THE SPOTTY BOOK:

NOTES ON

INFECTIOUS DISEASES IN SCHOOLS

DEVON

March 2010

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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. 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.

Contents

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 (from September 2006)

Infants and children

Age	**Vaccine**	
2 months	DTaP/IPV/Hib	Pneumococcal 13
3 months	DTaP/IPV/Hib	Meningitis C
4 months	DTaP/IPV/Hib	Meningitis C + Pneumococcal1
12 months	Hib/Meningitis C	Combined vaccine
13 months	MMR	Pneumococcal 13
3-5 years	DTaP/Hib/IPV dTaP/Hib/IPV	MMR
12 years (+ Catch up 18years)	HPV	Human Papillomavirus Vaccine
13-18 years	Td/IPV	*Meningitis C *MMR
At Risk Groups only	BCG	

DTaP/Hib/IPV	Diphtheria/Tetanus/ Pertussis/Inactivated Polio/Hib
aP	Acellular Pertussis
Hib	Haemophilus Influenzae type b Vaccine
MMR	Measles, Mumps, and Rubella vaccine
Td/IPV	Low dose Diphtheria/Tetanus/Inactivated Polio 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 causes 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 ideal (for example Milton diluted as suggested on the bottle). For example when there is an outbreak of diarrhoea and vomiting.

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.

Consider disinfecting the dry 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.

Guidelines on farm and countryside visits

Visiting a farm is an enjoyable and educational experience for many people, particularly children. However, such visits can never be free from all risks. Farm animals, even those that look clean and healthy, carry infections that can be harmful to people. The bacterial infection Escherichia coli O157 (known as E. coli) is a particular health risk, especially for children under five, as they are more vulnerable to this infection and more likely to develop serious illness once infected.

It should be assumed that all cattle, sheep, goats and deer are carrying E. coli O157 even when they appear healthy. When an animal is infected with E. coli O157 the bacteria will be in the animal's droppings and will be on the animal's body, fences and surfaces around the farm. Touching animals, fences and other surfaces can thus lead to infection, as you may pick up E.coli O157 bacteria and accidentally pass them to your mouth. It only takes a small number of E.coli O157 bacteria to cause infection. Washing your hands thoroughly with soap and water immediately after you have had contact with animals will reduce the risk of infection.

What to do when visiting a farm

Following the simple rules listed below will help to keep you and your children safe from E.coli O157 and other infections that may be found on open farms. Pregnant women need to take particular care and specifically should avoid contact with lambs and their droppings.

• Do not put hands on faces or fingers in mouths while petting animals or walking round the farm
• Do not kiss farm animals nor allow children to put their faces close to animals
• Do not eat or drink while touching animals or walking round the farm. This includes not eating sweets, crisps or chewing gum.
• Do not eat anything that has fallen on the floor.
• Do not use gels or wipes instead of washing hands with soap and water. Gels and wipes do not remove E.coli O157 that is in dirt.
• Do wash your hands thoroughly with soap and water after you have touched animals, fences or other surfaces in animal areas.
• Do wash your hands thoroughly with soap and water before eating or drinking.
• Do wash your hands thoroughly with soap and water after removing dirty shoes or boots that have been worn on the farm.
• Do supervise children closely to ensure that they wash their hands thoroughly.
• Do eat and drink in picnic areas or cafes only.

If you or anyone in your group has sickness or diarrhoea within two weeks of visiting a farm, contact your GP as soon as possible. If you or anyone in your group, particularly a young child, has bloody diarrhoea, seek immediate emergency medical attention.

Children under five should not attend school/nursery/group childcare until they have been free of sickness or diarrhoea for two days. Tests may be required to confirm that a child is free from infection.

Parents should confirm with their health professional whether it is safe for them to return before the child returns to school or nursery.

Information for teachers on taking children on farm visits is available on the Health and Safety Executive website at: www.hse.gov.uk

7 Common ailments:

i. Infectious Diarrhoea and Vomiting (Gastroenteritis).

This may be due to a number of agents including:

bacteria	Campylobacter
	Salmonella
	Shigella (bacillary dysentery)
	E. coli 0157
viruses	Rotavirus
	Small round structured viruses (e.g. Norwalk or Winter Vomiting Disease)
parasites	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 48 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 **48 hours** after vomiting and diarrhoea has settled. 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 red eyes often with swelling, weeping or visible pus. 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 should be risk assessed on an individual basis regarding exclusion

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. Chickenpox and Shingles

Chickenpox 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. Chickenpox is usually a mild childhood illness. Shingles may follow chickenpox years later and is caused by a reactivation of the virus.

Chickenpox 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.

Chickenpox 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. Chickenpox is infectious during its early stages from 1 - 2 days before until 5 days after spots first appear.

The incubation period of chickenpox is between 13 and 17 days after contact with the infected person. If a pregnant woman who thinks she has not had chickenpox 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 children remain off school/nursery 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.

xi. Panton-Valentine Leukocidin (PVL)

What is PVL?

Staphylococcus aureus is a 'bug' (a microbe or bacterium) that is a normal part of the skin flora (bacterium and fungi that live on healthy skin). It particularly likes to live on the moist surfaces of the body such as inside the nostrils, the armpits and in the groin area. People in the wider community carry many different strains of Staphylococcus aureus. Some strains are more likely to cause infections than others i.e. they are more virulent. Strains that secrete a toxin called Panton-Valentine Leukocidin (PVL) are more likely to cause infections, particularly of the skin.

The number of cases of this strain of Staphylococcus aureus has been rising over the past few years. Almost all of the cases identified so far have been in normally fit healthy people, including children attending nurseries and/or schools

Guidance for reducing the spread of PVL-Staphylococcus aureus (PVL-SA) in schools and nurseries

General Measures

1. Hand hygiene should be facilitated by providing adequate washing facilities and supplies. Liquid soap dispensers (not soap bars) should be used and paper towel dispensers should replace cloth towels.

2. Children should wash hands after using toilets, before eating and drinking, before and after use of the gymnasium and other communal sports activities, and whenever hands are contaminated or soiled.

3. Open wounds should be covered with plasters.

4. Children and staff with wounds that cannot be contained by bandages should be excluded from schools and nurseries

5. Common areas in school/nursery (e.g. toilets, locker rooms, dining room etc), should be kept clean by following regularly scheduled cleaning protocols.

For individual cases with PVL-SA infection

1. Individuals can go to school provided they feel well, are of an age where they can understand the importance of good hand hygiene, and the infected skin is covered with a clean dry dressing able to stay dry and in place until the end of the school day.

2. Individuals should not be at school if they have a boil that requires drainage or a newly discharging boil or abscess, the leakage from which cannot easily be contained.

3. Individuals should not take part in contact sports or use communal gym equipment until their skin lesion has totally healed.

4. Those with eczema or a more generalised skin condition should remain off school until treatment has been completed and/or discussed with local HPU.

Increasing numbers of skin infections

If it appears that infection is spreading between children, the local Health Protection Unit should be contacted.

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.

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.

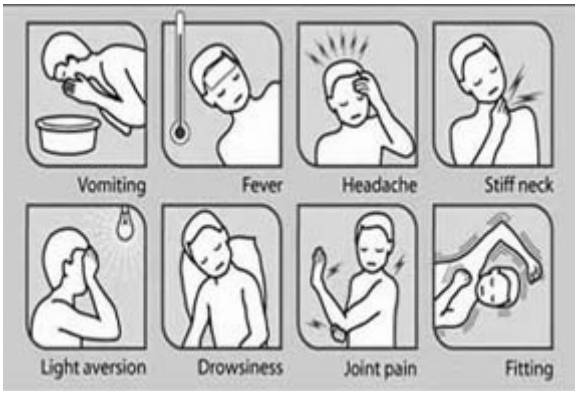
In the past, antibiotics were offered to nursery school or playgroup contacts of isolated cases of meningococcal disease. There is now good evidence showing that these contacts do not benefit from antibiotics; the antibiotic used may eradicate protective organisms and so be detrimental. Preventive antibiotics 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.

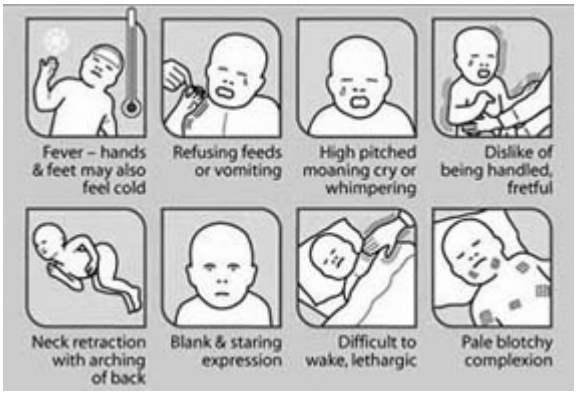
Action for schools

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

Signs and symptoms



In adults and children.



In babies.

Taken from signs & symptoms cards copyright Meningitis Trust.
Used with their kind permission.
Copied from their web site on the 1/06/2010.
Meningitis Trust Helpline number: 0800 028 18 28 (24 Hours)
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 too the nearest Accident and Emergency Department.

Early treatment with antibiotics is vital.

Do not wait for the rash, it may be the last symptom to appear and may not appear at all.

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 childminders[1]

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 Hygiene (England) Regulations 2006 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 $8^{o}C$ 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;
- 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.

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

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)	Discuss with local HPU	None
Colds /'Flu	1-3 days	while symptoms persist	while child unwell	None
Conjunctivitis	2-3 days	during active infection (with pus and crusting)	Single cases: if child is well no exclusion necessary	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 48 hours.	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	2 days before onset of swelling to 5 days after	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 Captitis (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	24 hours after commencing antibiotic treatment.	None
Skin Infection, e.g. PVL or MRSA			Please discuss with local HPU	Good hygiene, in particular hand washing and environmental cleaning are important to prevent spread.
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

Whooping Cough	7-10	From 7 days after exposure to 21 days after onset of severe coughing fits	until clinically recovered	None

Devon Health Protection Team

Outbreak Guidance for Schools and Nurseries in Devon

Contents

The Devon Health Protection Team would like to acknowledge all those who helped formulate this guidance.

Devon Health Protection Team
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1. Introduction

This pack provides important information on outbreaks of infection for schools and nurseries. Outbreaks can be caused by many microbes (bacteria or visruses) and it is important in every suspected outbreak to seek expert advice from the start. We hope that this information will raise awareness of the importance of early reporting of two or more linked cases or **more cases than you would usually expect**. Its aims are to ensure that staff are aware of their responsibility to act promptly if an outbreak of infection is suspected either in themselves or in the children.

- Don't wait for several cases of, for example, sickness and diarrhoea to occur before you report it.
- Put controls into place as prompt action could prevent a major outbreak of infection.
- Ensure that information about what to do in a suspected outbreak of infection is cascaded to key staff.

The two most common illnesses that cause outbreaks in school are diarrhoea and vomiting (Norovirus) and flu-like illnesses.

Thank you for your co-operation.

Devon Health Protection Team (HPT)

For more information regarding infections in schools refer to the Spotty Book. If not available, a free copy can be obtained, telephone 01803 861833 or visit the website and download a copy from
www.sw-devon-ha.swest.nhs.uk/publicHealth/commdiseases/FinalSpottyBook.pdf

2. What is Norovirus?

Norovirus is a virus which infects the gut. It causes a highly infectious gastroenteritis which typically lasts for a day or two but may occasionally last for up to a week. It is not a serious illness in healthy people but can be very disruptive in large institutions such as schools and nurseries. Symptoms can be a combination of any of the following:

- Nausea
- Vomiting
- Abdominal pain
- Diarrhoea

It is sometimes associated with a flu-like illness e.g. aching joints and limbs.

How is Norovirus spread?

Norovirus is spread from the vomit or faeces of an affected person sometimes vomiting occurs with no warning. The virus may be transmitted to others in the following ways:

Droplets

- Droplets are formed following vomiting which is often violent and projectile in nature.
- Diarrhoea is less of a risk for droplet spread if it is contained in the toilet.

Environment

- The environment becomes contaminated via the hands or from settling droplets of vomit. Droplets land on work surfaces, in the toilet area (including on handles, sinks etc) and are easily transferable via hands to mouth.

Food

- Eating food that has been contaminated by an infected person, either directly by vomit droplets or indirectly by contaminated hands, also poses a risk of infection.

One vomit contains in excess of 30,000,000 viral particles: ingestion of between 10 or 100 viral particles may be enough to cause infection. To reduce the risk of transmission, it is essential that vomit and diarrhoea is cleaned up immediately (Appendix 1).

Incubation period for Norovirus is up to 72 hours, but usually 24 - 48 hours.

What you should do – Staff *(including parent helpers, meal time assistants)*

- If you have any of the above symptoms, do not come to work.
- Remain off work for 48 hours after the last symptom (exclusion is a requirement for food handlers with symptoms).
- Discuss whether you should submit a stool specimen with your GP/HPU.
- Specimens should be submitted via your GP.
- If symptoms commence during your working day – go straight home. The risk of spread is reduced considerably if contamination of the environment is reduced (see Appendix 1 for advice on cleaning).
- Inform the head teacher or manager of nursery.
- Movement of supply teachers and specialist staff between schools/nurseries may need to be restricted.
- Staff should supervise hand washing of pupils if possible.

REMEMBER, being at work with symptoms poses a risk to children and your work colleagues.

What you should do – Pupils

- Children who become ill during the day should be sent home as soon as possible
- If the child cannot go home they should be kept away from other children if at all possible
- Parents should be informed verbally that the child should remain off school for 48hours after the last symptom
- Parents should consult with their GP whether they should submit a stool specimen from the child

3. What is influenza?

- Influenza or ‘flu’ is an infection caused by a virus. It affects mainly the nose, throat and the lungs.
- There are 3 broad types of influenza virus: A, B and C. Most outbreaks of influenza are caused by type A or B viruses. These viruses are constantly changing so that different strains predominate from year to year.
- Many people who say (or are told) that they have ‘flu’ in fact have a bad cold. Usually what people call "gastric flu" is a gastrointestinal infection with another virus, although some people with flu do suffer from diarrhoea and vomiting.

Who catches influenza?

- Anyone can catch flu; the highest rates of infection are often in school age children.
- Most influenza infections occur during the winter months.
- The amount of illness occurring each year varies and depends largely on how many people are susceptible to that particular virus; this, in turn, depends on whether people have been infected with that, or a similar, virus in the past. If the new viruses differ greatly from previous ones, the population will not have much immunity. Some influenza viruses cause more severe illness than others. Hence in some winters people may have worse disease than in other years.

How do you catch influenza?

- Influenza is mostly caught by breathing in air, containing droplets of secretions of an ill person, which contain the virus. The virus is passed into the air when an infected person coughs or sneezes. The virus can also be transmitted directly by person to person contact and from contaminated surfaces.
- After being infected, people take about 24 – 48 hours to develop symptoms.
- Influenza is highly infectious and can spread very rapidly from person to person. Some strains of virus seem more infectious than others, or cause more severe illness.

What are the symptoms of influenza?

- Influenza is worse than an ordinary cold. It usually starts suddenly with a high fever of 38.9-40.0oC (102-104oF) which lasts 3-4 days.
- Headaches, chills and a dry cough are common as are general muscle aches and pains which can be severe. A stuffy nose, sneezing and a sore throat can also be present. The fever tends to decrease after the second day when nasal congestion and a sore throat become more noticeable.
- Some children may also feel sick (nausea), or have vomiting and diarrhoea.
- Tiredness can last 2-3 weeks.

How serious is influenza?

- Most people recover completely from influenza in a matter of days or a week. For others, for example the elderly, those with other illnesses (such as chest or heart disease, or diabetes) and newborn babies, influenza can be a serious illness.
- Serious illness from influenza is usually not due to the flu itself, but to secondary bacterial infections causing lung infections (bronchitis and pneumonia) or to a worsening of underlying chronic medical condition such as heart disease.

How can you reduce the risk of influenza transmission in schools?

- Keep children and staff away from school/nursery while ill.
- Cover your mouth and nose with a tissue when coughing or sneezing.
- Dispose of used/dirty tissues in a bin.
- Wash hands frequently with liquid soap and water and dry thoroughly on disposable paper towels.
- Avoid touching surfaces (such as door handles) and then the face.
- Ensure hands are washed prior to eating food.
- Ensure more frequent environmental cleaning of hard surfaces, door handles and frames and light switches.
- Provide liquid hand soap and paper towels to ensure good hand hygeine by children and staff.
- This should all be routine practice whether of not there is an outbreak.

How soon should a child/teacher be back at school after influenza?

- Influenza is most infectious from about a day before symptoms start until about 3 days later. A child should return once the fever settles and they are well enough.

How can you treat someone with influenza?

- Most people with the flu need no special treatment. Influenza is caused by a virus so antibiotics do not help unless there is a complication. Occasionally a special ‘antiviral’ medicine will be given (this will happer in a flu pandemic).
- It is best to stay at home while feeling ill with influenza as this also reduces the chance of spreading the infection to others.
- The patient should rest and drink lots of fluids to prevent dehydration. Paracetamol can be given to reduce the fever; aspirin must NOT be given to children as it has been associated rarely with the development of a severe disorder called Reye’s syndrome.

- Children with other medical conditions, who have flu, should be taken to their general practitioner.

4. In the event of a suspected outbreak at school:

- The head teacher or nursery manager should inform the HPT (01803 861833) and the Local Education Authority. The HPT will in turn notify the local authority Environmental Health Officer, the hospital microbiology department and local GPs.
- Wear protective clothing if dealing with spillages - gloves and plastic aprons that can be disposed of immediately following use, if cleaning up soiling e.g. vomit.
- Wash hands on removal of gloves and if hands become soiled (maintain scrupulous hand hygiene). Wash hands if in contact with an affected child and at other times after using the toilet, before eating or handling preparing food etc.
- Ensure environmental soiling is cleaned up **immediately** (see Appendix 1)
- Ensure warm water, liquid soap and paper towels are available in the toilet facilities.
- Stop all communal play i.e. sand, play dough, water and cooking until the outbreak is over.
- Arrange for toilets and facilities to be cleaned more often to reduce the risk of transmission of the infection via environmental contamination e.g. toilet seats, toilet flush and door handles in the event of diarrhoea /vomiting etc. Increase cleaning of hard surfaces such as door handles and frames and table tops in a flu-like outbreak.
- Staff or children who become ill during the day should be sent home as soon as possible and if possible kept away from other children.
- The head teacher/nursery manager will be advised by the HPT to send out a letter informing parents of their responsibilities (see appendix 2 an 3 for sample letters).

During an outbreak the HPT will contact the school regularly to collect information about new cases. Please ensure that the information is documented on the outbreak form (Appendix 3) and is easily located.

5. Some commonly asked questions about outbreaks in schools/nurseries

How do we know if it is viral or bacterial in nature?
Informing the HPT at the start of an outbreak will enable us to assess the likely nature of the outbreak. The following information is important: - symptoms, numbers affected, timescales, dates of onset of illness, duration of illness in affected individuals. (We do understand that this information may be difficult to collect and may be incomplete.)
Stool samples are important, particularly to rule out more serious causes of infection. If it is thought to be related to food handlers/food then the local environmental health officer at your council will take the lead.
Throat swabs in some situations may be required to confirm diagnosis in outbreaks in children that are respiratory in nature for example in a flu outbreak. This may be undertaken in school with the liaison of the head teacher, nursery manager, school nurse, the health protection unit and the local microbiology service.

What happens when a child vomits in the food hall?
If possible the child should be sent home as soon as possible. Any vomit should be cleaned up immediately and disposed of into a plastic bag and secured and disposed of safely. Under no circumstances should vomit go into the food preparation area as this could pose a threat of further transmission if the environment becomes contaminated. Any children in the immediate vicinity of the vomiting should be offered alternative food stuffs, as the likelihood is that their food will have been contaminated by aerosol droplets, and they should wash their hands.

Under what circumstances would the school/nursery need to be closed?
It would depend on a number of issues e.g. the numbers of children/staff with illness and whether the school can cope. The HPT does not have the power to close the school/nursery that decision would be made by the head teacher and the LEA.

Will every area of the school/nursery need to be cleaned even if it has not been contaminated?
A risk assessment will be made by the HPT and the head teacher or nursery manager. It is important that a record is kept of the location of where contamination i.e. vomiting occurred. If there are only a moderate number of cases and the areas have been cleaned appropriately (as per Appendix 1) then a thorough general clean will suffice in most cases once the outbreak is deemed to be over.

6. References

Hoffman P, Bradley C and Ayliffe G. (2004) *Disinfection in Healthcare.* Blackwell publishing. Oxford.

www.hpa.org.uk

Appendix 1

The cleaning, removal and disposal of body fluids

The current guidance on cleaning up spills and the recommendation from the HPT is detergent and water followed by a standard hypochlorite (0.1%) solution to disinfect (e.g. Milton diluted as detailed by the manufacturer). However there are differing opinions within the local authorities on the choice of products that are used for cleaning. Instructions from the manufacturer should be followed.

Note: All disinfectant solutions must contain 0.1% hypochlorite. (It is important that the product chosen can specifically deal with viruses)

Spillages of diarrhoea and vomit should always be attended to as quickly as possible.

Step 1 Always assess the risk of carrying out the required task before you begin.

Step 2 Isolate the affected area, for example, with warning cones, if at all possible.

Step 3 Make sure that all the protective clothing and equipment you require is available (disposable latex gloves and plastic aprons).

Step 4 Put on the protective clothing.

Step 5 Contain the spill, if needs be, by placing disposable wipes/paper towels around it.

Step 6 Remove the bulk of the contamination with paper towels. The area should be cleaned thoroughly with detergent and water, using disposable cloths, then wiped over using a standard hypochlorite solution **or** the recommended product agreed by your locality, which should also contain 0.1% hypochlorite. Ensure adequate ventilation when using hypochlorite solutions.

It is important that all visible soiling is physically removed prior to disinfection.

Step 7 Put all disposable items into a plastic bag, tie and dispose. Consider double bagging if bags are flimsy.

Step 8 All re-usable items must be thoroughly cleaned, disinfected and dried before being returned to the correct storage area. The cleaning of such equipment must be carried out in the cleaning equipment sink and never anywhere else.

Step 9 Thoroughly wash your hands on removal of gloves with soap and water and dry well.

Step 10 Remove safety cones when the area is dry.

Step 11 Report any shortfalls in the protective clothing or equipment used for dealing with body fluids to the person responsible for maintaining stock levels.

The disinfectant solution should always be freshly prepared and then discarded when you have finished (in the cleaners sink). The solution may become deactivated after 24 hours.

Note: If the spillage has taken place on a carpet, thoroughly clean the affected area using disinfectant (but not hypochlorite). If possible use a steam cleaner if appropriate, or a carpet extraction machine.

Once the outbreak is over, a thorough environmental clean should be carried out.

It is important that all staff work together to enable the final clean to be performed in a safe, timely manner. Good communication between the HPT, school/nursery and cleaning agency etc. is essential.

Prior to cleaning ensure:

- Areas to be cleaned are emptied of as many children's personal belongings as possible e.g. lunch boxes are taken home, gym kits, coats etc.

It is the responsibility of the school/nursery to ensure soiling (i.e. vomit or diarrhoea) is

cleaned up in a timely manner to reduce the risk of further transmission.

Process of Cleaning:

- Table tops where dust collects
- Door handles and edges
- Floors
- Toilet facilities, including edges of doors, door handles, light switches etc
- Toys and equipment

All areas are to be damp dusted with detergent and water and then a standard hypochlorite solution, or appropriate locally agreed product. This ensures that dust and possible virus particles are wiped away. If necessary and on discussion with the HPT, curtains are steam-cleaned insitu unless there are mitigating circumstances and they need to be taken down and washed. Carpets, if soiled, should be steam cleaned or at least shampooed. (Hypochlorite solution should not be used on carpet or soft furnishings as it may damage the fabric. Please check manufacturer's advice on the product for more information).

Appendix 2

Suggested letter for parents

Date

Dear Parent/Guardian

I am writing to let you know that a number of children and staff at school/nursery have had gastro-enteritis over the last few days.

I have been advised by the Health Protection Unit and Environmental Health departments that this is a mild illness probably caused by a virus, but that it is very infectious. The most usual symptom is vomiting. Some people may have diarrhoea and/or abdominal pain. Symptoms rarely last for more than 24 – 48 hours. The incubation period (time it takes for the illness to develop) is between 24 and 48 hours.

If your child is affected, please keep him or her off school/nursery. He or she should not return until **48** hours after the diarrhoea and vomiting have stopped.
The virus is easily spread from person to person. Good hygiene by everyone in the family reduces the risk. This means washing hands with soap and warm water after going to the toilet and before preparing or eating food.

It is important to clean up carefully when someone has been sick as vomit is very infectious. It is important to clear up spills of vomit or faeces immediately, by thorough washing of the contaminated environment with soap and hot water. For hard surfaces, (floor, work tops etc, an additional disinfection with a dilute solution of Milton or household bleach (according to manufacturer's instructions) will reduce the contamination. DO NOT MIX these substances with soap and water. Be sure that each family member uses separate towels and flannels which are changed and washed frequently. **Hand washing after visiting the toilet, cleaning up spillages and before handling food is the most important element of reducing the risk of infection.**

We are ensuring the school/nursery is thoroughly cleaned to reduce any further risk.

If you need any further advice you can phone NHS Direct on 0845 4647 or Health Protection on 01803 861833.

Yours faithfully

Head Teacher/Nursery Manager

Appendix 3

Suggested letter for parents

Date

Dear Parent/Guardian

I am writing to let you know that a number of children and staff at school has had [many/several] students off sick with a flu-like illness (cough, headache, fever and body aches). Some students have been sick (vomiting) or have had diarrhoea.

If your child is unwell with symptoms of flu please make sure they stay off school until they are fully recovered. If your child has vomited or had diarrhoea, they must stay away from school until **48 hours** after the symptoms have stopped.

You can lower the risk of passing on viruses like this by washing your hands, before preparing food or eating - and remember to wash them thoroughly after going to the toilet. If you have symptoms of the flu, use a tissue when you cough or sneeze, and dispose of it by throwing it in the bin or flushing it down the toilet.

If you need any further advice you can phone NHS Direct on 0845 4647 or Health Protection on 01803 861833.

Yours faithfully

Head Teacher/Nursery Manager

Appendix 3

Outbreak Form

Case number	Name	Date of onset	School year	Diarrhoea Y/N	Vomiting Y/N
1					
Total					

Useful Contact Numbers

Devon Health Protection Team 01803 861833

These are the Environmental Health Telephone numbers for Devon.

Local Environmental Health Officers can be contacted as follows:

East Devon	01395 516551
South Hams	01803 861234
Exeter	01392 277888
Teignbridge	01626 361101
Mid Devon	01884 255255
Torbay	01803 208010
North Devon	01271 388870
Torridge	01237 428809
Plymouth	01752 668000
West Devon	01822 813600

Devon Health Protection Team Tel 01803 861833

Fax 01803 861853

Dr Mark Kealy
Dr Geoffrey Thould
Dr Gill Lewendon
Consultants in Communicable Disease Control

Linda Churm
Pam Mallalieu
Rachel Campbell
Specialist Health Protection Nurses

Peter Smith
Health Protection Practitioner

NOTIFICATION OF INFECTIOUS DISEASE
OR
FOOD POISONING

The following diseases are notifiable :-

Acute Encepalitis

Acute Poliomyelitis

Anthrax

Cholera

Diptheria

Dysentery (Amoebic or Bacillary)

Food poisoning

Leprosy

Leptospirosis

Malaria

Measles

Mumps

Meningitis

Meningococcal Septicaemia

Opthalmia Neonatorum

Paratyphyoid fever

Plague

Rabies

Relapsing Fever

Rubella

Scarlet Fever

Smallpox

Tetanus

Tuberculosis

Typhoid Fever

Typhus

Viral Haemorrhagic Fever

Viral Hepatitis

Whooping Cough

Yellow Fever

For more copies of this report please contact:-
The Devon Health Protection Unit
Tel: (01803) 861833

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