspect an outbreak of infection

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# Classification of an outbreak

An outbreak or incident may be defined as:

- an incident in which 2 or more people experiencing a similar illness are linked in time or place
- a greater than expected rate of infection compared with the usual background rate for the place and time where the outbreak has occurred

For example:

- 2 or more cases of diarrhoea or vomiting which are in the same classroom, shared communal areas or taking part in the same activities
- higher than usual number of people diagnosed with scabies
- higher than usual number of people diagnosed with scarlet fever
- 2 or more cases of measles at the school or other childcare setting

## When to report

Headteachers and managers should contact their local health protection team as soon as they suspect an outbreak to discuss the situation and agree if any actions are needed. It is useful to have the information listed below available before this discussion as it will help to inform the size and nature of the outbreak:

- total numbers affected (staff and children)
- symptoms
- date(s) when symptoms started
- number of classes affected

If you suspect cases of infectious illness at your school but are unsure if it is an outbreak, please [call your local HPT](#).

## How to report

Childcare settings are asked to telephone their local HPT as soon as possible to report any serious or unusual illness particularly for:

- Escherichia coli (VTEC) (also called E.coli 0157) or E coli VTEC infection
- food poisoning
- hepatitis
- measles, mumps, rubella (rubella is also called German measles)
- meningitis
- tuberculosis
- typhoid
- whooping cough (also called pertussis)

The [full list of notifiable diseases](#) was updated in 2010.

Your local HPT can also draft letters and provide factsheets for parents and carers to ensure the most up to date information is given.

## Confidentiality

It is important to note that health protection teams are bound to manage personal case details in strict confidence. Therefore, information given to schools from the team for distribution during an outbreak will never name cases or give out any personal details. Organisations where cases are identified are also bound to manage personal case details in strict confidence.

Read further information on PHE [personal information charter](#).

## Chapter 5: immunisation

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Immunisations should always be checked at school entry and at the time of any vaccination. Parents should be encouraged to have their child immunised and any immunisation missed or further catch-up doses required should be organised through the child's GP. The national schedule changes periodically so it is important to check the [NHS website](#) for up to date details. Alternatively, the school health service can advise on the latest national immunisation schedule.

Children who present with certain risk factors may require additional immunisations. Your local community NHS health team can provide further information if required.

### Staff immunisation

It is important that all staff are up to date with the current immunisation schedule (see above). In addition to this, the following risk areas should be considered:

#### Hepatitis B

Hepatitis B vaccine is not recommended for routine school or nursery contacts of an infected child or adult. Hepatitis B vaccine is, however, recommended for staff who are involved in the care of children with severe learning disability or challenging behaviour, and for these children, if they live in an institutional accommodation<sup>1</sup>. In such circumstances, it is the responsibility of the employer to finance the vaccine programme<sup>2</sup>.

#### Rubella

Women of childbearing age should check with their GP that they are immune to the rubella (German measles) virus. Those who are not immune should be immunised with MMR vaccine. The vaccine should not be given during pregnancy<sup>1</sup>.

### References

1. [www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book](http://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book)  <sup>2</sup>
2. [www.bma.org.uk/advice/employment/gp-practices/service-provision/hepatitis-b-immunisations](http://www.bma.org.uk/advice/employment/gp-practices/service-provision/hepatitis-b-immunisations) 

## Chapter 6: cleaning the environment

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Cleaning of the environment, including toys and equipment, is an important function for the control of infection in childcare settings. It is important that cleaning schedules clearly describe the activities needed, the frequency and who will carry them out. Cleaning standards should be monitored regularly by the school. Cleaning staff should be appropriately trained and have access to personal protective equipment.

### **Cleaning contract**

Essential elements of a comprehensive cleaning contract include daily, weekly and periodic cleaning schedules, based on national guidance. A proper colour coding system is recommended by the Health and Safety Executive<sup>1</sup>. Choosing to employ a colour system in your workplace can make cleaning easy, efficient and in turn, increase general hygiene and cleanliness.

Colour-coded equipment should be used in different areas with separate equipment for kitchen, toilet, classroom and office areas (red for toilets and wash rooms; yellow for hand wash basins and sinks; blue for general areas and green for kitchens). Cloths should be disposable (or if reusable, disinfected after use).

Cleaning solutions should be stored in accordance with Control of Substances of Hazardous to Health (COSHH), and cleaning equipment changed and decontaminated regularly<sup>2</sup>. Consideration should be given to situations where additional cleaning will be required including during term time (for example in the event of an outbreak) and how the school might carry this out.

A nominated member of staff should be chosen to monitor cleaning standards and discuss any issues with cleaning staff.

### **Cleaning blood and body fluid spills**

All spillages of blood, faeces, saliva and vomit should be cleaned up immediately, wearing personal protective equipment. Clean spillages using a product which combines detergent and disinfectant, and ensure it is effective against both bacteria and viruses. Always follow the manufacturer's instructions. Use disposable paper towels or cloths to cleaning up blood and body fluid spills, and dispose of after use. A spillage kit should be available for blood spills.

### **Toys and equipment**

Toys can easily become contaminated with organisms from infected children so it is important that a written schedule is in place for regular cleaning. The cleaning schedule should identify who, what, when and how toys should be cleaned and be monitored.

If toys are shared, it is strongly recommended that only hard toys are made available because they can be wiped clean after play. The condition of toys and equipment should be part of the monitoring process and any damaged item that cannot be cleaned or repaired should be discarded.

Soft modelling and play dough should be replaced regularly or whenever they look dirty and should be included in the schedule.

Sandpits should be securely covered when not in use to protect from animals contaminating the sand. Sand should be changed regularly; 4 weekly for indoor sandpits and as soon as it becomes discoloured or malodorous for outdoor sandpits. Sand should be sieved (indoor) or raked (outdoor) regularly to keep it clean.

The tank should be washed with detergent and water, and dried before refilling with sand. Water play troughs or receptacles should be emptied, washed with detergent and hot water and dried and stored inverted when not in use. The water should be replenished either daily or twice daily when in use and it should always be covered when not in use.

### **Enhanced cleaning during an outbreak of infection**

In the event of an outbreak of infection at your school, your local health protection team will recommend enhanced or more frequent cleaning, to help reduce transmission. Advice may be given to ensure twice daily cleaning of areas (with particular attention to door handles, toilet flushes and taps) and communal areas where surfaces can easily become contaminated such as handrails. Plans should be developed for such an event on how the school might carry this out which could also include during term time. Dedicated cleaning equipment must be colour coded according to area of use.

### **References**

1. Health and Safety Executive (2006) [Manual cleaning and disinfecting surfaces](#) 
2. Health and Safety Executive (1988) [The Control of Substances Hazardous to Health Regulations](#) 

## Chapter 7: staff health

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### Staff immunisation

All staff should undergo a full occupational health check before starting employment; this includes ensuring they are up to date with immunisations, including Measles, Mumps, Rubella (MMR).

### Exclusion

Staff employed in schools, nurseries and other childcare settings should have the same rules regarding exclusion applied to them as are applied to the children. They may return to work when they are no longer infectious, provided they feel well enough to do so.

### Pregnant staff

It should be noted that the greatest risk to pregnant women from such infections comes from their own household rather than the workplace. However, if a pregnant woman develops a rash, or is in direct contact with someone with a rash who is potentially infectious, she should consult her doctor or midwife.

### Chickenpox

Chickenpox can affect the pregnancy if a woman has not already had the infection. The GP and midwife should be informed promptly. A blood test may be arranged to check immunity if it isn't already known. Shingles is caused by the same virus as chickenpox therefore anyone who has not had chickenpox is potentially vulnerable to the infection if they have close contact with a case of shingles.

### Measles

Measles during pregnancy can result in early delivery or even loss of the baby. If a pregnant woman is exposed, the midwife should be informed immediately. All female staff under the age of 25 years, working with young children, should have evidence of 2 doses of MMR vaccine or a positive history of measles.

### Rubella (German measles)

If a pregnant woman comes into contact with German measles she should inform her GP and midwife immediately. 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 2 doses of MMR vaccine or a positive history of Rubella.

## **Slapped cheek disease (Parvovirus B19)**

Slapped cheek disease (Parvovirus B19) can occasionally affect an unborn child if exposed early in pregnancy. The pregnant woman should inform their midwife promptly.

## **Food handling staff**

Food handlers and catering staff may present a particular risk to the health of their pupils and staff if they become infected (or have close contact) with diseases that can be transmitted to others via the medium of food or drink. These diseases commonly affect the gastrointestinal system (stomach and bowel) and usually cause diarrhoea or vomiting, or both.

Food handling staff suffering from such diseases must be excluded from all food handling activity in the school or nursery setting until advised by the local Environmental Health Officer that they are clear to return to work. There are legal powers for the formal exclusion of such cases but usually voluntary exclusion will suffice with 'off work' certificates from the GP, as necessary.

All establishments should have a clear written policy for the exclusion of staff, particularly food handlers, in relation to gastro-enteric diseases. Staff and attenders should not be present at the establishment if they are currently suffering from diarrhoea or vomiting, or both. At the very least, persons suffering from gastrointestinal diseases should not return to work until 48 hours post recovery (no further diarrhoea or vomiting).

Employers should notify their local Environmental Health Department immediately that they are informed of a member of staff engaged in the handling of food has become aware that he or she is suffering from, or is the carrier of, any infection likely to cause food poisoning.

This policy should be made clear to the person in charge of the kitchen and all catering staff at the time of appointment <sup>1</sup>. Food handlers are required by law to inform their employer immediately if they are suffering from:

- typhoid fever
- paratyphoid fever
- other salmonella infections
- dysentery
- shigellosis
- diarrhoea (cause of which has not been established)
- infective jaundice
- staphylococcal infections likely to cause food poisoning like impetigo, septic skin lesions, exposed infected wounds, boils
- E. coli VTEC infection

## Reference

1. Food Standards Agency (2009) [Food Handlers: Fitness to Work](#) 

## Chapter 8: pets and animal contact

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Pets and other animals in school can enhance the learning environment. However, contact with animals can pose a risk of infection including gastro-intestinal infection, fungal infections and parasites. Some people, such as pregnant women and those with a weakened immune system, are at greater risk of developing a severe infection. However, sensible measures can be taken to reduce the risk of infection to the children and to staff.

Only mature and toilet trained pets should be considered and the Headteacher should ensure that a knowledgeable person is responsible for the animal. There should be a written agreement within the school detailing:

- the types of animals allowed in the school
- how to manage them and permitted behaviour whilst on the premises
- where they can go and where they cannot go when in the school
- any insurance liability of owners and handlers

Animals should always be supervised when in contact with the children and those handling animals advised to wash their hands immediately afterwards. Animals should have recommended treatments and immunisations, be regularly groomed (including claws trimmed) and checked for signs of infection. Bedding should be laundered regularly.

Cat litter trays should be cleaned daily wearing disposable gloves. It should not be placed near food preparation, storage or eating areas. Wash hands immediately after removing gloves but pregnant staff members should not carry out this task because of the risk of toxoplasmosis.

Feeding areas should be kept clean and their food stored away from human food. Food not consumed in 20 minutes should be taken away or covered to prevent attracting pests<sup>1</sup>.

### Visits to petting farms and zoos

There are a number of diseases that can be passed on to pupils and staff from infected farm animals such as campylobacter, salmonella and cryptosporidium. It is not possible to know which animals are carriers so a standard approach to reducing the risk of transmission of infection to children and staff should be taken.

## **Before you go**

Emphasise the importance of hand hygiene during and after the visit and check that the farm has easily accessible hand washing facilities. Educate pupils not to eat, drink or put fingers in their mouths except when in designated eating areas and after they have washed their hands.

Check that the farm is well managed. Drinking taps should be clearly marked and sited in a clean area away from the animals.

## **During the visit**

If children are allowed to handle or feed the animals, ask them not to put their faces against the animals or put their hands in their own mouths afterwards. Check that children wash and dry their hands thoroughly after contact with animals and particularly before eating and drinking. Younger children should be supervised.

Food should only be taken in the designated picnic areas. Children should be reminded not to eat anything which may have fallen on the ground. They should not eat or drink unpasteurised products like milk, cheese or ice-cream, or taste animal feedstuff such as silage and concentrates.

Manure or slurry presents a particular risk of infection and children should be warned against touching it. If they do, ensure hands are promptly washed and dried.

## **At the end of the visit**

Ask all the children to wash and dry their hands before leaving. Ensure that they are as free as possible from faecal material<sup>2</sup>.

## **School trips**

Some school trips involve activities associated with a small risk of picking up an infection, particularly those involving water-based activities and visits to farms or animal parks.

## **Water based activities**

There is a risk of infection associated with any water-based activity on rivers, canals and freshwater docks, and also with the collection of specimens from ditches, streams and ponds. Water-based activities should only be undertaken at education authority residential centres.

Exercises such as 'capsize drill' and 'rolling' should ideally be practised in swimming pools and never in stagnant or slow-moving natural bodies of water.

Children and staff should cover all cuts, scratches and abrasions with a waterproof dressing prior to the activity. Do not eat or drink immediately after water-based activities until after hands have been washed.

The use of appropriate footwear is recommended to reduce the risk of cuts to the feet. Pupils and staff should always wash or shower after canoeing or rowing.

Anyone taking part in water based activities who becomes ill within 3 to 4 weeks of the activity is advised to seek medical advice.

It should be made clear to parents and carers that if their child becomes ill following participation in outdoor or water-based activities, the treating doctor should be made aware of the child's participation in these activities.

Babies or children shouldn't swim in public swimming pools for 2 weeks after diarrhoea and vomiting has stopped<sup>3</sup>.

### References

1. Health Protection Agency (2002) Guidelines for the control of Infection and Communicable Diseases in nurseries and other Institutional early years Settings in South West London Sector. (2003) South West London Health Protection Unit 
2. Health and Safety Executive (2015) [Preventing or controlling ill health from animal contact at visitor attractions](#) 
3. NHS [Diarrhoea and vomiting in babies and children](#) 

# Chapter 9: managing specific infectious diseases

Updated 27 March 2019

## Athlete's Foot

Athlete's foot is a skin infection caused by a fungus which can also cause ringworm.

### Symptoms

The person will have scaling or cracking of the skin, especially between the toes, or blisters containing fluid; it can be very itchy.

### Spread

It is generally spread by prolonged direct or indirect contact with skin lesions on infected people or contaminated floors, shower stalls and other articles used by infected people.

### Exclusion

No exclusion is necessary.

### Do's

Advise the case to visit their GP for advice and treatment.

Take care to dry between the toes after bathing. Use a fungicidal dusting powder on the feet, between the toes and in the socks and shoes.

Wear shoes that allow feet to breathe and change frequently.

Cover the affected foot with a rubber sock when going swimming.

## **Don'ts**

Do not share towels, bath mats or footwear when infected.

## **Chicken pox (shingles)**

Chickenpox is highly infectious and is spread by respiratory secretions or by direct contact with fluid from blisters. Shingles is spread by direct contact with fluid from blisters. It cannot produce shingles in another person but the virus can spread to those who never had chickenpox from fluid in the blisters of a case.

## **Symptoms**

Chickenpox has a sudden onset with fever, runny nose, cough and a generalised rash. The rash starts with blisters which then scab over. Several 'crops' of blisters occur so that at any one time there will be scabs in various stages of development.

The rash tends to be more noticeable on the trunk than on exposed parts of the body and may also appear inside the mouth and on the scalp. Some infections can be mild or without symptoms.

Shingles presents as a blistering rash in the area supplied by the affected nerve. Usually only one side of the body is affected and there is severe pain in the affected area. Most people recover fully without developing serious complications. There is often altered sensation before the rash appears, accompanied by 'flu like' symptoms.

## **Spread**

Chickenpox is highly infectious and is spread by respiratory secretions or by direct contact with fluid from blisters.

Shingles is spread by direct contact with fluid from blisters. It cannot produce shingles in another person but the virus can spread to those who never had chickenpox from fluid in the blisters of a case.

## **Exclusion**

Cases of chickenpox are generally infectious from 2 days before the rash appears to 5 days after the onset of rash.

Although the usual exclusion period is 5 days, all lesions should be crusted over before children return to nursery or school.

A person with shingles is infectious to those who have not had chickenpox and should be excluded from school if the rash is weeping and cannot be covered or until the rash is dry and crusted over.

## **Do's**

Send the child home and advise parents to consult their GP.

In cases of shingles, decision to exclude child will vary for each case of shingles and will be dependent on whether the rash is weeping and whether the rash can be covered.

## **Don'ts**

Don't allow the child back to school until at least 5 days after the appearance of the chickenpox rash (blisters) and all the lesions have crusted over.

## **Cold sores**

Cold sores are caused by a virus called herpes simplex and usually appear on lips and around nostrils but can spread more widely over the face. It is estimated that 50 to 90% of the population are carriers of the virus but they do not all suffer from cold sores.

It is usually a mild self-limiting disease. Most people who already suffer from cold sores will have been infected very early in life.

## **Symptoms**

First signs are tingling, burning or itching in the area where it is going to appear. This phase may last for as little as 24 hours. There is reddening and swelling of the infected area resulting in a fluid filled blister, or sometimes a group of them, which can be very painful and uncomfortable. They break down to form ulcers, which weep and crack. They then dry up and crust over.

The virus can be reactivated by various trigger factors such as stress or sunlight.

## **Spread**

The virus is spread by direct contact.

## **Exclusion**

None needed.

## **Do's**

Advise the case (and their carers) to avoid spread by not touching the cold sore or breaking or picking the blisters.

Avoid kissing people, especially children when they have a blister and not to share things like cups, towels and facecloths.

## **Don'ts**

Cases should not touch their eyes and adults should take extra care when applying or removing make-up.

## **Conjunctivitis**

Conjunctivitis is an inflammation of the outer lining of the eye and eyelid causing an itchy red eye with a sticky or watery discharge. It can be caused by bacteria or viruses or due to an allergy.

Conjunctivitis can be caused by a bacteria or a virus and is treated with eye drops. Spread is by direct or indirect contact with discharge

from the eyes. Prompt treatment and good hand washing helps to prevent spread especially after contact with infectious secretions.

## **Symptoms**

The eye(s) becomes reddened and swollen and there may be a sticky yellow or green discharge. Eyes usually feel itchy and 'gritty'. Topical ointment can be obtained from the doctor or pharmacy to treat the infection.

## **Spread**

Conjunctivitis can be spread by contact with discharge from the eye which gets onto the hands or towel when the child rubs their eyes.

## **Exclusion**

None needed.

## **Do's**

Advise parents to seek advice.

Encourage children not to rub their eyes and to wash their hand frequently.

Contact your local Health Protection Team if an outbreak or cluster occurs.

# Food poisoning

Food poisoning is a general term for gastrointestinal infections caused by consuming contaminated food or drink. Person to person spread of these infections is unusual.

## Symptoms

Symptoms of food poisoning usually begin within 1 to 2 days of eating contaminated food, although they may start at any point between a few hours and several weeks later. The main symptoms include feeling sick (nausea), vomiting, diarrhoea, stomach cramps and fever.

## Spread

Infection can be caused by a variety of bacteria, viruses or parasites; most commonly reported are Salmonella and Campylobacter. They can cause sudden large outbreaks of diarrhoea if a large number of people eat the same contaminated food.

## Exclusion

Children and adults with diarrhoea should be excluded until 48 hours after the diarrhoea and vomiting has stopped and they are well enough to return.

For some infections, longer periods of exclusion from school are required and there may be a need to obtain microbiological clearance. For these groups your local Health Protection Team will advise. All outbreaks of food poisoning need to be investigated in order to identify their cause.

## **Do's**

Exclude the pupil or staff member until 48 hours after the symptoms have stopped.

Inform your local [Health Protection Team](#) if 2 or more cases with similar symptoms are reported to you.

## **Giardia**

This parasitic disease is spread from those with the infection to others by the faecal-oral route. It may also be spread by drinking water contaminated with faeces. Infection with giardia may not cause any symptoms. The incubation period is between 5 and 25 days.

When symptoms do occur, they may include abdominal pain, bloating, fatigue and pale, loose stools. Cases need to be treated with antibiotics.

## **Exclusion**

Cases should be excluded until 48 hours after symptoms have stopped.

## **Do's**

Exclude the pupil or staff member until 48 hours after the symptoms have stopped.

Inform your local Health Protection Team if 2 or more cases with similar symptoms are reported to you.

# Salmonella

Salmonella is caused by eating contaminated food, particularly poultry or eggs. It can also be spread directly from person to person by the faecal-oral route. Symptoms include diarrhoea, headache, fever and sometimes vomiting. Infection can be more serious in the very young and very old. The incubation period can be from as little as 6 hours up to 72 hours (most commonly 12 to 36 hours).

## Exclusion

Cases should be excluded until 48 hours after symptoms have stopped.

## Do's

Exclude the pupil or staff member until 48 hours after the symptoms have stopped.

Inform your local Health Protection Team if 2 or more cases with similar symptoms are reported to you.

# Typhoid and Paratyphoid fever

These are less common but serious illnesses. They are spread by consuming food or water contaminated by the faeces or urine of someone with the illness or someone without symptoms who may be excreting the organism. These infections are most commonly acquired abroad.

Symptoms of typhoid fever are tiredness, fever and constipation, whereas those of paratyphoid fever are fever, diarrhoea and vomiting.

The severity of the illness and length of the incubation period (typhoid 1 to 3 weeks, paratyphoid 1 to 10 days), are related to the number of infecting organisms ingested.

## **Exclusion**

Environmental health officers or your local Health Protection Team will advise.

## **Do's**

Encourage staff and children to always practice good personal hygiene.

Encourage staff and children to wash their hands especially after using the toilet and before eating or preparing food. Young children may need supervision to ensure that adequate hand washing takes place

Always ensure high standards of environmental cleaning (especially frequently touched areas, like flush handles, toilet seats, taps, toilet door handles). Please refer to the infection control section on cleaning.

Use liquid soap and disposable paper towels for hand washing.

Report immediately to the Health Protection Team (HPT).

Observe exclusion period – whilst symptomatic and for 48 hours after symptoms have resolved, or longer if advised by the HPT or Environmental Health Officer (EHO).

Consider sending out the travel health advice information prior to the main travel periods to raise awareness of the need for pre-travel health advice and vaccinations.

# **E. coli (verocytotoxigenic or VTEC)**

Escherichia coli (E. coli) are bacteria that live in the gut of humans and animals, particularly cattle and sheep. A few strains of E. coli, such as VTEC can produce toxins that lead to more serious and potentially fatal illness.

Spread is by eating contaminated food, direct contact with animals and by faecal-oral route from an infected person as a result of sharing towels and food. Spread by contaminated drinking has also been reported.

## **Symptoms**

Symptoms vary depending on the severity of the infection but include diarrhoea, abdominal cramps, headache and bloody diarrhoea. The incubation period is 1 to 10 days and cases are infectious as long as bacteria are present in the faeces.

## **Spread**

Spread is mainly by contaminated water and food and contact with animals. Person to person spread is by direct contact and can happen within families and child care settings. Outbreaks and sporadic cases have also been linked with handling animals. Therefore, adults should supervise children while washing their hands during visits to petting zoos and farm centres. Read [chapter 8: pet and animal contact](#).

## **Exclusion**

The standard exclusion period is until 48 hours after symptoms have resolved. However, some people pose a greater risk to others and may be excluded until they have a negative stool sample(s) for

example pre-school infants, food handlers, and care staff working with vulnerable people. The HPT will advise in these instances.

## **Do's**

Follow healthcare professional's exclusion advice.

Promote good hand washing to children visiting to farms or petting zoos, especially after handling animals and prior to eating or drinking (see chapter 8: pet and animal contact).

# **Diarrhoea and vomiting (Gastroenteritis)**

Diarrhoea has numerous causes but diarrhoea caused by an infection in the gut can be easily passed to others.

## **Symptoms**

Diarrhoea is defined as 3 or more liquid or semi-liquid stools in a 24 hour period.

## **Spread**

These infections are spread when organisms enter the gut by the mouth or when contaminated hands or objects are put in the mouth or after eating contaminated food or drinks. Also, infection can be spread to contacts when the affected person vomits. This is because aerosols

can spread the organism directly to others and contaminate the environment. A person will be infectious while symptoms remain.

## **Exclusion**

Children and adults with diarrhoea or vomiting should be excluded until 48 hours after symptoms have stopped and they are well enough to return. If medication is prescribed, ensure that the full course is completed and there is no further diarrhoea or vomiting for 48 hours after the course is completed.

For some gastrointestinal infections, longer periods of exclusion from school are required and there may be a need to obtain microbiological clearance. For these groups, your local HPT, school health advisor or environmental health officer will advise.

If a child has been diagnosed with cryptosporidium, they should NOT go swimming for two weeks following the last episode of diarrhoea.

## **Do's**

Ensure the case is excluded.

Do encourage staff and children to practice good hand hygiene at all times.

Notify your local Health Protection Team if there are more cases than normally expected.

## **Bacillary Dysentery (Shigella)**

This disease is passed directly from person to person by the faecal-oral route or by contaminated food. It is usually spread from those

with diarrhoea but can be spread from those recovering from the illness even if they do not have symptoms.

## **Symptoms**

Symptoms can include bloody diarrhoea, vomiting, abdominal pain and fever lasting on average from 4-7 days but can last for several weeks. The incubation period is 12 to 96 hours.

## **Exclusion**

Microbiological clearance is required for some types of shigella species prior to the child or food handler returning to school (age of child and infectious agent).

## **Campylobacter**

It is spread between people and animals by the faecal-oral route. Bacteria are present in the faeces of adults and children with diarrhoea, and spread to the mouths of other people directly on their hands or by food or objects. Campylobacter can be present in raw meat, especially chicken, and can contaminate other foods, surfaces and utensils. The disease usually lasts 3 to 5 days and has an incubation period of between 1 and 10 days but most commonly 3 to 5 days.

## **Exclusion**

Cases should be excluded until 48 hours after symptoms have stopped.

## **Cryptosporidiosis**

Cryptosporidiosis is spread from those with the infection to others by the faecal-oral route. It can also be spread by direct contact with farm animals particularly cattle and sheep. Spread by contaminated or untreated water and milk has also been reported. Symptoms include abdominal pain, diarrhoea and occasionally vomiting. The incubation period is between 1 and 12 days.

### **Exclusion**

Cases should be excluded until 48 hours after symptoms have stopped.

## **Glandular fever**

Glandular fever is caused by the Epstein-Barr virus.

### **Symptoms**

Symptoms present as severe tiredness, aching muscles and sore throat, fever, swollen glands and occasionally jaundice (yellowing of the skin and eyes). In children, the disease is generally mild and difficult to recognise. The incubation period is 4 to 6 weeks but the infectious period is not accurately known.

Duration of the illness is from 1 to several weeks or months.

## **Spread**

Spread is by direct contact with saliva and by indirect contact with hands or contaminated objects from cases. The incubation period is between 4 to 6 weeks.

## **Exclusion**

Exclusion is not required and children can return once they feel well.

## **Do's**

Promote hand hygiene to reduce the risk of spread and ensure that used tissues are disposed of or washed straight away.

Remember the child may feel unwell for some months.

## **Don'ts**

There is no specific treatment only symptom management.

# **Hand, foot and mouth disease**

Hand, foot and mouth disease is a common viral illness in childhood. It is generally a mild illness caused by an enterovirus. In very rare instances it can be more severe.

## **Symptoms**

The child usually develops a fever, reduced appetite and generally feeling unwell. One or two days after these symptoms a rash will develop with blisters on their cheeks, hands and feet. Not all cases have symptoms. The incubation period is 3 to 5 days.

## **Spread**

Hand foot and mouth infection is most contagious in the first 7 days but the virus can stay in the body for a few weeks. Spread is by direct contact with the secretions of the infected person (including faeces) and by coughing and sneezing. Younger children are more at risk because they tend to play closely with peers. Promote good hand washing to reduce the risk of transmission even after the child is well because the virus can still be present in the faeces and saliva (spit) for a few weeks.

## **Exclusion**

Children are safe to return to school or nursery as soon as they are feeling better, there is no need to stay off until the blisters have all healed. Keeping your child off for longer periods is unlikely to stop the illness spreading. Exclusion of a well pupil is not required.

## **Do's**

Do ensure that any tissues used to for nose and throat are disposed of or washed immediately. Promote hand washing.

## **Don'ts**

Don't confuse with foot and mouth disease in animals.

## **Head lice**

Head lice are tiny insects that live only on humans, feeding on blood. Eggs are grey or brown and about the size of a pinhead; are glued to the hair, close to the scalp and hatch in 7 to 10 days. Empty egg shells (nits) are white and shiny and are found further along the hair shaft as they grow out.

## **Spread**

Head lice are spread by direct head-to-head contact and therefore tend to be more common in children because of the way they play. They cannot jump, fly or swim. When newly infected, cases have no symptoms. Itching and scratching on the scalp occurs 2 to 3 weeks after infection. There is no incubation period.

Treatment is only needed if live lice are seen. Dimeticone, a silicone oil (like Hedrin) or malathion, an insecticide are recommended treatments. Alternatively, lice can be physically removed by combing through hair that has been lubricated with a conditioner using a fine-toothed detector comb.

## **Exclusion**

No exclusion is needed.

## **Do's**

Treatment is needed only when live lice are seen.

## **Don'ts**

Exclusion is not required.

# **Hepatitis A**

Hepatitis A is a viral infection affecting the liver. The severity of the disease varies from a mild illness lasting 1 to 2 weeks to a severely disabling disease lasting several months. Children under 5 years may not have any symptoms.

## **Symptoms**

Symptoms include abdominal pain, loss of appetite, nausea, fever and tiredness, followed by jaundice (yellowing of the skin and eyes), dark urine and pale faeces. Symptoms are usually much milder or not noticed in younger children and jaundice is not common in children under 5 years.

The illness in children usually lasts 1 to 2 weeks but be longer and more severe in adults.

## **Spread**

Hepatitis A is spread from person to person through the faecal-oral route, most commonly when food and hands are contaminated. As some children may not have symptoms at all, they may readily spread the infection to others unless good personal hygiene measures are routinely taken.

## **Exclusion**

Exclude cases from school while unwell or until 7 days after the onset of jaundice (or onset of symptoms if no jaundice or if under 5 or where hygiene is poor. There is no need to exclude well, older children with good hygiene who will have been much more infectious prior to diagnosis.

## **Do's**

Promote good hand washing to reduce the risk of spread.

Take care to wash hand before handling food and after going to the toilet.

Clean kitchen and toilet areas regularly.

Household contacts of cases will be offered a hepatitis A vaccine if they are not immune.

## **Hepatitis B**

Hepatitis B infection is not a common viral infection in young children.

## **Symptoms**

The incubation period varies between 4 to 160 days. Symptoms can vary and include general tiredness, nausea and vomiting, loss of appetite, fever, dark urine and older children and adults may develop jaundice (a yellowing of the eyes and skin).

## **Spread**

Spread is by contact with infected blood and body fluids entering the bloodstream through broken skin or the mucous membranes, for example through a bite which breaks the skin or if the skin is pierced by an object which has been in contact with someone else's body fluids.

All blood and body fluids should be considered potentially infectious and spills should be cleared wearing protective clothing and using a spills kit.

## **Exclusion**

Acute cases of hepatitis B will be too ill to attend school and their doctors will advise when they can return. Do not exclude chronic cases of hepatitis B or restrict their activities. Similarly, do not exclude staff with chronic hepatitis B infection. Contact your local health protection team for more advice if required.

## **Do's**

Take a standard approach to cleaning all spillages of blood and body fluids.

Always complete the accident book with details of injuries or adverse events.

## **Don'ts**

Individuals with chronic hepatitis B infection should not be excluded or have their activities restricted.

# **Hepatitis C**

Hepatitis C is not a common infection in children.

## **Symptoms**

Hepatitis C virus (HCV) is a blood borne virus affecting the liver. Symptoms of hepatitis C infection can often be vague and include loss of appetite, fatigue, nausea and abdominal pain. Jaundice (yellowing of the skin and eyes) occurs less commonly than in hepatitis B infection. Up to 80% of those infected may be carriers of the virus and can pass it on to others.

## **Spread**

HCV is present in blood and other body fluids and tissues and is spread in the same way as hepatitis B virus. Hepatitis C, like Hepatitis B, cannot be spread through casual contact.

## **Exclusion**

No exclusion is needed

## **Do's**

Take a standard approach to cleaning all spillages of blood and body fluids.

Always complete the accident book with details of injuries or adverse events.

## **Don'ts**

Individuals with chronic hepatitis C infection should not be excluded or have their activities restricted.

## **Impetigo**

Impetigo is an infectious bacterial skin disease and may be a primary infection or a complication of an existing skin condition such as eczema, scabies or insect bites. Impetigo is common in children, particularly during warm weather.

## **Symptoms**

The infection can develop anywhere on the body but lesions tend to occur on the face, flexures and limbs not covered by clothing.

## **Spread**

Spread is by direct contact with discharges from the scabs of an infected person. The bacteria invade skin through minor abrasions and then spread to other sites by scratching. Infection is spread mainly on hands, but indirect spread via toys, clothing, equipment and the environment may occur. The incubation period is between 4 to 10 days.

## **Exclusion**

The child should be excluded from school until the lesions are crusted and healed or 48 hours after commencing antibiotic treatment.

## **Do's**

Promote hand hygiene to reduce the risk of spread.

Towels and facecloths or eating utensils should not be shared by pupils.

Ensure that toys and play equipment are thoroughly cleaned.

## **Don'ts**

The child should not return to school until lesions are crusted over or 48 hours after starting antibiotic treatment.

## **Influenza**

Influenza, commonly known as flu, is caused by a virus, usually influenza A or B. The illness is very infectious and easily spreads in crowded populations and in enclosed spaces. Flu viruses are always changing so this winter's flu strains will be slightly different from last winter's.

Annual vaccination is recommended for certain groups of people. Currently all children between the ages of 2, 3 or 4 years and children in year groups 1, 2 and 3 are recommended to have vaccination against influenza.

This programme will include more year groups in the future, your school health team will be able to advise you on this Influenza vaccine is also recommended for pregnant women. For further details see [national immunisation schedule](#).

## Symptoms

Influenza is a respiratory illness and commonly has a sudden onset. Symptoms include headache, fever, cough, sore throat, aching muscles and joints and tiredness. Cases are infectious 1 day before to 3 to 5 days after symptoms appear.

## Spread

By breathing in droplets coughed out into the air by infected people or by the droplets landing on mucous membranes. Transmission may also occur by direct or indirect contact with respiratory secretions for example via soiled tissues, surfaces.

Incubation period is between 1 to 3 days.

## Exclusion

There is no precise exclusion period. Adults and children with symptoms of influenza are advised to remain at home until recovered.

## **Do's**

Encourage those in risk groups to have the influenza vaccine.

Encourage children and staff with flu-like symptoms to stay at home until recovered.

Ask children to cover their noses and mouths with a tissue when coughing or sneezing and discard tissues after use.

Ensure regular hand washing with soap and water, especially after coughing or sneezing.

## **Don'ts**

Do not allow children under 16 years old to have aspirin as it is associated with Reye's syndrome (a neurological disorder).

## **Measles**

Measles is a highly infectious viral infection. The mumps, measles-rubella (MMR) immunisation campaign carried out in the UK 1994 resulted in a dramatic reduction in cases of measles. However, there has recently been a sharp rise in the number of cases reported in unvaccinated individuals in London.

## **Symptoms**

Symptoms include a runny nose; cough; conjunctivitis (sticky eye); high fever and small white spots (Koplik spots) inside the cheeks. Around day 3 of the illness, a rash of flat red or brown blotches appear, beginning on the face and spreading over the body. The incubation period is between 7 to 18 days.

## **Spread**

Measles is highly infectious. The virus is transmitted through airborne droplet spread, and direct contact with nasal or throat secretions.

## **Exclusion**

Cases are infectious from 4 days before onset of rash to 4 days after so it is important to ensure cases are excluded from school during this period.

## **Do's**

Encourage all children over the age of 1 to have MMR immunisations as per the national schedule.

Staff should be up to date with their MMR vaccinations.

## **Don'ts**

Children and adults with a weak immune system, pregnant women and children under 12 months who come into contact with measles should contact their GP immediately for advice.

## **Meningitis**

Meningitis is a general term that describes an inflammation of the membranes covering the brain and spinal cord. It can be caused by a range of bacteria or viruses. Bacterial meningitis is less common but more serious than viral meningitis and needs urgent antibiotic treatment. In some cases, bacterial meningitis can lead to septicaemia (blood poisoning). If you suspect meningitis, get medical help urgently.

## **Symptoms**

Common signs and symptoms of meningitis and septicaemia include fever, severe headache, photophobia, neck stiffness, non-blanching rash (see glass test box below), vomiting, drowsiness.

The incubation period varies with the organism causing the infection. Bacterial meningitis incubation is between 2 and 10 days.

## **Glass test**

If a glass tumbler is pressed firmly against a septicaemic rash, the rash will not fade. You will be able to see the rash through the glass. If this happens get medical help immediately. Note that the rash is a late symptom - if any of the other symptoms have already occurred seek medical advice immediately.

The routine childhood immunisation schedule provides protection against meningitis caused by mumps, polio, Haemophilus influenzae type b (Hib), pneumococcus and Neisseria meningitidis group A,B,C,W and Y. There is no vaccination for some types of meningitis. Pupils should be encouraged to be up to date with their vaccinations.

There is no effective medication the treatment of viral meningitis but symptoms are usually much milder.

## **Exclusion**

Once the child has been treated (if necessary) and has recovered, they can return to school. No exclusion is needed.

Meningitis is a notifiable disease.

# **Meningococcal meningitis and meningitis septicaemia**

Meningitis and septicaemia require immediate medical attention.

The bacteria Neisseria meningitidis is responsible for meningococcal meningitis and meningococcal septicaemia (known collectively as 'meningococcal infection'). There are 13 known groups of the bacteria, the most common worldwide are A, B, C, W135 and Y. In the UK, groups B and C are the most common. Meningococcal infection is a rare but serious disease and is fatal in around 1 in 10 people with the illness. About 15% of those that recover have long-term complications.

## **Symptoms**

Symptoms include fever, severe headache, photophobia, drowsiness, non-blanching rash (see glass test box). Not all the symptoms will be present and cases can have symptoms of meningitis and septicaemia.

## **Glass test:**

If a glass tumbler is pressed firmly against a septicaemic rash, the rash will not fade. You will be able to see the rash through the glass. If this happens get medical help immediately. Note that the rash is a late symptom - if any of the other symptoms have already occurred seek medical advice immediately.

## **Spread**

Spread is from person to person through respiratory droplets and direct contact with nose and throat secretions. About 10% of us carry the bacteria harmlessly in our nose and throat without and only a very small proportion of people develop meningitis or septicaemia if they come into contact with it.

Close and prolonged contact is needed to pass the bacteria to others (such as contacts in a household setting or intimate kissing). For this reason, only people that have had significant close contact with the case in the previous 7 days will be offered antibiotics.

The case is considered non-infectious 24 hours after taking appropriate antibiotic treatment to clear the bacteria from their nose and throat.

If the child has been treated and has recovered, they can return to school. The HPT will have carried out a risk assessment and organised antibiotics for household and other close contacts. Exclusion is not necessary for household or close contacts unless they have symptoms suggestive of meningococcal infection.

## **Do's**

Seek medical advice immediately if meningitis is suspected.

Inform HPT and school health advisor of a case of meningococcal disease in your school.

Respect confidentiality of the patient.

Inform the HPT if 2 cases of meningococcal disease occur in the school within 4 weeks.

## **Meningitis (viral)**

The symptoms of meningitis (inflammation of the linings surrounding the brain) can be caused by a number of different viruses.

## **Symptoms**

Symptoms include headache, fever, gastrointestinal or upper respiratory tract involvement and in some cases a rash. Active illness seldom lasts more than 10 days.

## **Spread**

How the disease is spread will depend on the virus causing the illness. Transmission may be through droplet spread or direct contact with nose and throat discharges or faeces of infected individuals.

## **Exclusion**

No exclusion is required. Once the child is well the risk of infection is minimal. There is no reason to exclude siblings and other close contacts of a case.

## **Do's**

Encourage high standards of basic hygiene.

Encourage the prompt disposal of soiled tissues.

Recommend a consultation with the GP.

Seek advice from Health Protection Team if more than one case occurs.

## **Meticillin resistant Staphylococcus aureus (MRSA)**

MRSA (meticillin resistant Staphylococcus aureus) is a bacteria that has developed resistance to methicillin (a type of penicillin) and some other antibiotics that are used to treat infections.

## **Symptoms**

Staphylococcus aureus is commonly found on the skin and in the nostrils of about 25 to 30% of the population. Most people do not even realise they are carrying it because it does not harm them and they have no symptoms, or only experience minor problems such as skin infections or boils. It can occasionally cause serious infection.

## **Spread**

Spread is mainly by direct contact with contaminated hands and objects.

## **Exclusion**

None advised.

## **Do's**

Staff should ensure good infection control principles are in place, in particular good hand washing, to reduce the risk of transmission.

All infected wounds should be covered.

# **Mumps**

## **Symptoms**

Mumps is a viral infection. The first symptoms of mumps are usually a raised temperature and general malaise. Following this there is stiffness or pain in the jaws or neck. Then the glands in the cheeks and under the jaw swell up and cause pain. The swelling can be one sided or affect both sides. Mumps is usually fairly mild in young children, but can cause swelling of the testicles and rarely, infertility in males over the age of puberty.

## **Spread**

The mumps virus is highly infectious and can be spread by droplets from the nose and throat and by saliva.

## **Exclusion**

Infected children can return to school 5 days after the onset of swelling, if well.

## **Do's**

Encourage staff and children to practice good hygiene at all times.

Send the child home if unwell.

Advise the parents to see their GP.

Encourage parents to have their children immunised against mumps.

## **Ringworm**

### **Symptoms**

Ringworm, also known as tinea, is a fungal infection of the skin, hair or nails. It is caused by various types of fungi and infections are named after the parts of the body that are affected, namely face, groin, foot, hand, scalp, beard area and nail. Scalp ringworm in children is becoming more common in the UK, particularly in urban

areas. Until recently this was usually spread from infected animals but now spread between humans within families and in schools is more common.

## **Ringworm of the scalp**

Infection with animal ringworm starts as a small red spot which spreads leaving a scaly bald patch. The hair becomes brittle and breaks easily. The picture with human scalp ringworm varies from lightly flaky areas, often indistinguishable from dandruff, to small patches of hair loss on the scalp. There may be affected areas on the face, neck and trunk.

## **Ringworm of the body**

Infected areas are found on the trunk or legs and have a prominent red margin with a central scaly area.

## **Athlete's foot**

Affects the feet, particularly the toes, in between the toes and soles.

## **Nail ringworm**

Infection of the nails often with infection of the adjacent skin. There is thickening and discolouration of the nail.

## **Spread**

Spread is by direct skin to skin contact with an infected person or animal and with athlete's foot, by indirect contact with contaminated surfaces.

## **Exclusion**

No exclusion needed. Once treatment has started for infections of the skin and scalp children can return to school. Scalp ringworm needs to be treated with oral anti-fungal agents. An anti-fungal cream is used to treat ringworm of the skin and feet.

## **Do's**

Wash and dry feet well in cases of athlete's foot.

Keep towels separate in all cases.

Ensure the child with ringworm of the feet is wearing socks and trainers. The child should have his or her feet covered for physical education.

# **Rotavirus**

## **Symptoms**

Rotavirus infection is the most common cause of gastroenteritis (inflammation of the intestines) in children under 5 years of age

worldwide. Rotavirus is a highly infectious virus and can cause severe diarrhoea, stomach cramps, vomiting, dehydration and mild fever. These symptoms usually last from 3 to 8 days.

## **Spread**

Rotavirus is highly contagious and is mainly transmitted by the faecal-oral route, although respiratory transmission may also occur.

Apart from vaccination, good hygiene is the most important way of preventing the spread of rotavirus.

## **Exclusion**

Until 48 hours after the symptoms have subsided.

## **Do's**

Encourage staff and children to practice good hygiene at all times.

Send the child home if unwell advise the parents to see their GP.

Use PPE when handling blood or body substances.

## **Rubella (German Measles)**

Rubella is a viral infection. The infection is mild but can cause congenital rubella syndrome. When a pregnant woman who is not immune gets a rubella infection in the first twenty weeks of pregnancy it can have serious consequences for the pregnant woman and for the

unborn baby. If you are not immune and develop rubella infection in the first twenty weeks of pregnancy, there is a chance that the virus will affect the baby's developing organs and cause serious disability.

In the UK, the introduction of the MMR vaccine has resulted in the infection being virtually eliminated, although due to the decline in the uptake of the measles, mumps and rubella vaccine it has resulted in some cases within the UK.

## **Symptoms**

The symptoms of rubella are mild. Usually the rash is the first indication, although there may be mild catarrh, headache or vomiting at the start.

The rash takes the form of small pink spots all over the body. There may be a slight fever and some tenderness in the neck, armpits or groin and there may be joint pains. The rash lasts for only 1 or 2 days, and the spots remain distinct, unlike measles.

## **Spread**

Spread is by the respiratory route.

## **Exclusion**

Exclude from school for 5 days from the appearance of the rash.

## **Do's**

Promote 2 MMR vaccinations for all pupils.

Female staff should have 2 MMR vaccinations or show a history of rubella infection.

## **Scabies**

Scabies is a skin infection caused by tiny mites that burrow in the skin. The pregnant female mite burrows into the top layer of the skin and lays about 2 to 3 eggs per day before dying after 4 to 5 weeks. The burrows may be several centimetres long but they are very close to the surface of the skin. The eggs hatch after 3 to 4 days into larvae which move to hair follicles where they develop into adults.

## **Symptoms**

The appearance of the rash varies but tiny pimples and nodules are characteristic. Secondary infection can occur if the rash has been scratched. The scabies mites are attracted to folded skin such as the webs of the fingers. Burrows may also be seen on the wrists, palms elbows, genitalia and buttocks.

## **Spread**

Spread is most commonly by direct contact with the affected skin.

Occasionally if there is impaired immunity or altered skin sensation, large numbers of mites occur and the skin thickens and becomes very scaly.

## **Exclusion**

Yes. The infected child or staff member should be excluded until after the first treatment has been carried out.

## **Do's**

The child can return after the first treatment has been completed.

It is important that the second treatment is not missed and this should be carried out 1 week after the first treatment.

All household contacts and any other very close contacts should have 1 treatment at the same time as the second treatment of the case.

## **Scarlet Fever**

A wide variety of bacteria and viruses can cause tonsillitis and other throat infections. Most are caused by viruses but streptococci bacteria account for 25 to 30% of cases. Certain strains of streptococcus bacteria produce a toxin which causes scarlet fever in susceptible people.

## **Symptoms**

There is acute inflammation extending over the pharynx or tonsils. The tonsils may be deep red in colour and partially covered with a thick yellowish exudate. The illness symptoms vary but in severe cases there may be high fever, difficulty in swallowing and tender enlarged lymph nodes.

A rash develops on the first day of fever, it is red, generalised, pinhead in size and gives the skin a sandpaper-like texture and the tongue has a strawberry-like appearance. The fever lasts 24 to 48 hours. Scarlet fever is now usually a mild illness but is rarely complicated by ear infections, rheumatic fever which affects the heart, and kidney problems.

## **Spread**

Spread is by the respiratory route through inhaling or ingesting respiratory droplets or by direct contact with nose and throat discharges especially during sneezing and coughing.

## **Exclusion**

Yes. Children can return to school 24 hours after commencing appropriate antibiotic treatment. If no antibiotics have been administered the person will be infectious for 2 to 3 weeks. If there is an outbreak of scarlet fever at the school or nursery, the HPT will assist with letters and factsheet to send to parents or carers and staff.

## **Do's**

Ensure that particular attention is paid to hand washing at all times.

Send the child home from school if unwell.

Advise parents to take the child to their GP.

Inform the HPT if there is an outbreak.

# **Slapped cheek syndrome, Parvovirus B19, Fifth's Disease**

## **Symptoms**

The illness may only consist of a mild feverish illness which escapes notice but in others a rash appears after a few days. The rose-red rash makes the cheeks appear bright red, hence the name 'slapped cheek syndrome'. The rash may spread to the rest of the body but unlike many other rashes it only rarely involves the palms and soles.

The child begins to feel better as the rash appears. The rash usually peaks after a week and then fades. The rash is unusual in that for some months afterwards, a warm bath, sunlight, heat or fever will trigger a recurrence of the bright red cheeks and the rash itself. Most children recover and need no specific treatment. In adults the virus may cause acute arthritis.

The virus can affect an unborn baby in the first 20 weeks of pregnancy. If a woman is exposed early in pregnancy (before 20 weeks) she should seek prompt advice from whoever is giving her antenatal care.

## **Spread**

Spread is by the respiratory route and a person is infectious 3 to 5 days before the appearance of the rash. Children are no longer infectious once the rash appears. There is no specific treatment.

## **Exclusion**

None. The child need not be excluded from school because he or she is no longer infectious by the time the rash occurs.

## **Do's**

Do advise a visit to the GP.

Do request that parents inform the school of a diagnosis of fifth disease.

# **Threadworm**

Threadworm infection is an intestinal infection and is very common childhood infection.

## **Symptoms**

Adult worms live in the small intestine. Mature female worms migrate through the anus and lay thousands of eggs on the perianal skin causing itching, particularly at night. Infective embryos develop within 5 to 6 hours and these are transferred to the mouth on fingers as a result of scratching. Larvae emerge from the eggs in the small intestine and develop into adult worms.

## **Spread**

Re-infection is common and infectious eggs are also spread to others directly on fingers or indirectly on bedding, clothing and environmental dust.

## **Exclusion**

None needed.

## **Do's**

Do encourage high standards of basic hygiene.

Do recommend a consultation with the GP or pharmacist.

Do be aware that transmission is uncommon in schools.

## **Don'ts**

Don't forget that threadworm infection can lead to lack of sleep, irritability and loss of concentration.

# **Tuberculosis (TB)**

TB is a bacterial infection that can infect any part of the body, including the lungs. It can affect people of all ages, classes and ethnic background.

## **Symptoms**

People with TB might have all or some of the following symptoms; cough, loss of appetite, loss of weight, fever, sweating particularly at night, breathlessness and pains in the chest. TB in a part of the body

other than the lungs may produce a lump or swelling which can be painful.

## **Spread**

Some (but not all) people who develop TB of the lung (pulmonary TB) are infectious to others. Spread happens when these infectious cases pass TB in their sputum to someone else by inhalation. This happens if the person had a lot of close contact with the case (especially if the case has been coughing). The incubation period is 4 to 12 weeks.

## **Exclusion**

Yes. Pupils and staff with infectious TB can return to school after 2 weeks of treatment if well enough to do so and as long as they have responded to anti-TB therapy. Pupils and staff with non-pulmonary TB do not require exclusion and can return to school as soon as they are well enough.

## **Do's**

Do inform and discuss with the Health Protection Team, TB nurses or school health advisor before taking any action.

Do maintain confidentiality of persons with suspected TB.

Do exclude pupils whilst they are infectious, following taking advice from TB nurses or the Health Protection Team.

## **Don'ts**

Don't exclude children or staff with non- pulmonary TB or those with pulmonary TB who have effectively completed at least 2 weeks of treatment as confirmed by the TBnurses.

## **Whooping Cough (pertussis)**

Whooping cough (pertussis) is a bacterial chest infection caused by *Bordetella pertussis*. The national immunisation schedule recommends that women 16 to 32 weeks pregnant should be immunised to maximise the likelihood that the baby will be protected from birth. Infants receive 3 doses of vaccination by their 16th week and an additional pre-school booster.

### **Symptoms**

The early stages of whooping cough, which may last a week or so, can be very like a heavy cold with a temperature and persistent cough. The cough becomes worse and usually, the characteristic 'whoop' develops. Coughing spasms are frequently worse at night and may be associated with vomiting. The whole illness may last several months.

The disease is usually more serious in children of pre-school age. Antibiotics rarely affect the course of the illness, but may reduce the period the child is infectious.

### **Spread**

Whooping cough spreads by direct contact with airborne particles of discharges from the nose and throat.

## **Exclusion**

Yes. A child or staff member should not return to school until they have had 48 hours of appropriate treatment with antibiotics and they feel well enough to do so or 21 days from onset of illness if no antibiotic treatment.

Children should be immunised against whooping cough in their first year of life.

## **Do's**

Do advise parent to see GP.

Do allow the child to return to school after exclusion period even if they are still coughing.

Do encourage parents to have their children immunised against whooping cough.

# Appendices

Updated 27 March 2019

## Appendix 1: Health Protection Teams contact details

### Choosing the appropriate local contact at Public Health England (PHE)

Centres are the front door for most of PHE's local services across health improvement, healthcare public health and health protection. Depending on their size and geography, centres may have one or more local health protection teams who can assist with specific health protection enquiries.

Find [contact details for all Health Protection Teams in England](#).

## Appendix 2: list of notifiable diseases

Diseases notifiable (to Local Authority Proper Officers) under the Health Protection (Notification) Regulations 2010:

- acute encephalitis
- acute meningitis
- acute poliomyelitis

- acute infectious hepatitis
- anthrax
- botulism
- brucellosis
- cholera
- diphtheria
- enteric fever (typhoid or paratyphoid fever)
- food poisoning
- haemolytic uraemic syndrome (HUS)
- infectious bloody diarrhoea
- invasive group A streptococcal disease and scarlet fever
- legionnaires' disease
- leprosy
- malaria
- measles
- meningococcal septicaemia
- mumps
- plague
- rabies
- rubella
- SARS
- smallpox
- tetanus
- tuberculosis
- typhus
- viral haemorrhagic fever (VHF)
- whooping cough
- yellow fever

## **Appendix 3: diarrhoea and vomiting outbreak – schools,**

# nurseries and other childcare settings action checklist

See [diarrhoea and vomiting outbreak action checklist](#).

## Appendix 4: further resources

[E-bug](#)

[Farm visits](#)

[Health and Safety Executive](#)

[The Meningitis Research Foundation](#)

[The Meningitis Trust](#)

[National immunisation schedule](#)

[NHS choices](#)

[Notification of infectious disease](#)

[Public Health England](#)

[Waste disposal](#)



