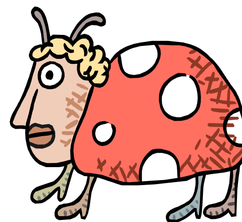
Dorset and Somerset
Health Protection Unit

INFORMATION LEAFLETS FOR COMMON CHILDHOOD INFECTIOUS CONDITIONS



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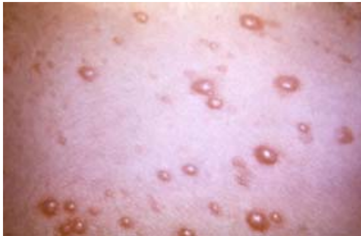
CHICKENPOX

Chickenpox is a common and infectious disease. It is caused by a virus and is spread by sneezing and coughing, or direct contact with broken chickenpox blisters. This virus is also called the varicella-zoster virus, and is also responsible for causing shingles. Chickenpox is usually a mild disease affecting mostly children. It is more common in the winter and spring. After a chickenpox infection the virus lays dormant in the nervous system, which can in later life reactivate and a person will develop shingles. It is not possible to develop shingles from exposure to a person with chickenpox, but it is possible to develop chickenpox following exposure to shingles. It is rare to get chickenpox twice. Vaccination for chickenpox is not currently provided for the UK childhood vaccination schedule.

What are the symptoms?

Chickenpox usually begins with the onset of a slight fever, feeling generally unwell for a couple of days before the spots appear. These generally begin on the scalp, face and back, but can appear anywhere (including the mouth) although it is rarely seen on the palms of the hands or soles of the feet. The rash is intensely itchy. The spots look flat and red, and later become raised and filled with fluid. Most children are free from chickenpox in less than two weeks.



Chickenpox pustules

Picture courtesy of the Centres for Disease Control and Prevention, Public Health Image Library: http://phil.cdc.gov/phil/quicksearch.asp

Is it infectious?

Chickenpox is highly infectious for 5 days before the rash develops, until all the lesions have crusted; usually about 5 days after the first crop of spots appear. The following groups of people should report to their general practitioner if they are exposed to chickenpox and do not remember having been previously infected with chickenpox:

- pregnant women;
- babies whose mothers develop chickenpox in the first 28 days of their life;
- people with weak immune systems (e.g. people receiving large doses of oral steroids or receiving chemotherapy for cancer or leukaemia, HIV or AIDS);
- household contacts of immuno-compromised people who may have contact with children with chickenpox.

What is the treatment?

The most common treatment for chickenpox is aimed at relieving the symptoms:

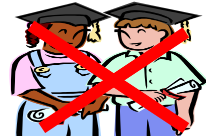
- applying calamine lotion to the rash may relieve the itching (this should only be applied according to the information supplied by the manufacturer). Other itch-relieving products may be recommended by a pharmacist;
- iced lollies may help to reduce the fever;

- giving Paracetamol will reduce the fever (dosage must not exceed that recommended by the manufacturer according to the age of the child). Aspirin must not be given to children under 16 years old;
- cutting the nails short to prevent damaging the skin when scratching;
- wear cool, loose fitting clothing and keep the room temperature cool which may reduce the itching.

Are there any complications?

The majority of people affected by chickenpox suffer no long-term effects:

- there is an increased risk that you could develop shingles later in life due to the virus remaining dormant in the body and reactivating;
- bacterial infections can arise if the blistered areas become contaminated with bacteria;
- very occasionally chickenpox infection causes pneumonia, which presents as a persistent high fever and a severe dry cough;
- very rarely it can lead to a condition called encephalitis. This is an inflammation of the brain which can occur between 7 days and10 days after the onset of the rash. Encephalitis is **very rare,** and would present with symptoms of drowsiness, headache, neck stiffness, dislike of bright lights and possibly convulsions.



How can I stop chickenpox spreading to others?

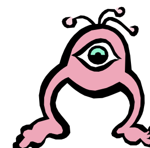
- by keeping the child at home until 5 days after the first appearance of the rash. It is not necessary for all the skin lesions to have formed dry crusts / scabs before the child returns to school;
- by avoiding contact with people who have not had chickenpox previously and those who are immuno-compromised;
- encouraging person to cough into a tissue which is then thrown away;
- following good basic hygiene measures including hand washing and not sharing towels.

Do I need to visit my general practitioner?

If your child has chickenpox with the symptoms as described in this fact sheet there is no requirement to routinely visit your general practitioner. Chickenpox is a self-limiting illness for most children and most will be completely better within a two week period. Taking the child to a busy doctor's surgery increases the risk of further spread of the virus, and there is no magical treatment other than that available at your local pharmacy to relieve symptoms. It is worth recording that a child has had chickenpox on their immunisation record sheet.

A further useful source of information is NHS Direct. They can be contacted via their website at:
http://www.nhsdirect.nhs.uk/

Alternatively, NHS Direct can be contacted by telephone on: 0845 4647 (Information is available in different languages.)



CONJUNCTIVITIS

What is it?

This is an infection of the covering of the eyeball and inside of the eyelid. The white of the eye and the inner surfaces of the lids are covered by a transparent membrane called the conjunctiva. Conjunctivitis is a condition that causes the surface of the conjunctiva to become inflamed. Viruses, bacteria, allergies or foreign bodies can cause this inflammation. It is a very common condition, particularly among children. It is usually a self-limiting disease, which means that it will resolve without treatment, but it is recognised that antibacterial eye preparations may relieve some of the symptoms.

What are the symptoms?

The white of the eye may appear red or pink, and there may be a discharge, which causes the eyelids to stick together, making them difficult to open. The eye may feel gritty and sticky, particularly first thing in the morning. Light might cause pain in the eye and increase the watery discharge.

Is it infectious?

Yes, conjunctivitis is commonly spread from person to person by direct contact with the discharge from the eye. Within a playschool area conjunctivitis spreads as the affected child often rubs their eye due to the irritation. Following this contact, objects such as toys, crayons or surfaces they touch may become contaminated, providing the opportunity for the infection to spread to the next child having contact with the object. For this reason it is essential that staff are told that a child is suffering from conjunctivitis. Staff can then take preventative action to reduce the risk of further transmission including:

- encouraging the parents to take the child to their doctor;
- babies aged less than one month showing signs of conjunctivitis must be examined by their doctor;
- discouraging close facial contact between infected and non-infected children;
- discouraging the child from rubbing their eyes (if they do rub their eyes encourage thorough hand washing);
- ensuring particular attention to hand washing and making sure that a separate towel is provided for the affected child / only paper towels are used.

What is the incubation period?

The incubation period and period of infectiousness depends on the cause of the conjunctivitis but may range from 1-12 days, depending on the organism and treatment given.

What can I do to help my child?

- it is important that a child with conjunctivitis is examined by a doctor to exclude the presence of a foreign body;
- if eye drops or ointment are prescribed this should be applied only following thorough hand washing by the parent or carer;
- only use drops / ointment prescribed for the affected eye, e.g. do not use drops for the right eye in the left eye if both are affected;

- when cleansing the eyes use separate wipes for each eye using clean tissues or gauze swabs and cooled, previously boiled water;
- clean the unaffected eye before the infected eye;
- do not share eye drops or ointments between family members;
- avoid using contact lenses while the infection is present;
- discourage the child from rubbing the eyes.

What can I do to stop conjunctivitis spreading to others?

- **pay particular attention to hand washing ensuring that the affected child uses paper towels or has a dedicated hand towel which should be washed / changed daily;**
- do not share flannels;
- **children should not routinely be excluded from school during the course of this illness;**
- discourage close facial contact between children while affected;
- advise the teacher or carer of your child of their condition;
- in community settings such as playgroups, nurseries or schools any outbreaks of conjunctivitis should be reported to your local Health Protection Team (see contents page for telephone numbers). An outbreak is defined as two or more children affected at the same time with the condition).

When should I see my doctor?

- a doctor should be consulted for all cases of conjunctivitis in children. This is not an emergency but an appointment at the next available surgery should be made;
- a doctor or health visitor should be contacted urgently if a baby under three weeks of age develops symptoms of conjunctivitis. This may require treatment with antibiotics as this infection can be acquired during birth from the mother's vaginal passage;
- if the treatment is not working after the prescribed course has been completed;
- if the condition is getting worse and the eye becomes more painful;
- if vision becomes impaired.

NHS Direct will be able to give information and advice by telephone on: 0845 4647.

Alternatively, see the NHS Direct website at: http://www.nhsdirect.nhs.uk/

HAND, FOOT AND MOUTH DISEASE

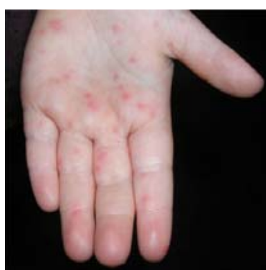
Hand, foot and mouth disease is a self-limiting viral disease caused most commonly by viruses from the group called enteroviruses. The most common cause is coxsackievirus A16 but sometimes it is caused by enterovirus 71 or other enteroviruses. It is most common in young children but can occur in adults. It is more common in summer and autumn. This infection is completely unrelated to foot and mouth disease that affects animals – that is caused by a different virus.

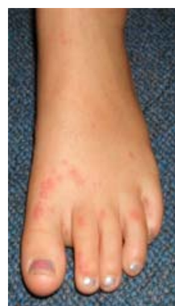
What are the symptoms?

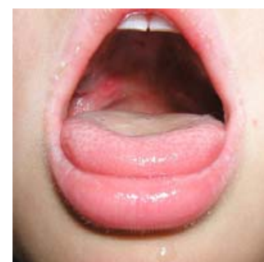
The illness usually starts with a sore throat and fever, and blisters may then develop on the surface of the inside of the mouth and on the throat and tongue. The virus may also cause blisters on the palms of the hands, fingers and toes. Unlike chickenpox these blisters are generally not itchy. The blisters usually last for between 4 days and 10 days.

Is it infectious?

Hand, foot and mouth disease is infectious and the virus can be passed on during social contact. Young children mixing in nursery settings are particularly vulnerable to viral infections. Adults and older children may develop a mild form of the illness, but rarely. Symptoms usually develop between 3 days and 5 days after contact with a case. The person with the infection is considered infectious until the blisters fade. The virus is carried in the faeces (stools, motions), so extra care with hand washing following toileting and handling of nappies should be taken to prevent further spread. The virus can be excreted in stools for up to 4 weeks after the onset of the illness.







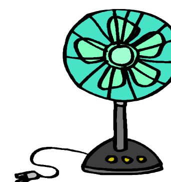
Hand, foot and mouth images reproduced from:
http://www.askdrsears.com/html/8/T082902.asp

Is hand, foot and mouth disease serious?

The disease is not usually serious, and the fever and spots normally clear within a few days. The mouth ulcers can be painful and this may make a child miserable.

Is there any treatment?

There is no specific treatment for the infection. Viral infections do not respond to antibiotics. The viral illness is mild and with time all symptoms will clear up. Therefore it is better to treat the symptoms. The following advice may help to relieve the symptoms:



- keep the child cool;
- give plenty of fluids;
- cold foods such as ice cream or yoghurt may be preferred;
- give Paracetamol at the dose recommended for the child's age on the box or by the pharmacist. Aspirin must not be given to children under 16 years old.

How long should a child stay away from school?

There is no need to keep children out of school or nursery during this infection. However, if the child has a temperature and feels generally unwell they will probably be better managed in their own home. It is important that particular care is taken when carrying out toileting duties for young children. Hands must be thoroughly washed after such duties. Young children should be supervised and encouraged to wash their hands after toileting and dried with paper towels or their own dedicated towel. Thoroughly wash and disinfect contaminated items and surfaces.

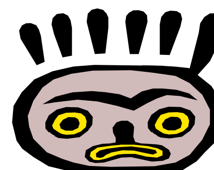
There is a slight risk to pregnant women, and they may wish to avoid close contact with a child during the course of their work activities. Pregnant women who develop any symptoms of rashes during pregnancy should seek advice from their general practitioner or midwife.

Do I need to visit my general practitioner?

This is a self-limiting illness and there are no effective treatments for this virus. Treating the symptoms will help and the illness will run its course. Should the person develop the rare additional symptoms of high fever, headache, stiff neck, or back pain or other complications then they need to see a doctor urgently.

A further useful source of information is NHS Direct. They can be contacted via the website at: http://www.nhsdirect.nhs.uk/

NHS Direct can also give information and advice by telephone on: 0845 4647.

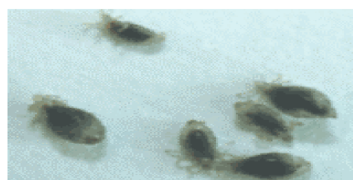


HEAD LICE

Head lice are not considered a serious problem in the United Kingdom, though they are a cause of much anxiety amongst the parents of children affected. Head lice also known as *Pediculus capitis* are grey / brown in colour and about 1mm to 3mm long (smaller than a match head). It is a wingless, parasitic insect that spends its whole life on human hair. They can be difficult to see as they blend in with the hair of the host. Head lice feed by sucking blood from the scalp of their host. Head lice cannot survive off the head and rapidly dehydrate and die if they leave it. The female louse lays her eggs on the hair shaft near the scalp, and is capable of laying up to 10 eggs per day. These eggs firmly attach to the hair and cannot be easily washed off with normal shampoo. The eggs hatch in about 7 days and the eggshells are left empty (nits). Head lice become fully mature in 10 days and can survive on the scalp for up to 4 weeks.

What are the symptoms of head lice?

Itching is often the only symptom of the disease, but may only happen some time after the onset of infection, particularly with people who have not been previously affected. Not all people will have symptoms. Sometimes a rash may appear on the back of the neck; this is an allergic reaction to the waste products of the louse. Detection combing should be used to identify living, moving lice.



Head lice

Reproduced from: http://www.insectresearch.com/head.html

How are head lice caught?

Head lice are transmitted from person to person following prolonged head to head contact (lice are unable to jump, fly or swim). Infestation occurs more readily in younger children who enjoy close contact with their friends and in families during close physical contact. **Head lice are not associated with poor hygiene; they are not selective and do not have a preference for clean or dirty hair.**

How can I tell if my child has head lice?

The best way to search for head lice is to buy a detection comb from your local pharmacy. The following Health Protection Agency advice should then be followed:

- wash the hair in the normal way with ordinary shampoo;
- rinse out the shampoo and put on lots of ordinary conditioner;
- comb the hair with a normal comb to get rid of tangles;

- when the hair is untangled switch to a detection comb. This is a special fine toothed comb that you can buy at pharmacies (the teeth of normal combs are too far apart);
- slot the teeth of the detection comb into the hair at the roots so it is touching the scalp;
- draw the detection comb through to the tips of the hair;
- repeat this in all directions until you have combed all the hair;
- check the comb for lice after each stroke. A magnifying glass may help;
- if you see any lice, clean the comb by wiping it on a tissue or rinse it before the next stroke;
- comb over a white surface such as white paper. This is so that any head lice that are flicked out by the comb are easy to see;
- after the whole head has been combed, rinse out the conditioner;
- while the hair is still wet, use an ordinary comb to get rid of tangles;
- repeat the detection combing in the rinsed hair to check for any lice that you might have missed the first time;
- it takes about 15 minutes to do detection combing, depending on how thick the hair is.

What should I do if I find head lice?

Go to your local pharmacist who will advise you on recommended treatments. You can buy lotions or creams which will be effective against head lice if the instructions are carefully followed and supported by a programme of thorough, regular combing. It is important that all household members and close contacts are examined. Remember to include grandparents or other carers who often have close head-to-head contact. All those with evidence of lice should be treated at the same time.

You will also be able to obtain the treatments if preferred at your doctor's surgery. A practice nurse will be able to organise the prescription. Your child can return to school following treatment.

There are many proprietary brands and the table on the following page summarises those currently available. When a large number of people are affected, for instance a school class, it is usually more effective for everyone to use the same treatment.

A further useful source of information is NHS Direct. They can be contacted via their website at: http://www.nhsdirect.nhs.uk/

Alternatively, NHS Direct will be able to give information and advice by telephone on: 0845 4647

TREATMENT OPTIONS FOR HEAD LICE

The recommendations for treatment of head lice are complex. Many treatments fail due to poor application or inadequate contact time. Many parents choose to avoid chemical treatments, preferring the bug busting method.
Always ask for advice before using medicated lotions on young babies (under 6 months), pregnant women or people with asthma.
It is important whatever method is used to eradicate head lice that the manufacturer's instructions are followed meticulously.
Resistance to the chemical preparations is reported nationally. It is therefore important that alternative treatments are tried if one treatment fails.
Failure can occur as a result of application of insufficient lotion - long thick hair may require more than one bottle of the selected lotion to achieve good coverage. The lotions require a period of contact time to destroy the head lice.
The treatments may require reapplication 7 days after the first application.

TREATMENT	BRAND NAMES	RECOMMENDED FOR:
Dimectone	• Hedrin	• **product coats head lice and interferes with water balance of lice by preventing excretion of water;** • **not licensed for use in children under 6 months;** • apply to dry hair allow to dry naturally and shampoo after 8 hours; • repeat treatment after 7 days.
Carbaryl in aqueous base	• Carylderm	• **not licensed for use in children under 6 months;** • apply to dry hair and scalp; • allow to dry naturally and shampoo hair after 12 hours; • repeat treatment after 7 days.
Malathion 0.5% alcoholic solution	• Derbac M • Suleo M • Prioderm • Quellada M	• **adults and children over the age of 2 years;** • apply to dry hair and scalp, allow to dry naturally, shampoo after 12 hours; • repeat treatment after 7 days.
Phenothrin 0.5% aqueous liquid	• Full Marks Liquid	• children under the age of 2 years; • people with asthma, eczema or sensitive skins; • people in whom malathion alcoholic lotion has failed.
Bug Buster Kit	• Bug Buster Kit	• people who do not want to use insecticides (PLEASE NOTE THIS 'TREATMENT' CAN TAKE SEVERAL WEEKS); • pregnant women; • breastfeeding women.

IMPETIGO

Impetigo is a common superficial infection of the skin. It is contagious, so it can be passed on to others. It is a bacterial infection of the skin most commonly caused by either *Staphylococcus aureus* or *Streptococcus pyogenes.* Sometimes both bacteria can be identified on swabs taken from infected skin lesions. It is quite common in young children aged four years and under, but can occur at any age. Outbreaks can occur in nurseries and schools. The infection is more common during the summer months.

What are the symptoms?

The face is the most common area affected, but impetigo can also occur on any part of the body. At first small blisters develop, which then burst to leave small scabby patches on the skin. These crusted lesions are often yellow in colour, sometimes itch and can spread in small clusters to surrounding areas of skin. The incubation period is usually between four days and ten days.

Impetigo. Courtesy of the Health Protection Agency:

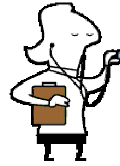
http://www.hpa.org.uk/emergency/pdfs/picture_gallery.pdf#search=%22Ringworm%20images%22

Is it infectious?

Impetigo is highly infectious whilst the sores are producing pus, and is spread by having contact with the infected lesions. This makes it very difficult to control during outbreaks involving young children.

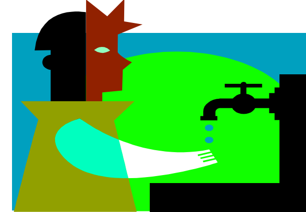
Are there any complications?

Impetigo can spread to other parts of the body if not treated. Occasionally scarring and pigment changes may occur, but these usually improve with time. Sometimes deeper infections may occur resulting in abscess formation, or more extensive deeper infections of the surrounding tissues.



What is the treatment?

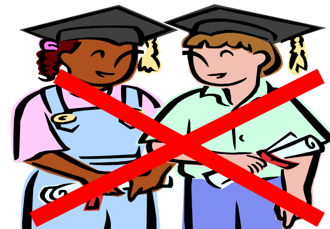
You should take your child to visit their doctor. The doctor will probably prescribe a course of antibiotics. This might be in the form of medication, or it might be a topical cream to apply to the affected areas, depending on the severity of the infection. The doctor may wish to take a swab of the affected area, particularly if it does not respond to treatment.



How can infections be prevented?

Impetigo can easily be passed from one person to another. To minimise the risk of further spread the following actions should be taken:

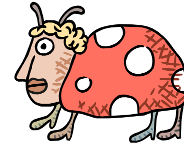
- try to discourage children from touching the affected lesions;
- wash hands after touching affected lesions or applying cream;
- do not share towels, flannels and so on until the infection has gone;
- exclude individual from school until lesions are crusted or healed. Antibiotic treatment by mouth may speed healing. If lesions can be effectively covered, exclusion time may be shortened.



Your child should visit the general practitioner with this condition, but it is not an emergency.

Further advice can be obtained from NHS Direct via the internet, at: http://www.nhsdirect.nhs.uk/

Alternatively NHS direct can give information and advice by telephone on: 0845 4647.

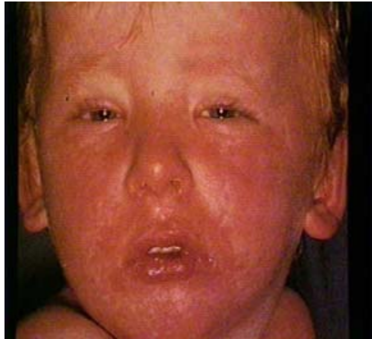


MEASLES

Measles is one of the most infectious viral diseases. It is caused by a paramyxovirus, a group of viruses that are responsible predominantly for acute respiratory diseases and are usually transmitted in an airborne manner. It is also one of the most dangerous of children's diseases and can lead to some serious complications and long term health problems. Measles is usually a childhood infection and is most common in children aged between one year and four years, but can affect any age group. Measles infections are quite rare now since the introduction of an effective MMR vaccination programme, which protects against the three diseases Measles, Mumps and Rubella.

What are the symptoms?

During the early stages of the disease the child may develop a fever, conjunctivitis (the white of the eye may appear red or pink and the eyelids may stick together) and a runny nose. Spots like tiny grains of white sand, each surrounded by a red ring may also appear on the inside of the cheek in line with the teeth ('Koplik's spots'). The skin rash appears between the third and seventh day of the illness. This is a red, slightly raised rash, which usually begins at the hairline and progresses down the body over the next three to four days, sometimes covering the whole upper body. The fever usually reduces as the rash appears. The rash will fade from red to brown over the next few days and may last for up to a week.



Picture demonstrating typical measles rash and symptoms -
Courtesy of the Group on Immunization Education of the Society Teachers of Family Medicine.:
http://www.immunizationed.org/measles.asp

Is it infectious?

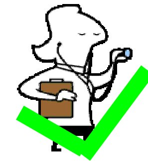
Measles is **very** infectious. The incubation period is about ten days, with a further two to four days before the rash develops. The person is considered infectious just before the onset of initial symptoms until four days after the appearance of the rash. Once a person has had the disease they cannot catch it again.

The infection is easily spread following contact with secretions of the nose or throat during coughing and sneezing. Children must be encouraged to cough and sneeze into disposable tissues and wash their hands thoroughly.

Children or people with this infection should avoid contact where possible with newborn babies, children under 13 months who have not yet been vaccinated with MMR, pregnant women and people whose immune systems may be weakened (for example leukaemia, cancer, AIDS and chemotherapy patients).

Are there any complications?

There are potentially serious complications associated with measles infection. These complications include ear infections, pneumonia, fits, meningitis, serious brain complications and sometimes death. Measles infection during pregnancy can lead to problems such as premature labour. Pregnant women who have significant contact with any person with a rash (house or classroom contact for a period of 15 minutes or more, or face to face contact) should seek advice from their midwife or general practitioner.

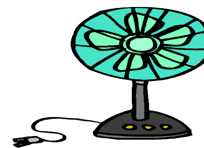


Are there any treatments?

If measles is suspected the person **must** be seen by their general practitioner. However, **before** visiting the surgery, phone and request an early appointment with the doctor explaining the suspected measles diagnosis, to prevent further spread of the infection to others in the waiting room. **The doctor will want you to report if any of the following symptoms develop:**

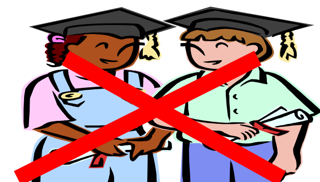
- uncontrolled temperature;
- worsening cough;
- earache;
- fits or convulsions;
- symptoms of meningitis (headache, dislike of bright lights, vomiting and stiff neck).

There are no specific treatments for measles infections but fluids should be encouraged. Paracetamol can be used to reduce the fever.



How soon can children return to school?

Children should stay away from school or nursery for a minimum of five days after the onset of the rash, after that when well enough to return.

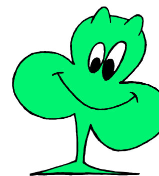


How can it be prevented?

The vaccination for measles is very effective at preventing the disease. Vaccination is offered to children at 13 months of age with a booster before starting school. This is part of the MMR programme. If your child has not had the MMR immunisation, or the programme is incomplete it is not too late. Vaccination advice and information can be obtained from your general practitioner or health visitor. Further information on MMR can be found at: http://www.mmrthefacts.nhs.uk/

NHS direct can also give information and advice and can be contacted by telephone on: 0845 4647.

Alternatively visit the website at: http://www.nhsdirect.nhs.uk/



MUMPS

Mumps is a viral infection caused by a paramyxovirus, a group of viruses that are responsible predominantly for acute respiratory diseases and are usually transmitted in an airborne manner. It mainly affects the salivary glands (these are situated on either side of the face, between the back part of the lower jaw and the ears) but sometimes other parts of the body are affected. Mumps usually affects children but can affect any age group. Since the introduction of mumps vaccination in 1988, the disease is much rarer in this country. Most children now receive the MMR vaccine, which protects against Measles, Mumps and Rubella.

What are the symptoms?

Mumps usually begins with a headache and fever for a day or two before the disease is obvious. This is followed by the onset of discomfort and swelling of the glands situated just below the ears, which normally cannot be felt. The swelling can be in both glands or just one side, causing the earlobes to stick out and the face to appear very swollen. The mouth may feel dry and swallowing can be painful. The temperature may be very high. The symptoms usually last for three or four days but can last for more than a week.

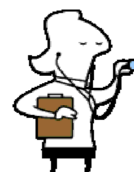
Are there any complications?

Boys may experience swelling and inflammation of the testicles (orchitis). If both testes are affected this may affect fertility in adult men. Older girls can experience swelling of the ovaries (oophoritis).

Brain inflammation (encephalitis or meningitis) is an uncommon complication. The symptoms of this are:

- headache;
- dislike of bright lights;
- vomiting;
- stiff neck.

Other organs, such as the heart or pancreas, and sometimes joints may become inflamed, but this is an extremely rare complication. **If any of these complications develop contact your general practitioner immediately.**

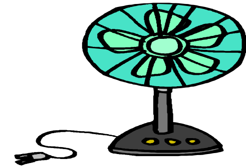


Is it infectious?

Yes, mumps is infectious, the infection being passed by contact with the saliva or droplets from the saliva of an infected person. This can occur during coughing and sneezing. The incubation period is two to three weeks and cases are usually infectious up to one week before the swelling is visible, and for a further nine days afterwards.

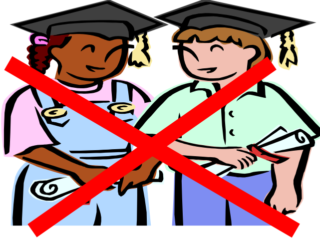
Are there any treatments available?

Usually the symptoms are mild and do not require treatment. Keep children cool if they have a temperature and give Paracetamol at the recommended dose to ease pain and fever. Encourage the child to drink plenty of cool fluids. Water may be preferred to fruit juice as the acids in the juice may stimulate the secretion of saliva and make the pain in the salivary glands worse.



Children must be encouraged to cough and sneeze into disposable tissues and wash their hands thoroughly.

How long should my child stay away from school?



The child should stay away from school for a minimum of five days following the onset of the swelling. If the swelling has significantly reduced the child may return to school after that if they feel well enough.

What can I do to prevent the disease?

Vaccination is the best way to prevent outbreaks of this disease. MMR vaccination is offered to all children at 13 months of age and before starting school. If your child has missed vaccinations it is not too late to catch up on the programme.

Vaccination advice and information can be obtained from your general practitioner or health visitor. Further information on MMR vaccination can be found at: http://www.mmrthefacts.nhs.uk/

NHS Direct is another good source of information on childhood infections and can be contacted via the website at: http://www.nhsdirect.nhs.uk/

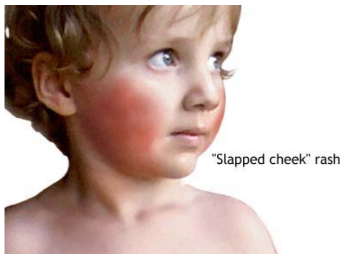
NHS Direct can also give information and advice by telephone on: 0845 4647.

PARVOVIRUS INFECTIONS (FIFTH DISEASE)

Parvovirus is also known as fifth disease, and is caused by a virus known as parvovirus B19, first discovered in 1975. The virus is spread by droplets from the secretions of the respiratory tract (coughing, sneezing and blowing the nose). It is a common viral infection, and most often occurs in children aged between six years and ten years old, but it can also affect any age group including adults. The illness occurs most commonly during the winter and spring.

What are the symptoms?

Not all people infected with the virus will have symptoms. The illness begins with a fever and feeling generally unwell. A bright red rash may then appear on the cheeks (this is sometimes called "slapped cheek syndrome"). Finally, a red, lace-like rash can develop over the rest of the body. The rash usually lasts between five days and seven days, but can reappear when exposed to sunlight or heat within the next three or four weeks. The illness is not usually serious in children, but four out of five adults can develop joint aches and pains. This form of arthritis is usually temporary, but may cause problems for several months.



Slapped cheek syndrome.
Image courtesy of:
http://www.healthline.com/adamcontent/fifth-disease

Is it infectious?

Parvovirus is highly infectious before the onset of the rash, and during the period of mild respiratory symptoms. The incubation time for the disease is from 13 days to 18 days. People living in the same household prior to the development of symptoms, or in close social contact of the person, are at an increased risk of becoming infected with the virus. People who have had the disease are considered immune. People who have a lowered immune system may remain infectious for several weeks.

What is the treatment?

Antibiotics are not effective for viral infections. The illness will resolve spontaneously in most cases. Paracetamol given at the recommended dose will help to alleviate symptoms associated with the fever.

Are there any complications?

Parvovirus infections are usually self-limiting and full recovery is usually achieved. However there are certain groups of people who may be more seriously affected by the virus. People in the following groups should seek further advice from their general practitioner:

- pregnant women (who have not previously had the disease). Women who are less than 21 weeks pregnant should avoid contact with people with fifth disease where possible. This may be particularly relevant for school teachers whose workload may require reorganising during outbreaks of the disease. Pregnant women who are not sure whether they have suffered with this virus before and are under 21 weeks pregnant, should seek advice from their general practitioner or midwife who can then arrange for blood tests if required. If during an outbreak pregnant staff are exposed to parvovirus, seek advice from your local Health Protection Team (see contents page for telephone numbers);
- people with existing conditions affecting their immune system;
- people with chronic blood problems such a sickle cell anaemia.

How can infections be prevented?

There is no vaccine to prevent this infection. Children should be encouraged to cough and sneeze into paper tissues, which should then be regularly disposed of. Sharing drinking and eating utensils should be discouraged. Hands should be washed thoroughly.

As the person is most infectious before the development of the rash there is no need to keep the child away from school if they are well enough to attend.

Once someone has had the infection they will not usually become infected again.

NHS Direct is a useful source of information. They can be contacted via their website at: http://www.nhsdirect.nhs.uk/

NHS Direct

- www.nhsdirect.nhs.uk
- Digital TV
- Telephone 0845 4647

Available 24 hours

Alternatively, NHS Direct can be contacted by telephone on: 0845 4647

RESPIRATORY SYNCYTIAL VIRUS (RSV)

What is it?

Respiratory syncytial virus (RSV) is a major cause of bronchiolitis in infants, and upper and lower respiratory tract infection in all ages. Bronchiolitis causes swelling and mucous production in the small breathing tubes of childrens' lungs. It is more common in children under the age of two years, with an increased incidence during the winter and early spring. RSV can also affect adults, most of whom will recover without treatment, but people with asthma, chronic bronchitis or immune problems may need to seek attention from their doctor at an early stage of the illness. People do not develop immunity following infection.

What are the symptoms?

Bronchiolitis starts just like a normal cold, with a cough, runny nose, congestion of the lungs, and a slight fever for two or three days. The child may then develop wheezy rapid breathing, persistent fever and cough. If symptoms persist children become very tired due to the effort of breathing which results in babies being reluctant to feed which may lead to dehydration. Children sometimes develop earache or a more serious lung infection, which can lead to pneumonia. The infection usually lasts between three days and ten days but the cough may persist for several weeks.

Is it infectious?

RSV is very infectious. The virus will be spread in fluids from the nose and throat of an infected person. The nasal secretions can be carried on hands, toys or surfaces the child comes into contact with. The secretions are then rubbed into the eyes or nose following contact with an infected person or their belongings, which introduces the virus into the body.

What is the incubation period?

The incubation period is between three days and five days. The infectious period starts usually just before symptoms first appear and then last for about one week. The virus can survive on surfaces or objects for about four to seven hours. Some children may have more than one episode of the illness.

What can I do to help my child?

There are no specific medicines for treating bronchiolitis caused by RSV. However, medication to reduce the child's temperature and a cough linctus may make your child more comfortable. **Antibiotics do not help because they do not work on viruses.** In very ill children antiviral agents may be given, but this is usually in a hospital setting.

- it is important to encourage regular fluids to prevent dehydration;
- use a vaporiser or run hot water in the shower or bathroom to create steam and sit in there with your child if they are coughing hard and having trouble breathing;
- contact your general practitioner for further advice if the child does not improve quickly.

How can I stop RSV spreading to others?

- use disposable tissues and / or gently wash away secretions from the child's face with a clean flannel;
- wash your hands properly after handling the child and help the child to wash their hands;
- do not let your child attend day nursery or child minders whilst they have symptoms;
- restrict contact with children outside the immediate family.

When should I call my doctor?

You should call your doctor if:

- your child is breathing very fast, more than forty breaths in one minute;
- your child's colour changes - this may be development of a bluish tinge around the lips or at the fingertips;
- your child is vomiting and unable to keep fluids down;
- your child has heart disease, asthma or is a baby born prematurely.

NHS Direct will be able to give information and advice and can be contacted by telephone on: 0845 4647

Alternatively, visit:
http://www.nhsdirect.nhs.uk/

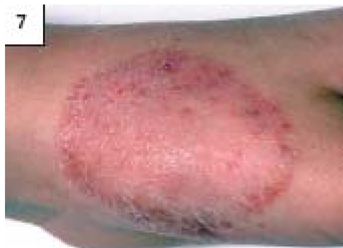
RINGWORM

Ringworm is an infection of the skin, but it is caused by a fungus, not a worm. It is also referred to as tinea. It is called ringworm because the infection often appears on the skin as a round shape or ring.

Ringworm can affect:

- the scalp, this is known as tinea capitis;
- the skin, this is known as tinea corporis;
- the groin, this is known as tinea cruris;
- the foot, this is known as tinea pedis or athletes foot;
- the nails, also known as tinea unguium.

These fungal infections are common and some infected animals can pass this infection to humans. Children are particularly susceptible to ringworm and can easily pass it on to other children they have contact with. This information sheet covers ringworm affecting the skin although all fungal infections require treatment.



Ringworm.

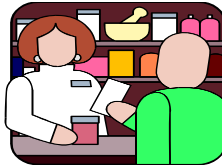
Picture courtesy of the Health Protection Agency:

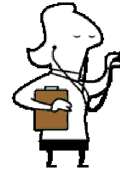
http://www.hpa.org.uk/emergency/pdfs/picture_gallery.pdf#search=%22Ringworm%20images%22

What are the symptoms?

A small scaly red patch develops on the skin. This area may vary in size from a few millimetres to several centimetres in diameter. The outer edge of the circular patch is more inflamed and scaly than the centre. The size of the patch will gradually increase as the infection spreads. Sometimes several patches may develop on different parts of the body, particularly if the infection is transmitted from an infected animal. The rash is irritating and can become itchy and inflamed and scratching may cause it to spread.

What is the treatment?





Your pharmacist or doctor will recommend treatments. Antifungal cream is usually effective if correctly applied and treatments are continued for the recommended timescale. A common cause for treatment failure is the tendency to stop application when the rash has diminished. Continuing treatment for 1-2 weeks after the rash has cleared up will clear the fungi from the skin thus preventing the rash reappearing.

If the infection is severe and does not respond to the anti fungal creams your doctor may prescribe tablets and take a skin scraping to send to the laboratory for testing.

How can infection be prevented?

It is important that animals with signs of skin infections are treated appropriately. If household pets are thought to be infected children should be discouraged from playing with the animal until treatment has been completed.

- children should be discouraged from touching and scratching the affected area;
- hands should be washed thoroughly and dried using paper towels or a dedicated towel for the affected person, which is changed daily;
- keep affected skin clean and dry, wash the affected area thoroughly but gently every day taking extra care when drying after bathing or showering;
- don't share towels;
- wash bedding and nightclothes frequently (every day if possible);
- change underwear and socks daily.

Pets also need to be checked and treated where appropriate.

Children should not be kept away from school once treatment has started.

NHS Direct is a useful source of information. They can be contacted via their website at: http://www.nhsdirect.nhs.uk/

Alternatively, NHS Direct can be contacted by telephone on: 0845 4647

RUBELLA (GERMAN MEASLES)

Rubella is a viral illness caused by the rubella virus. It causes a mild feverish illness associated with a rash. The illness itself is mild and children are not too badly affected generally. Many children do not get german measles until they are older.

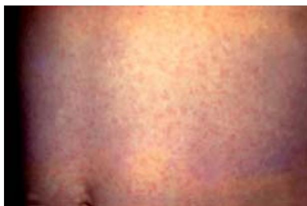
The major concerns with this illness are due to the serious effects the virus has on the unborn baby. For this reason rubella is part of the childhood immunisation programme and is given as part of the MMR (Measles, Mumps and Rubella) vaccination offered to children at between 13 months and 15 months of age, followed by a pre-school booster at four or five years of age.

Pregnant women who have had significant contact with any person with a rash (house or classroom contact for a period of 15 minutes or more, or face to face contact) should seek advice from their midwife or general practitioner who can organise or check previous tests for antibodies to specific viruses.

What are the symptoms?

Some people, especially young children, may acquire the illness and not develop specific symptoms (this is called a sub-clinical infection). If symptoms do develop they may include:

- a slight cold preceding the onset of symptoms;
- swollen glands, usually behind the ears and at the back of the neck;
- a rash, which typically develops starting around the ears from where it spreads all over the body. The rash is a faint red but less obvious than with measles or scarlet fever. The rash lasts between one day and five days before fading.



Rubella rash

Picture courtesy of the Centres for Disease Control and Prevention, Public Health Image Library: http://phil.cdc.gov/phil/quicksearch.asp

Is it infectious?

Yes, rubella is very infectious. It is spread from person to person by direct contact or from saliva and respiratory secretions during coughing and sneezing. The incubation period is 2-3 weeks, and people are considered infectious for one week before the onset of the rash to about 4 days after. It is very rare to have rubella more than once.

A blood test is offered to all pregnant women early in the pregnancy to test for immunity to rubella. The risk of congenital rubella to the unborn baby in women who do not have immunity and become infected with rubella is highest in the first three

months of pregnancy, declines in the second three months and there is no risk in the last three months.

Is there any treatment?

As rubella is caused by a virus there is no specific treatment. Most people with rubella are not very ill and will not even require relief of symptoms. Children may benefit from Paracetamol at the recommended dosage to relieve aches and pains. Encourage fluids to reduce the fever.

How long does my child need to stay away from school?

Children should be kept at home for 5 days after the onset of the rash. Infected children should where possible refrain from contact with pregnant women. There is no need to see your doctor unless unusual or worrying symptoms develop.

What can I do to prevent the disease?

Vaccination is the best way to prevent outbreaks of this disease. MMR vaccination is offered to all children at 13 months of age and before starting school. If your child has missed vaccinations it is not too late to catch up on the programme.

Vaccination advice and information can be obtained from your general practitioner or health visitor. Further information on MMR vaccination can be found at: http://www.mmrthefacts.nhs.uk/

A useful source of information is NHS Direct. They can be contacted via their website at: http://www.nhsdirect.nhs.uk/

NHS Direct can also be contacted by telephone on: 0845 4647

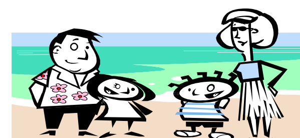
SCABIES

Scabies is a contagious skin disease caused by a mite, *Sarcoptes scabiei*. The mites are tiny and cannot be detected by the naked eye. The female mite burrows under the skin and lays her eggs as she burrows. During this burrowing process the excretions and saliva of the mite causes irritation. The immune system of the body mounts a response to these secretions. It is this immune response that creates the symptomatic itching associated with scabies. The mites then hatch and progress to the skin surface where they prepare for mating. It is during this time that they can be passed from one person to another. Scabies is not associated with poor hygiene. It can affect anyone of any age, causing itching and a rash. Outbreaks frequently occur in community settings such as schools and residential care homes.

What are the symptoms?

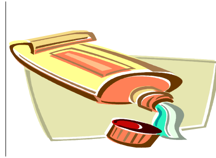
The symptoms can take between 2 weeks and 6 weeks to develop following the first exposure to mites. People who have previously been infected will develop the rash much more quickly following exposure the second time.

Intense itching occurs, often first on the hands. It then spreads to other parts of the body. The itching is worse at night or after a hot bath. Soon after the itching starts a rash appears on various parts of the body, most frequently affecting the abdomen, back and thighs. However, it can appear on most parts of the body. The rash is usually symmetrical (covering both sides of the body alike). Sometimes the burrows of the scabies mite can be seen. These burrows look like fine, dark or silvery lines about 2-10mm long. The common sites for these are the loose skin between the fingers, groin or armpits. The site of the rash does not necessarily indicate the site of the mite. Also the number of mites present may not be related to the severity of the rash. The rash is a result of the body's immune reaction to the secretions of the mites and some people react more strongly than others.



Is it infectious?

Scabies is infectious and can be passed from one person to another during direct contact. The length of time contact is required is uncertain, but it is known that the mites do not survive for a long period away from the human body. The mites like a warm, moist environment, which is why they burrow under the skin to survive. The symptoms of itching can take between 2 weeks and 6 weeks to develop. During this period, before the symptoms start, a person can be infectious. For this reason close household contacts of the person are advised to have treatment at the same time. If all members of the household are not treated at the same time re-infection can occur.

What is the treatment? 

The usual treatment for scabies is either a cream containing permethrin (Lyclear 5%) or a lotion containing malathion (Derbac M). Either treatment is available on prescription or can be purchased from a pharmacy. It is important that the application instructions are carefully followed to ensure full coverage, and that the contact time with the cream is sufficient to kill the mites, which may be several hours and even overnight. When using Lyclear cream make sure that a 5% cream is purchased. The 1% lotion is used for eradication of head lice and is not effective against scabies mites. The doctor or pharmacist may recommend treatments for people known to be affected, and one treatment for close contacts of a case. All members of the household should be treated on the same day.

The following is a guide to successful treatment:

- apply the lotion or cream to cool dry skin (do not have a hot bath prior to application);
- apply to the body from the neck down, including the back, soles of the feet, between the fingers and toes, under the fingernails and genitals. For young children and the elderly it is advisable to treat the skin on the head, avoiding contact with the eyes and mouth;
- family members may need help applying the cream / lotion to ensure total coverage of parts they are unable to reach themselves;
- leave the lotion on for the recommended time. If you wash your hands or other parts of your body during the treatment time you must reapply the lotion to those parts washed;
- it is not necessary to wash bedding or clothing following application as the mites do not survive for long away from the body;
- tell the doctor or pharmacist if the treatment is for a pregnant or breast feeding woman, or for a baby under six months old;
- **repeat the treatment after seven days if known to be infected with scabies**.

The itching will not disappear immediately after the treatment, and may take several weeks. This does not indicate treatment failure, but demonstrates that the immune system is still reacting to the secretions and bodies of the mites. Some people may benefit from antihistamines to lessen the itching. If the itching persists three or four weeks after the application of the second treatment seek advice from your general practitioner.

Children can return to school following treatment.

Further information can be obtained from NHS direct at:
http://www.nhsdirect.nhs.uk

SCARLET FEVER

Scarlet fever is caused by a bacterium called streptococcus A. This bacterium can cause many different infections, one of which is scarlet fever, also known as scarletina. Children with scarlet fever usually have a sore throat, high temperature and a rash. It most often affects children between two years and ten years of age, but can affect any age group.

What are the symptoms?

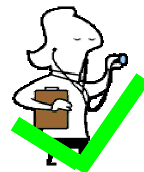
The illness usually begins with a sore throat, headache and fever. The rash normally breaks out on the second day and lasts between three days and six days. The rash often starts with a mass of tiny bright red spots on the neck and chest and will usually spread over the body. The rash does not normally appear on the face but the cheeks can appear very flushed. The rash goes white if you press on it. The skin often peels, especially on the hands, feet and groins. The tongue often has a thick white coating that peels after four or five days producing a strawberry like appearance. The skin may also peel.

Is it infectious?

Scarlet fever is infectious especially in the home environment. The infection is passed to close contacts by touching or via contact with respiratory secretions. The incubation period is short, between one day and three days. People do not remain infectious for long if antibiotic treatment is prescribed.

To prevent spread of the infection, until 24 hours after starting antibiotics the child's drinking glasses, eating utensils, sheets and towels should be kept separate from those belonging to other family members. These items should then be washed with hot soapy water. Carers should wash their hands frequently to prevent further spread to other family members.

Pregnant women who have had significant contact with any person with a rash (house or classroom contact for a period of 15 minutes or more, or face to face contact) should seek advice from their midwife or general practitioner.

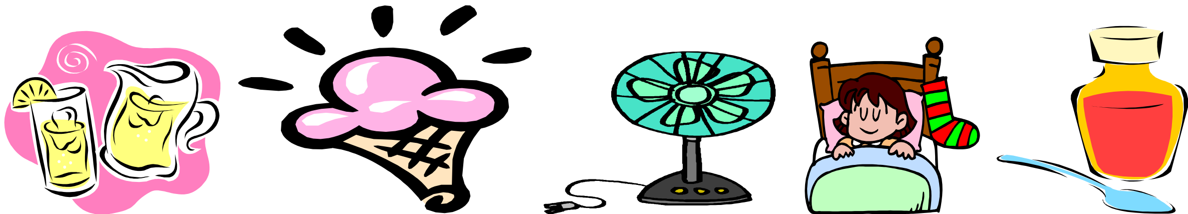


Can scarlet fever be treated?

Your child should be seen by a doctor if they develop a sore throat accompanied by a rash, or a sore throat accompanied by a fever, swollen glands, or a white coating on the tonsils or back of the throat. The doctor may wish to start a course of antibiotics. A swab of the throat may also be taken to confirm the diagnosis. Other things you can do include:

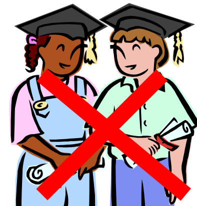
- keeping the child cool;

- giving Paracetamol to relieve discomfort and reduce the fever (dosage must not exceed that recommended by the manufacturer according to the age of the child). Aspirin must not be given to children under 16 years old;
- giving cool drinks and soft foods to help ease the throat because eating may be painful;
- encouraging the child to rest.



Are there any complications?

Complications are uncommon, but if present they can be serious. Serious secondary infections can occur including throat abscesses and chest infections leading to pneumonia. Late complications can sometimes develop two or three weeks after the infection has cleared up, and these complications may affect the heart, kidneys or joints. Treating scarlet fever with antibiotics reduces the chances of these complications arising.



How long should children stay away from school?

Children should stay away from school and other playmates for five days after starting antibiotics. During this period they should be encouraged to rest.

NHS Direct will be able to give information and advice and can be contacted by telephone on: 0845 4647

Further advice and information can be obtained from:

http://www.nhsdirect.nhs.uk/

THREADWORMS

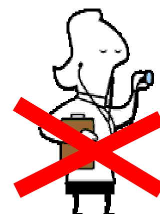
Threadworms or pinworms are tiny thin white worms between 2mm and 13mm long. They resemble threads of cotton and they infect the human digestive tract. Female worms lay tiny eggs around the anus (back passage). This usually happens at night when people are warm in bed. The male worms are smaller and are rarely seen as they stay inside the intestine. The eggs are too small to be seen without a microscope, the female worm secretes a mucous with the eggs which causes itching around the anus. Scratching then relieves the itching, which is how the eggs transfer on to fingers and under the nails. These eggs can then be swallowed if fingers are put in the mouth. This then starts another life cycle of the threadworms. The worms live for about five or six weeks in the gut and then die. But before they die the worms lay their eggs, as described above. Eggs can survive for up to three weeks outside the body on clothing and sheets, which can then provide a source for infection in others. This is why it is important to follow the hygiene precautions described later in this information leaflet. Threadworms are not harmful but they are irritating. They are more common in children but people of all ages can be affected.

What are the symptoms?

The most common symptom is itching around the back passage (anus) particularly at night. This is because they are most active in warmer conditions. This itching can lead to disturbed sleep resulting in tiredness. The skin around the bottom may also become very sore and inflamed due to the persistent scratching. Sometimes the worms may be noticed in the nappy of a child, or on toilet paper. Some people may not have any symptoms at all.

Are they infectious?

Threadworms are not an actual infectious illness but can easily be passed on from one person to another. Often when one family member has them other members of the family may also be affected. Individuals can re-infect themselves if they do not wash their hands and nails effectively after scratching. It is advisable to treat all household members with the medicines at the same time even though some do not have symptoms. This will help prevent re-infection.



What is the treatment?

There is no need to visit your general practitioner. A pharmacist in a local chemist can give advice for the treatment of threadworms.

There are several effective treatments available from a pharmacy. All household members should be treated on the same day and it is necessary to have two treatments.

The first treatment will kill the worms (but not the eggs); the second treatment two weeks later will kill the worms that have subsequently hatched from the eggs.

Hygiene precautions

The following advice will help to eradicate the threadworms and prevent re-infection. For two weeks following the first treatment:

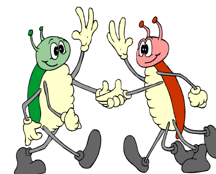
- wear pants at night. This will stop the eggs becoming attached to the fingers;
- keep fingernails short;
- wash hands and scrub nails thoroughly each morning;
- always wash hands thoroughly before preparing or eating food and after going to the toilet;
- have a morning shower / bath to get rid of any eggs around the anus each morning;
- change and wash underwear, nightwear and if possible bed linen daily;
- ensure all family members have their own flannels and towels and if possible hot wash these daily after morning use;
- avoid shaking bed clothes and nightwear to prevent spread of the eggs in the environment;
- vacuum and dust areas where children play. It is best to damp dust smooth surfaces with a cloth rinsed in hot water;
- avoid communal swimming pools or paddling pools until treatment is complete.

How soon can someone return to school?

There is no need to stay away from school or work.

A useful source of further information is NHS Direct. They can be contacted via their website at: http://www.nhsdirect.nhs.uk/

Alternatively, NHS Direct can be contacted by telephone on: 0845 4647

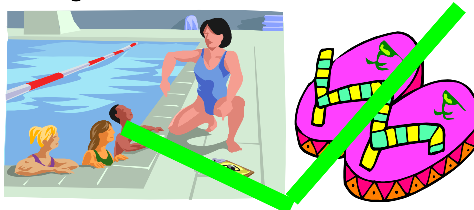


VERRUCAS

A verruca is a wart on the sole of the foot. They are also known as plantar warts. Warts are thickened growths on the skin caused by a virus known as the human papillomavirus (HPV). Verrucas normally don't stick up from the surface of the skin. Instead, the weight of the body pushing down on them makes them grow back into the skin, which can be painful. Verrucas often have a black dot in the centre, surrounded by a hard, white area. The average duration of a verruca is probably less than a year and 30-50% disappear spontaneously over a 6 month period. In adults and older children a longer duration is not uncommon, and they may persist for many years. The incubation period is between 1 month and 24 months following exposure to infection, and the virus can be present on the skin before signs of a verruca appear.

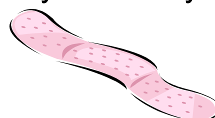
Are they infectious?

Verrucas are infectious, and can be transmitted from person to person by direct contact, or indirectly via contaminated surfaces. The virus can be present in the skin before there are obvious signs of infection (the appearance of a wart). The risks of transmission from person to person is considered low, and person to person spread is more likely to occur if there is a break in the skin surface, as may occur during a session in the swimming pool during contact with roughened surfaces.



How can infection be avoided?

The evidence to support increased risk of catching verrucas at swimming pools is limited. The virus responsible for causing verrucas is present in the environment and as previously discussed may be present for many months before symptoms develop. Therefore if people are concerned about the risk of getting a verruca, the best advice is to wear waterproof shoes e.g. flip flops around the poolside area, in the changing area and communal showers, as people may be carrying the infection without symptoms having developed.



People who have verrucas should cover them with a waterproof dressing. Some swimming pools have their own policies that advocate the use of plastic socks, waterproof dressings or nail varnish for those affected. The socks are not considered more effective than a waterproof dressing. The child wearing them may feel stigmatised and be reluctant to join in swimming lessons which may play an important role in the future safety of the child.

Also:

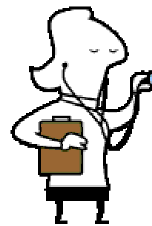
- don't touch other people's warts / verrucas;
- don't scratch or pick at a wart / verruca as this may spread the infection to other parts of the body;

- don't share towels, flannels or other personal items with a person who has a wart or verruca;
- don't share shoes or socks with someone who has a verruca.

What treatments are available?

As discussed previously verrucas are usually a self limiting infection, which means they will disappear naturally over a period of time. Some experts' viewpoint is that to let verrucas disappear naturally helps the body to build up immunity, thus preventing future infection occurring. Unless the verruca is causing pain, as may be the case if they are on a pressure point of the foot, the best advice is to leave them to disappear on their own over a period of time.

There are many topical treatments available from your local pharmacy. Your pharmacist will be happy to discuss treatment options with you. Topical treatments may cause local skin reactions, but these are usually minor. These topical treatments may need to be applied for several weeks or even months to be effective and have to be combined with soaking and rubbing the dead tissue off the wart on a regular basis.



Cryotherapy (freezing the verruca and surrounding skin) or even surgical removal is occasionally performed by a general practitioner for verrucas that are causing extreme pain or complications. However this treatment can have adverse effects and may need to be performed more than once, causing more pain and blistering at the site - and may not be more effective than correctly applied topical treatments.

A further useful source of information is NHS Direct. They can be contacted via their website at:
http://www.nhsdirect.nhs.uk/

Alternatively, NHS Direct can be contacted by telephone on: 0845 4647 (Information is available in different languages.)

WHOOPING COUGH (PERTUSSIS)

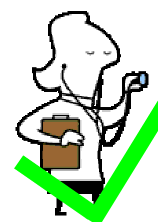
Whooping cough (also called pertussis) is a serious disease particularly when it occurs in children under one year old. It is more common in children but can occur at any age. Since the introduction of vaccinations it is now quite a rare illness. The disease is caused by a bacterium called *Bordetella pertussis.* Anyone who contracts the disease is highly infectious from seven days after exposure to three weeks after the beginning of the cough. Outbreaks of the disease are more common where the uptake of vaccination is low. The disease can be fatal particularly when contracted by young babies.

What are the symptoms?

The disease begins with a cold and a mild cough for 7-14 days. The frequency of coughing then increases and becomes uncontrollable, which is when the typical "whooping" noise is heard. The coughing is so extreme that the person often vomits. The child may turn blue (due to insufficient oxygen in the body), which can be extremely upsetting for parents watching children. Exercising may cause another bout of coughing. Sleeping is often interrupted. The symptoms may last for six weeks or more and may leave the child weakened by the disease.

Is it infectious?

Whooping cough is very infectious in unvaccinated children. The bacteria (germs) are transmitted from the droplets produced during coughing or sneezing. It is possible for vaccinated children to get a much milder form of the disease. The incubation period is between seven days and ten days. Cases are highly infectious during the early stages of the illness, before the typical cough starts.
It is rare to get the illness more than once.



Are there treatments available?

Your child needs to visit the doctor if whooping cough is suspected. The doctor will determine whether or not the child will benefit from antibiotics, although these will not stop the coughing from occurring. Your doctor will probably take a swab from the nose to confirm the diagnosis. Occasionally the child might be ill enough to need to go into hospital.

- a child with whooping cough will need rest and support during the coughing fits;
- it is important to encourage regular fluids to prevent dehydration;
- use disposable tissues and / or gently wash away secretions from the child's face with a clean flannel;
- wash your hands properly after handling the child and help the child to wash their hands;

- contact your general practitioner for further advice if the child does not improve, although the cough may continue for 6-8 weeks.

How long should children stay away from school / nursery?

Your child may need to stay away from school because they are unwell and unable to cope with the bouts of coughing. However, the requirement is to stay away for 5 days after starting antibiotics although the course of antibiotics will not be finished at this time and it is important that the full course is taken. If antibiotics are not given, the person will remain infectious for longer and advice must be sought.

Outbreaks of whooping cough in nurseries / schools should be reported to your local Health Protection Team (see contents page for telephone numbers).

What can I do to prevent the disease?

Vaccinations are the most effective means of preventing whooping cough. Before the introduction of vaccinations three out of every four children caught this disease, some of whom died.

The whooping cough vaccine is part of the primary immunisations given to babies at 2 months, 3 months and 4 months. As immunity can decline in older children, a booster vaccine is given before the child starts school (between 3 years 4 months, and 5 years).

If your child has missed vaccinations it is not too late to catch up on the programme.

Vaccination advice and information can be obtained from your general practitioner or health visitor. Further information on all vaccinations can be found at: www.immunisation.nhs.uk/

NHS Direct is another good source of information on childhood infections and can be contacted via the website at: http://www.nhsdirect.nhs.uk/

NHS Direct can also give information and advice by telephone on: 0845 4647

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