



THE SPOTTY BOOK:
NOTES ON
INFECTIOUS DISEASES IN SCHOOLS

DEVON

2003

Foreword

This booklet provides general guidance for schoolteachers and others with children in their care about the prevention and control of infectious diseases.

The advice applies to schools, nurseries, playgroups and childminders. "School" will be used throughout to indicate all these except where otherwise indicated.

We advise a proactive, preventative approach. A policy on when children must be kept away due to illness should be decided by the school. Parents should be made aware of the policy and agree to follow it.

You should consider the following:

1. Children unwell with infectious diseases should not in general attend schools, although mild snuffles and colds need not necessarily prevent a child attending.
2. If a child becomes ill during care, parents must be contacted and the child taken home if necessary. Schools, child-minders, nurseries and playgroups are advised to keep a record of each child's GP and immunisation history.
3. Parents should notify the school if their child has an infectious disease.
4. The school should notify parents if a significant risk to other children exists.
5. A child with infectious disease should be excluded from school until fully recovered and if it is one of the disease listed in the table (section 8), until the required period has passed.
6. Check that parents know your rules and accept that they will have to take time off, or make other arrangements for their child's care, if their child is ill.
7. Be aware of children and staff who are more susceptible due to infection due to underlying diseases, treatment or pregnancy.
8. Ensure that toilet and hand washing facilities are kept clean and supplied with hot and cold water, soap and towels.
9. If in doubt seek further advice

Acknowledgements

The first edition of the "Spotty Book" was produced in Plymouth in the 1970s. Since then there have been several editions both in Plymouth and in other districts in Devon. Authors and editors include Paediatricians, Microbiologists, General Practitioners, Nurses and Public Health Physicians. Contributions and comments have been provided by numerous people. This edition provides up to date information, and being produced for the whole of Devon ensures that advice is consistent. Local contact names and numbers are provided in the appendix for each part of the county.

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NOTES ON INFECTIOUS DISEASES IN SCHOOLS

INTRODUCTION

Control of infection among children in schools depends upon

- prevention
- early recognition of each case
- prompt action and follow-up

Infections may be:

- (i) acquired at home or the community and brought into school.
- (ii) acquired and spread within school

In addition members of staff (teachers, classroom assistants, catering, caretaking, clerical etc.) may become infected.

The following guidance provides background information about the most common infections and outlines the appropriate action to be taken to limit their spread. It updates and replaces all previous issues.

The key personnel involved include:

- Head teacher or manager
- School nurse
- Health Visitor (for children in nurseries or play-groups)
- Consultant in Communicable Disease Control (CCDC)
- School doctor
- General Practitioner
- Consultant Community Paediatrician
- Environmental Health Officer
- Consultant Microbiologist
- Occupational Health

Prompt communication between each of these parties will ensure that children and staff are not exposed unnecessarily to infectious diseases and that undue anxiety is avoided.

1. CHILDHOOD IMMUNISATION

Children are offered protection against many of the childhood diseases through the vaccination programme (see schedule). Booster doses are given before school entry. However, it is always worthwhile for the school health service to check that all appropriate doses of vaccine have been given and to arrange this if not.

This means that very few cases of these childhood infectious diseases should now occur but, until all children are protected in this way, sporadic cases will continue to be seen.

CURRENT ROUTINE IMMUNISATION SCHEDULE

INFANTS AND CHILDREN

AGE	VACCINE			
2 months*	1st DTP	1st Hib	1st OPV	1 st Men C
3 months*	2nd DTP	2nd Hib	2nd OPV	2 nd Men C
4 months*	3rd DTP	3rd Hib	3rd OPV	3 rd Men C
12-18 months	MMR			
4-5 years (booster)	DTaP	OPV	MMR	
10-14 years	BCG if tuberculin negative			
14-18 years (School leaving age)	dT	OPV	Men C/ MMR/ rubella*	

DTP = Diphtheria, Tetanus, Pertussis (Triple Vaccine)

aP = Acellular pertussis

Hib = Haemophilus influenzae type b Vaccine

OPV = Oral Polio Vaccine

MMR = Measles, Mumps, and Rubella vaccine

dT = Low dose Diphtheria and Tetanus vaccine

Men C= Meningitis C vaccine

BCG = Bacille Calmette-Guerin (protects against tuberculosis)

* if no record of immunisation

NOTE: Premature children should begin immunisation two months after birth, the same as other children.

2. HAND HYGIENE:

Hand hygiene is crucial in preventing the spread of many infections including skin, nose, throat, eye and stomach or bowel infections.

Provision of adequate and accessible hand washing facilities is crucial. Pleasant liquid soap in wall mounted dispensers, water at temperatures not too hot or cold and paper hand towels encourage people to wash their hands.

Hand washing is always essential after going to the toilet and before eating, and should be supervised in young children.

Hand washing with warm water and soap (preferably liquid soap) is recommended as follows:

- if hands are visibly soiled
- immediately after hands have been contaminated with respiratory secretions, blood, faeces, urine or other body fluid
- before serving food
- after going to the toilet
- after handling animals

Procedure for hygienic hand washing

Wet both hands before application of soap. Follow the technique below for 15-30 seconds ensuring that each step consists of at least 3 strokes backwards and forwards.



Wet hands thoroughly before applying soap



Rub palm to palm



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



Palm to palm, fingers interlaced



Backs of fingers to opposing palms with fingers interlocked



Rotational rubbing of right thumb clasped in left palm and *vice versa*



Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and *vice versa*



Rinse and dry hands thoroughly

Special attention should be paid to fingertips, thumbs and other areas of hands likely to contact a contaminated site. Hands should be rinsed in clean water. Care should be taken to dry the skin with paper towels to avoid skin damage.

3. CLEANING, DISINFECTION AND SUITABLE FACILITIES

A clean (free from dust, dirt and grease) and dry environment poses little or no threat of infection to healthy adults and children.

Cleaning with detergent and water is normally all that is needed as it removes the majority of germs that can cause disease. Disinfection reduces the number of germs still further and is carried out after adequate cleaning when there is a particular risk of infection. A 0.1% Hypochlorite solution is essential (e.g. Milton diluted as detailed by the manufacturer) when there is an outbreak of diarrhoea and vomiting. The use of tablets may be more convenient. A new solution should be made up daily.

Colour coding of mops and cloths to ensure that different equipment is used for toilets, kitchen and other areas is recommended. E.g. red for toilets, yellow for kitchens and blue for elsewhere.

Toilet areas: Toilets in schools and nurseries should be of the correct size for the children (apart from staff toilets). Small children have to slide forward to get off adult size toilets which may result in the seat becoming smeared with urine or faeces. Toilet seats, flush handles, wash hand basins taps and toilet door handles should be cleaned at least daily and when visibly dirty. Standard detergent and warm water is ideal for cleaning. During outbreaks disinfection after and in addition to cleaning should be considered using a hypochlorite disinfectant such as Milton (follow instructions on the bottle).

Nappy changing: The nappy changing area should be close to running water and waste disposal. The area should be situated well away from food preparation, serving and eating areas. The surface of the nappy changing area should be of impermeable material that is easily cleaned with detergent and water between use and can be disinfected with a suitable disinfectant hypochlorite solution such as Milton.

Sluice: A sluice type sink is useful for emptying potties and a separate sink for hand washing is advised.

Potties: After use potties should be emptied in a sluice area (if possible) and then washed with detergent and hot water, rinsed and dried. Named potties are useful in cutting down the risk of spreading infection. The use of scrubbing brushes is not encouraged as they can damage the surface and add to the risk of infection.

4. DEALING WITH SPILLS OF BODY FLUIDS.

Clean all body fluid spills up promptly.

It is good practice to wear well fitting disposable latex gloves when dealing with all body fluids from any source.

Avoid contact or splashing into eyes, mouth or any broken skin sites. Have any cuts or abrasions covered at all times with waterproof dressings.

Clean up with warm soapy water and dispose of carefully, preferably with disposable cloths.

Disinfect the clean surface with 0.1% hypochlorite solution afterwards, by wiping over, then rinsing and drying.

5. MANAGEMENT OF CUTS/ABRASIONS and SPILLS OF BLOOD.

There is a very small risk of infection with certain blood-borne viruses (Hepatitis B and C, HIV) to staff and children when bleeding occurs during an accident or sport.

If certain precautions are taken the risk is minimised:

- ◆ Wear single use well fitting disposable latex gloves whenever in contact with blood (washing grazes, dressing wounds, cleaning up blood after an accident) and wear a disposable plastic apron if possible.
- ◆ Carefully cleanse the wound under running water or using a fresh sachet of normal saline from a first aid kit. Avoid splashing. Dab carefully dry.
- ◆ Children and adults should have all exposed cuts and grazes covered with waterproof plasters.
- ◆ Cover any blood spillage on hard surfaces with paper towels, then (if the surface allows) gently apply a 1% hypochlorite solution (e.g. Milton – follow instructions on the bottle), avoiding splashing. Allow to stand for 10 minutes then clean the area with warm water and detergent.
- ◆ If the surface would be damaged by hypochlorite (e.g. soft furnishings) wash with detergent and water.
- ◆ At sports events, the sponge or cloth used to mop blood from one child must never be returned to a bucket of water or used on another child.
- ◆ If someone suffers a bite, scratch or puncture injury that may have introduced someone else's blood or a splash of blood to the eye, area of broken skin or mouth. Rinse well with water and seek medical advice urgently.

6. GUIDELINES ON FARM AND COUNTRYSIDE VISITS

Visits to working farms, wildlife parks and rural study centres are a regular feature of modern education for young children. Such visits are highly beneficial, however, experience over recent years shows such visits carry a risk for children acquiring infections. Several micro-organisms (*Campylobacter*, *Salmonella*, *Cryptosporidium*, *E. coli* 0157, *Giardia*) are commonly present in animals. They may be found in faecal droppings and elsewhere in the farm environment. Farm visits may result in a risk of transmitting infection directly because the substance eaten is infected or contaminated (animal feed, raw milk). In addition, children's fingers may become contaminated with animal faeces which is transferred to their mouths when eating, sucking fingers etc.

Precautions:-

1. Tell children to keep their fingers out of their mouths and not to eat foods or sweets until they have washed their hands well with warm soapy water.
2. Use disposable hand-wipes if hand washing facilities not immediately available.
3. Do not sample, taste or take away any animal feed-stuff, raw milk etc.
4. Do not drink water from farm taps.
5. Children should be closely supervised if direct contact with animals is likely. In particular bottle-fed lambs and calves are usually especially tame and may nuzzle and suck their fingers. After such contact children should be made to wash their hands well with warm soapy water.
6. Eat only in designated picnic areas away from the animals.

Further advice is available from the Health & Safety Executive (<http://www.hse.gov.uk/pubns/ais23.pdf>, page 5)

By following such advice, farm visits can be enjoyed safely.

Animals in schools

In recent years keeping animals in schools has become increasingly common. Many of the precautions outlined in the section on management of body waste and body fluids can be applied when animals are kept in schools. However schools should seek veterinary advice on the care of their animals as well kept and cared for animals are likely to present less of an infection risk. Hands should always be washed after handling animals.

7 COMMON AILMENTS:

i. **Infectious Diarrhoea and Vomiting (Gastroenteritis).**

This may be due to a number of agents including:

<i>bacteria</i>	Campylobacter Salmonella Shigella (bacillary dysentery) E. coli 0157
<i>viruses</i>	Rotavirus Small round structured viruses (e.g. Norwalk or Winter Vomiting Disease)
<i>parasites</i>	Cryptosporidium Giardia

Anyone with gastroenteritis should be regarded as infectious and kept away from the school until the diarrhoea and vomiting have stopped for at least 24 hours.

Infectious diarrhoea and vomiting (D & V) is usually spread through the faecal oral route (i.e. not washing hands after going to the toilet), either by hand to hand contact, on toys, or indirectly through food or water. Viruses may also be spread through the air in droplets after vomiting or when coughing or sneezing.

The main symptoms are vomiting, diarrhoea and abdominal pain which may occur singly or in combination. The illness usually lasts only a short time and requires no specific treatment, however should blood be present in stools or a child appears particularly unwell, a doctor should be consulted.

Strict attention to personal hygiene is important to reduce the spread of the disease. Pets or farm animals may be a source (see section 6).

Action

(a) *Single case of diarrhoea and/or vomiting*

- exclude from school until **24 hours** after vomiting and diarrhoea has settled. Children under 5 or older children who are unable to maintain good personal hygiene should be excluded for **48 hours** after symptoms have ceased. Seek further advice in the case of E.coli 0157 infection.

(b) *Cluster of cases of diarrhoea and vomiting*

- contact
 - (i) school nurse
 - (ii) Consultant in Communicable Disease Control
- exclude cases for **48 hours** after symptoms have ceased
- remind everyone (staff and children) of the importance of hand washing after using the toilet and before eating.
- check toilets for the availability of toilet paper, warm water, soap and towels.

- increase frequency of cleaning in toilet areas
- supervise hand washing in affected classes under 8 years.
- ensure thorough cleaning of sanitary facilities including WC seats (including underneath the seats), handles and lavatory door handles with dilute hypochlorite (bleach) solution (follow the manufacturer's instructions).
- discontinue cookery lessons and communal play with sand, dough and water.
- toys should be washed weekly and when visibly dirty. During an outbreak toys should be washed at least daily, dried and then disinfected with a hypochlorite solution such as Milton. Consider removing soft toys which cannot easily be cleaned during an outbreak.

In the event of an outbreak the CCDC will inform the microbiology laboratory, environmental health department and local GPs, and convene an outbreak committee, with representation from school staff to advise on the investigation and control of illness.

ii. Conjunctivitis

Causes sticky red eyes with gummy lids. The infection is readily spread, and affected children should not use communal towels. Strict attention to hand washing reduces spread (see section 2). Children with active infection (visible pus, swelling or weeping) should be kept away and should consult their doctor for appropriate treatment.

iii. Glandular Fever

Although it can occur in young children, this condition is much more common in adolescents. It usually takes the form of a sore throat with swollen glands in the neck. Full recovery may take some weeks, during which time the person may feel very washed out. There is no specific treatment. This is not a very infectious disease except with close contact (known as "kissing disease") and the child should only be kept away if feeling unwell.

iv. Chicken Pox and Shingles

Chicken pox and shingles are caused by the same virus which causes an itchy rash starting with flat red spots which become raised and filled with fluid. Chicken pox is usually a mild childhood illness. Shingles may follow chicken pox years later and is caused by a reactivation of the virus.

Chicken pox usually begins with a fever, feeling generally unwell and glassy fluid filled spots spreading all over the body. Shingles is characterised by pain and spots on part of one side of the face or body only. Shingles is not infectious unless you touch the spots; fluid from the spots and crusts from the spots are infectious.

Chicken pox is spread from person to person by virus shed from the nose or throat as droplets or by direct contact. The fluid inside the spot is infectious. Chicken pox is infectious during its early stages from 1 - 2 days before until 5 days after spots first appear.

The incubation period of chicken pox is between 13 and 17 days after contact with the infected person. If a pregnant woman who thinks she has not had chicken pox before has contact with a case she should take medical advice as soon as possible. Depending on the results of a blood test, it may be advisable to have an injection of protective antibody (VZIG).

Although chickenpox is a mild disease in normal healthy children, it can be fatal in children whose immune systems are impaired in any way such as children on treatment for leukaemia or children who have had a transplant. Many of these children may be immune to chickenpox or may have had the vaccine and so are protected, but it is important to let their parents know if there is a case of chickenpox in school as they can then take action, if necessary (this would usually mean an injection of protective antibody from the doctor).

v. Fifth Disease (Slapped cheek)

This is a viral disease due to Parvovirus B 19 spread by respiratory droplets. It initially appears as a 'flu-like' illness and then the bright red 'slapped cheeks' rash appears, followed by a reddish rash on the body. This rash may last for up to three weeks. A few children, but most adults, have mild joint pains. It is invariably a mild illness.

By the time the 'slapped cheeks' rash appears, most patients are no longer infectious, and excluding children with the body rash serves no useful purpose. However, pregnant women should try to avoid contact with affected children and see their doctor if they think they have the disease or have had contact with it, as rarely it can affect the unborn child.

The illness is commonest in the 4-10 year old age group and outbreaks are common in primary schools in the later winter through to early summer. The incubation period is 6-11 days.

vi. Hand, foot and mouth disease

This disease is caused by a Coxsackie virus, and as the name implies affects hands, feet and the mouth. About 85% of cases are in children. The incubation period is about 3-7 days with the disease lasting about 10 days.

The illness starts with red spots which become small blisters which then ulcerate. The ulcers are painful and can be in the mouth, on the hands or feet. A fever is common, but the disease is usually mild.

The disease is largely spread by respiratory droplets or by the faecal oral route; articles contaminated with discharge from the nose and throat may be infectious. As this particular virus can also live in the bowel, it is important that cases and carers exercise good toilet hygiene (see hand washing, section 2).

In view of the short incubation period and the fact that early cases may be asymptomatic, complete control is not achievable. The best that can be done is to isolate cases until clinically recovered, to disinfect articles soiled with nose and throat secretions and to practise good toilet hygiene.

vii. Scabies

Scabies is a skin infection caused by a mite. It can be uncomfortable but is not a serious disease. The main symptom is itching and there may be a rash on the wrists, fingers, feet and body.

It is transmitted by skin to skin contact in a warm environment e.g. by children holding hands. The scabies mite does not survive for long outside the human body and can not be picked up just from clothes.

Treatment: Lotions can be purchased from a chemist or obtained on prescription from the doctor. It is important to follow the instructions on the bottle.

The whole family should be treated at the same time even if only one person has obvious scabies. If more than one child in a class has scabies and it appears that transmission may be taking place at school, then it is important to treat the class, in which case advice should be sought from the school nurse or health visitor and the CCDC should be informed.

Children can return to school on the day after they have been treated.

viii. Molluscum contagiosum

Molluscum contagiosum is a skin disease with small lumps caused by a virus. Small pale pearly raised spots may occur anywhere on the body except the palms and soles. It is mildly infectious and transmitted by direct contact with the lesions. Incubation period is about 1 month but may be up to 6 months.

There is no need for an infected person to stay off school, but direct contact with the lesions should be avoided to prevent spread.

Treatment: The lesions usually disappear after a few months but may persist, in which case they can be easily treated by the doctor.

ix. Head Lice

Lice are small wingless insects which live on the human scalp. They may cause itchiness. They are passed from person to person, usually by head to head contact. Although several cases may occur in the same class at school, they should be considered to be a community problem because they may spread to any member of a family. They can be found in any of the following forms:

lice (flesh coloured insects about 3mm long)

live eggs (very small, dull and flesh coloured, cemented just above the roots of individual hairs)

old egg shells(white and shiny harmless shells found away from the scalp)

lice droppings (black dots on pillows)

Detection:

Lice are most easily detected by combing wet hair with a fine toothed comb. If no lice can be found, there is no need to consider applying head lice treatments, even if cases have been reported in a school. If lice are detected there are two options to deal with the problem (a combination is most effective).

Treatment:

“*Wet combing method*”: Head lice may be cleared over a 2 week period, as follows:

Wash the hair in the normal way, with an ordinary shampoo;

Using lots of conditioner, and while the hair is very wet, comb through the hair from the roots to the ends with a fine comb. Make sure the teeth of the comb slot into the hair at the roots of every stroke;

Clear the comb of lice between each stroke;

Repeat this routine every 3 days for 2 weeks, so that any lice emerging from eggs are removed before they mature and spread.

Using lotions:

Only those with live lice should be treated.

Lotions are preferable to shampoos. These can be bought from the chemist or obtained on prescription.

It is important that the instructions on the bottle are followed very carefully and that all the family and close contacts are checked and treated, if necessary.

Asthmatics and those with skin problems such as eczema should use water based products, or Lyclear. Pregnant and breast feeding mothers and children under 6 months should be treated under medical supervision.

Exclusion:

People with head-lice do not need to be excluded, including if the combing method is used (as any newly emerging lice do not mature and spread between treatments). Treatment should be started on same day, but child does not have to be sent home from school.

Further advice:

Seek advice from your school nurse. Leaflets are available from your nurse, or from the Health Protection Unit.

x. Impetigo and Erysipelas

Impetigo and erysipelas are bacterial skin infections caused by staphylococci and streptococci. Impetigo commonly affects the face, particularly around the nose and mouth causing weeping lesions which form crusts. Young children may be generally off colour. Erysipelas causes the skin to become swollen, red and blistered, and is usually associated with a fever.

These are infectious while the spots are wet and discharging pus. Antibiotic treatment is helpful; separate towels and thorough hand washing are important in preventing transmission (see section 2). Children can return to school once they are well and the lesions are crusted or healed.

8. OTHER DISEASES

i. **Meningitis**

Meningitis is inflammation of the meningeal coverings of the brain. Common causes include bacteria or viruses.

- **Viral meningitis:** no treatment of contacts is necessary and the case is not a risk to others. This is usually a rare complication of any of a number of viruses that normally cause other diseases, such as mumps or glandular fever.
- **Bacterial meningitis** in school-aged children is usually due to meningococcal infection. There is a small increased risk to people who have had particularly close and prolonged contact with cases of meningococcal infections, so contacts are traced and given preventive antibiotics and sometimes vaccine (depending on the strain). The increased risk is usually considered only to affect the immediate family of a case. Contacts of other types of bacterial meningitis such as pneumococcal meningitis are not at risk, as these diseases are largely a matter of individual susceptibility.

The incidence of *Haemophilus influenzae* type b (Hib) fell dramatically after Hib immunisation was introduced in 1992 but there has been a small increase in recent years. An immunisation campaign is planned to take place in the summer of 2003. Boosters will be given to children between the ages of 6 months and 4 years. The disease mainly affects children under 4 years and close contacts of a case are offered preventive antibiotics if there are other young children in the household.

Contacts of other types of bacterial meningitis such as pneumococcal meningitis are not at risk, as these diseases are largely a matter of individual susceptibility.

Meningococcal disease

Meningitis (infection of the covering of the brain) or septicaemia (blood poisoning) due to meningococci cause concern in school aged children. Usually only one case will occur in a school in any one year, and the only people at risk from the case will be brothers and sisters, parents and boyfriend or girlfriend. The risk of passing on meningococci is associated with the prolonged, close contact that occurs in a family, at home. Very rarely, a second case of meningococcal meningitis will occur in a school. In such a situation, it may be necessary to give antibiotics (and sometimes vaccine) to other pupils and staff.

Meningococcal group C vaccine was introduced in October 1999. Most children have now been immunised against group C and it is very unusual for this strain to cause disease in anyone under 18 years of age. Group B, for which there is no vaccine at present, causes the majority of cases.

In the past, antibiotics were offered to nursery school or playgroup contacts of isolated cases of meningococcal disease. There is now good evidence showing that these contacts do not benefit from antibiotics; the antibiotic used may eradicate protective organisms and so be detrimental. Preventive antibiotics are only recommended in the rare event of two cases occurring in the same school or playgroup, within one month.

The Consultant in Communicable Disease Control (CCDC) will be happy to assist the head teacher in the composition of letters and the provision of advice.

Action for schools

- i. inform CCDC (who should already be aware of the case)
- ii. inform school nurse/ health visitor
- iii. discuss composition of letters to parents with CCDC
- iv. discuss need for antibiotic prophylaxis with CCDC

Signs and symptoms



In adults and children.

In babies.

RASH: in some cases a rash appears which does not fade if you press it (press it with a glass) although in a small number of cases the rash does fade at first.

Symptoms do not appear in any particular order and some may not appear at all. Do not wait for the rash, it may be the last symptom to appear and may not appear at all.

Taken from signs & symptoms cards copyright Meningitis Trust.

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Copied from their web site on the 29/6/01.

Meningitis Trust Helpline number: 0845 6000 800.

Website: www.meningitis-trust.org.uk

Action for a child taken ill in school

If you suspect meningitis/meningococcal septicaemia contact a GP immediately

Describe the symptoms carefully, explain why you are worried.

If your doctor is not available go straight to the nearest Accident and Emergency Department.

Early treatment with antibiotics is vital.

ii. **Hepatitis or Jaundice**

- usually viral (hepatitis A, B, C, glandular fever)
- commonest form in schools is Hepatitis A which may cause loss of appetite, feeling 'off colour', with or without jaundice. It is often asymptomatic in children. Spread is by the faecal oral (hand to mouth) route and thus good hand hygiene is essential in prevention.

Prevention: Hand washing essential (section 2.ii)

Immunoglobulin (a type of immunisation) or vaccine may be used to control outbreaks (under guidance of CCDC).

- Hepatitis B and C may be blood borne (Hepatitis B is also sexually transmitted). There is no risk to others, as long as blood spills are dealt with appropriately, if possible by a designated first aider (see section 5).

iii. **Tuberculosis**

- children are rarely infectious (usually diagnosed when an adult, relative or close friend is found to have TB)
- exclusion from school is not necessary once treatment has been taken for 2 weeks.
- adults (staff, parents) with TB **may** be infectious, hence children in close contact may need medical assessment (discuss with CCDC).

iv. **HIV and AIDS**

The Acquired Immunodeficiency Syndrome (AIDS) is caused by infection with the Human Immunodeficiency Virus (HIV). HIV is mostly spread by sexual contact with an infected person, by sharing an infected needle or by receiving blood from an infected person. The latter is extremely unlikely to occur now in this country as all blood is carefully screened. If a pregnant woman is infected she may pass the infection to her unborn child.

There is no risk to other children or staff from an HIV infected child attending a school provided standard good hygiene practices are in place (see section 5).

Health education about HIV is of vital importance and should be included in the curriculum for older children, along with an endorsement of life-long patterns of safer sexual behaviour and information about the physically and socially damaging effects of drug misuse.

v. **Whooping Cough (Pertussis)**

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' may develop. Coughing spasms are frequently worse at night and may be associated with vomiting. The whole illness may last several months. Antibiotics rarely affect the course of the illness but can reduce the period of infectivity. This infection can cause serious complications especially in very young children or people with diseases causing immunosuppression. Vulnerable household contacts may benefit from preventive antibiotics.

vi. Measles

Measles is now a very rare disease as a result of Measles Mumps Rubella (MMR) immunisation at 13 to 15 months, and the MR (Measles Rubella) campaign in 1994. However measles is highly infectious and can be a serious disease. The new pre-school booster is important and a high uptake should prevent the need for mass immunisation campaigns in the future.

vii. Rubella

Rubella (German Measles) is now a very rare disease in school aged children. It now most commonly affects men in their 20s because until the 1994 Measles Rubella campaign only girls were immunised (the MMR was introduced in the late 1980s). Rubella is usually a mild illness, but can have very serious effects on the unborn child if a woman is infected in pregnancy.

viii. Mumps

Mumps has become very uncommon since the introduction of the MMR. This was previously an important cause of viral meningitis in children.

9. GUIDELINES ON FOOD HYGIENE FOR CHILDMINDERS¹

Legal Requirements

If meals are being prepared for children then registration as a Food Business is required. Application forms for registration can be obtained from the District Council Environmental Health Department.

Compliance with the Food Safety (General Hygiene) Regulations 1995 is required to ensure that prepared food is safe, supplied hygienically and all hazards are controlled.

Food handlers should also attend an approved food hygiene course or hold a Basic Food Hygiene Certificate or equivalent.

Kitchen Standards

A good domestic standard of kitchen equipment and facilities is acceptable. A double/twin sink for correct wash and rinse/sterilisation procedures is expected but a single sink used in conjunction with a dishwasher is satisfactory. In addition, a separate wash hand basin (with soap and hand drying facilities) and both hot and cold water supplies is a requirement. This should ideally be installed in the kitchen but if you have one in a utility room or ground floor toilet then this is also acceptable. It is recommended that the use of a sanitiser (chemical bacteriocidal cleaning agent) be used on work surfaces, cutting boards and all equipment in contact with food.

A household fridge set to work at less than 8°C is necessary and a simple plastic thermometer stored in the appliance will indicate the correct working temperature or that the thermostat should be adjusted.

A washing machine in the kitchen is acceptable but the laundering of clothes should be carried outside the food preparation times.

Avoid carpeted kitchens, artex ceilings and ensure that pets and pet foods, potted plants and cleaning chemicals/materials are kept out of the food room generally but particularly during food preparation.

Food Handling

It is important that you are up to date with food handling practices. You may wish to contact your local environmental health department for advice.

In addition, you should make sure hands are washed and utensils and surfaces thoroughly cleaned before preparing food, and, that food is:

- stored at an appropriate temperature;
- not out of date;
- thoroughly cooked or reheated;
- partly eaten or used food is not re-offered;
- commercial baby foods are stored and cooked following the manufacturer's recommendations;

¹ Advice for schools and nurseries is available from www.food.gov.uk

- microwaved food is allowed to reach the appropriate temperature before it is given to the child.

Food handlers with diarrhoea or vomiting should not handle or prepare food until 48 hours after full recovery.

10. EXCLUSION FROM SCHOOL

Guidelines for the exclusion from day nursery and school of children and household contacts suffering from an infectious disease

Disease	Usual Incubation Period (days)	Infectious Period (days)	Minimum period of exclusion of patients from school, day nursery, playgroup, etc.	Exclusion of family contacts who attend playgroup, day nursery or school
CAMPYLOBACTER	3-5	Whilst organism is in stools (<7 weeks) but mainly whilst diarrhoea is present	Until clinically fit with no diarrhoea for 48 hours	None
CHICKENPOX	13-21	From 1-2 days before, to 5 days after appearance of rash	5 days from onset of rash	None
SHINGLES	Usually years after chicken pox	Blisters contain Chicken Pox virus (Varicella Zoster)	5 days from onset of rash	None
COLDS /FLU	1-3 days	while symptoms persist	while child unwell	None
CONJUNCTIVITIS	2-3 days	during active infection (with pus and crusting)	until infection cleared	None
CRYPTOSPORIDIUM	3-11	Whilst cysts are present in stools (several weeks) but mainly whilst diarrhoea is present	Until clinically fit with no diarrhoea, for 48 hours	None
DIPHTHERIA	2-5	Whilst the organism is present in nose and throat	Until clinically fit and bacteriological examination is clear	7 days and until bacteriological result is negative

Disease	Usual Incubation Period (days)	Infectious Period (days)	Minimum period of exclusion of patients from school, day nursery, playgroup, etc.	Exclusion of family contacts who attend playgroup, day nursery or school
EAR INFECTIONS /STICKY EARS	may be chronic	usually not infectious	None	None
FIFTH DISEASE (SLAPPED CHEEK)	4-20	1 week+ before the rash develops	Until clinically well. Presence of rash does not indicate infectivity	None
FOOD POISONING (including salmonellosis and shigella sonnei but not E coli 0157- seek further advice)	varies according to cause	Varies according to cause- usually whilst symptomatic (may need to consult CCDC)	Until clinically fit with no diarrhoea or vomiting for 24 hours (48 hours if under 5 years or unable to maintain good personal hygiene, and during outbreaks)	None
GERMAN MEASLES (RUBELLA)	14-21	From 7 days before to 5 days after onset of rash	5 days from appearance of rash	None. If pregnant woman is in contact, she should consult GP.
GIARDIA LAMBLIA	7-28	Whilst cysts are present in stools but mainly whilst diarrhoea is present	Until clinically fit with no diarrhoea after treatment	None
GLANDULAR FEVER	4 - 6 weeks	Once symptoms have cleared risk is small apart from very close contact e.g. kissing	Until clinical recovery	None
HAND, FOOT AND MOUTH DISEASE	3-5	Probably from 2-3 days before and up to several weeks after onset of symptoms (virus in stools)	Until clinically well. Presence of rash does not indicate infectivity	None

Disease	Usual Incubation Period (days)	Infectious Period (days)	Minimum period of exclusion of patients from school, day nursery, playgroup, etc.	Exclusion of family contacts who attend playgroup, day nursery or school
HEAD AND BODY LICE	eggs hatch in 1 week	as long as live lice or eggs	None: treatment should be started on day head lice found. No need to send child home	None. Others affected in household should be treated at same time
HEPATITIS A	2-6 weeks	From 7-14 days before to 7 days after onset of jaundice	7 days from onset of jaundice	Adults in family should discuss prophylaxis with GP
HEPATITIS B(see text)	2 weeks to 6 months	not infectious under normal conditions	until the child feels well	None
HERPES SIMPLEX (COLD SORE)	2-12 days	during infection	None	None
HIV INFECTION (see text)	variable	not infectious under normal conditions	None	None
IMPETIGO/ ERYSIPELAS	Impetigo: 4-10 days Erysipelas: 1-3 days	as long as lesions are wet and pus is present	until lesions are crusted or healed	None
MEASLES	7-14 days	From a few days before to 5 days after onset of rash	5 days from onset of rash	None

Disease	Usual Incubation Period (days)	Infectious Period (days)	Minimum period of exclusion of patients from school, day nursery, playgroup, etc.	Exclusion of family contacts who attend playgroup, day nursery or school
MENINGITIS (see text)	varies, depending on cause (meningococcal is less than 7 days-usually 3-4 days)	see text	Until clinical recovery	None
MOLLUSCUM CONTAGIOSUM	2-7 weeks	As long as lesions persist	None	None
MUMPS	12-21 commonly 18 days	From 7 days before onset of symptoms to subsidence of swelling	Until swelling has subsided (5 days minimum)	None
POLIOMYELITIS	3-21	Whilst virus is present in stools	Until clinical recovery. At the discretion of CCDC	At the discretion of CCDC
RINGWORM: TINEA CAPITIS (head), TINEA CORPORIS (body), ATHLETES FOOT	4-10 days	as long as rash present	none (treatment recommended)	None
SCABIES	few days to 6 weeks	until mites and eggs are destroyed by treatment	day of treatment	None. Household should be treated at the same time

Disease	Usual Incubation Period (days)	Infectious Period (days)	Minimum period of exclusion of patients from school, day nursery, playgroup, etc.	Exclusion of family contacts who attend playgroup, day nursery or school
SCARLET FEVER AND OTHER STREPTOCOCCAL INFECTIONS	2-5	Whilst organism is present in the nose and throat or skin lesion	Until clinical recovery or completed course of antibiotics	None
THREADWORMS	2-6 weeks to complete life cycle	when eggs are shed in faeces	none once treated	None. Household should be treated at same time
TUBERCULOSIS	4-6 weeks	whilst organism is present in sputum	For 2 weeks following start of treatment	None. Close contacts may need to be screened
TYPHOID and PARATYPHOID FEVER	Typhoid: 7-21 Paratyphoid: 1-10 days	Whilst organism is present in stools or urine	At the discretion of the CCDC	At the discretion of the CCDC
VERRUCAE (plantar warts)	2-3 months	as long as wart present	None	none
WHOOPIING COUGH	7-10	From 7 days after exposure to 21 days after onset of severe coughing fits	until clinically recovered	None

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