**Health protection in schools and other childcare facilities - A practical guide for staff on managing cases of infectious diseases in schools and other childcare settings.** PHE Guidance, [www.gov.uk](http://www.gov.uk) Updated 27 March 2019

**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

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 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.

**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 .

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 .

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 4.

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)

**Immunisation**

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.

**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.

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.

**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 and Ecxlusion

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

**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 1or 2 days, and the spots remain distinct, unlike measles.

Spread and Exclusion

Spread is by the respiratory route. 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.