

Teach germs a lesson!

Infection Control Guidance for Primary and Secondary Schools



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



National Public Health
Service for Wales
Gwasanaeth Iechyd Cyhoeddus
Cenedlaethol Cymru

Developed in collaboration with:



www.amicus-cphva.org



www.icna.co.uk

Good hygiene is the first step to good health

Title of document:	Teach Germs a Lesson! Infection Control Guidance for Primary and Secondary Schools.
Audience:	Head teachers and staff working in primary and secondary schools.
Overview:	This booklet provides helpful advice on infection control for all those who work in Welsh schools. The information can be used to develop infection control procedures and policies to help minimise the risk of infection.
Further information:	Enquiries about this document should be directed to: Tracey Gauci Nursing Officer for Communicable Disease Welsh Assembly Government Cathays Park Cardiff CF10 3NQ E-mail: tracey.gauci@wales.gsi.gov.uk .
Additional copies:	Schools throughout Wales can obtain additional copies of this booklet and a bilingual CD-ROM free of charge from Natalie Price: E-mail: Natalie.price@wales.gsi.gov.uk Tel: 029 2080 1232 Fax: 029 2082 5283 Or from the Chief Medical Officer's website: new.wales.gov.uk/topics/health/protection/communicable-disease or by writing to the address below.
Postal address:	Public Health Protection Division 1 Office of the Chief Medical Officer Welsh Assembly Government Cathays Park Cardiff CF10 3NQ.
Related documents:	Mind the Germs! Infection Control Guidance for Nurseries, Playgroups and other Childcare Settings (Welsh Assembly Government – June 2006) ⁽¹⁾ Immunisation Fact Sheet (Welsh Assembly Government – 2004) ⁽²⁾ Your Guide to Pre-school Immunisations for 3- to 5-Year Olds (Welsh Assembly Government – October 2005) ⁽³⁾ .

ISBN Number: 0 7504 8985 5

Published by the Welsh Assembly Government, Cathays Park, Cardiff, CF10 3NQ. Copyright © Welsh Assembly Government 2006. This publication is copyright under the Berne Convention and the Universal Copyright Convention. All rights reserved.

Contents

Foreword	2
Introduction	3
Definitions	3
Infection and hygiene	4
Hand hygiene	6
Toilet hygiene	8
Food poisoning	9
Classroom and sports equipment	13
Clothing and other fabrics	14
Dealing with spills	15
Pets in school	16
Farm visits	17
Illness absence	18
Immunisations	20
Gastrointestinal infections	21
Threadworms	24
First aid	25
References	26
Acknowledgements	28
Useful contacts	29

Foreword

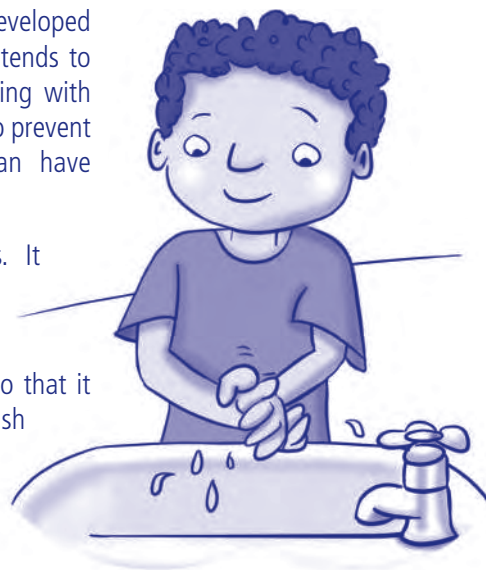
This booklet is one of two that the Welsh Assembly Government has developed following an outbreak of *Escherichia coli* (*E. coli*) in Welsh schools. It intends to reinforce the importance to children and staff of preventing and dealing with infections efficiently and effectively. We all need to work together to try to prevent cases of gastrointestinal infection and future outbreaks, which can have devastating effects.

This booklet is aimed at staff working in primary and secondary schools. It provides details on gastrointestinal infections, how best to avoid infections and how to contribute to outbreak management.

We need to reinforce the culture of hand washing from an early age so that it becomes second nature to children. We recognise that children do not wash their hands as often as they should. Therefore, it is important that this basic skill is taught to children as soon as they are old enough and is reinforced throughout their time at school. We need to provide children with the appropriate facilities to encourage them to wash their hands. As highlighted by the *E. coli* outbreak in 2005 and the Children's Commissioner's Report 'Lifting the lid', there is a need for all schools to provide liquid soap, warm water and paper towels to ensure hand hygiene compliance⁽⁴⁾.

This guidance provides simple, practical advice, which will aid staff in their understanding of infection and how to prevent it spreading in schools where children are in close contact with each other and with staff.

We hope that this booklet will provide useful guidance for all staff working in schools.



A handwritten signature in blue ink that reads "Dr Brian Gibbons".

Dr Brian Gibbons
Minister for Health
and Social Services

A handwritten signature in blue ink that reads "Jane Davidson".

Jane Davidson
Minister for Education,
Lifelong Learning and Skills

Introduction

In schools, where children are in close and frequent physical contact with each other, infectious diseases can spread rapidly. Outbreaks of infection not only interrupt the schooling of affected children but they can also disrupt the school's routine and can incur costly control measures (e.g. for environmental cleaning or destruction of food supplies). Fortunately, there are a number of simple procedures that all schools can implement to help protect children and staff from infections and reduce the risk of outbreaks. These include;

- rigorous hygiene
- ensuring children and staff receive appropriate immunisations which will protect them against some severe and sometimes fatal infections (e.g. tetanus, diphtheria, polio) ^(2,3)
- keeping infectious children and staff away from school, when appropriate
- ensuring prompt and appropriate treatment of infections.

This booklet provides helpful advice on infection control for all those who work in Welsh schools. It is particularly relevant to head teachers who are responsible for managing health and safety issues at school under delegation from the local authority. You can use this information to develop your own infection control procedures and policies and to help minimise the risk of infection. You may also like to share this information with parents/carers who may have concerns about controlling infections in other settings, such as the home.

Definitions

- **Antimicrobial** – A product or process that kills germs (microbes) or inhibits their growth.
- **Antibacterial** – A product or process that kills bacteria or inhibits their growth.
- **CCDC** – The Consultant in Communicable Disease Control is appointed as the 'Proper Officer' to the local authority and has a variety of powers under the Public Health (Control of Disease) Act (1984). Their responsibilities include the surveillance, prevention and control of communicable diseases.
- **Cleaning/Cleaner** – A physical process or product that removes dirt from an object. Cleaning may reduce the level of microbial contamination but cannot be relied on to remove all microbes.
- **Contamination** – The presence of germs on a body surface, object, or in food or water.
- **CSIW** – The Care Standards Inspectorate for Wales is a division of the Welsh Assembly Government that ensures that settings such as boarding schools and residential special schools meet the regulations and National Minimum Standards set by the National Assembly for Wales and the Welsh Assembly Government.
- **Decontamination** – A general term for the destruction or removal of germs to render an item safe. This will include methods of cleaning, disinfection and sterilization.
- **Detergent** – A cleansing agent that removes dirt.
- **Disinfectant** – A chemical that under defined conditions is capable of destroying germs, but not usually bacterial spores. It does not necessarily kill all germs, but reduces them to an acceptable level, e.g. a level that is not harmful to health.
- **EHO** – The Environmental Health Officer works for the local authority. Their role includes inspecting a wide range of premises, advising on hygiene and safety issues, and investigating outbreaks of food poisoning.
- **Faeces** – The solid waste matter discharged from the body through the anus.
- **Hygienic cleaner** – A product that removes dirt from an object or surface, and destroys some germs through an inherent antimicrobial activity. The combination of dirt removal and germ destruction reduces the level of contamination.
- **Sterile** – Free from all viable germs.

Infection and hygiene

Generally, the main sources of infection are people, domestic animals, contaminated raw food and water. Certain areas where stagnant water and waste residues accumulate such as sinks, u-bends, toilets and wet cleaning cloths readily support the growth of germs and may also become a source of infection ⁽⁵⁾.

Infections can be transmitted in a variety of ways:

- Some occur by direct contact with infected people, animals, blood and other body fluids, e.g. contact with blood spills during first aid.
- Some arise by self-infection from the body's own germs, e.g. bladder infections are commonly due to normal gut organisms invading the urinary tract.
- Gastrointestinal infections (tummy upsets) usually arise from consuming contaminated food or water (food poisoning), but sometimes result from faecal germs being carried to the mouth on unwashed hands (faecal-oral transmission).
- Airborne transmission of infection occurs in two ways: either germs are carried on skin scales as they are shed from our bodies or by respiratory droplets expelled when we cough, sneeze or talk.
- Some infections spread indirectly. For example, they may be transferred via unwashed hands to surfaces. The surfaces commonly involved are hand and food contact surfaces and cleaning utensils. Although germs will eventually die on a dry surface, many species can survive on surfaces long enough to pose a risk of infection. Germs transferred via surfaces to cooked foods can multiply rapidly at room temperatures. So can germs that are transferred to wet cleaning cloths.
- Insects, other pests and animals can act as vehicles for transfer of infection.



The main principles for achieving high standards of infection control are concerned with;

- reducing or eliminating sources of infection (e.g. by cooking meat, fish and eggs properly and by excluding infectious children from school)
- preventing transfer of contamination from these sources (e.g. by washing your hands after using the toilet)
- educating staff and children about good hygiene practices.

The purpose of applying a hygiene procedure is to reduce the number of germs to a level where there is no longer a threat to health. This level varies depending on the circumstances and will dictate what procedures are required. A number of procedures can be used to achieve hygienic decontamination, including:

- **Cleaning** – In many instances (e.g. for washing hands, utensils, cutlery and crockery) decontamination can be achieved by using a cleaning product (soap or detergent) and water. Decontamination is only achieved if applied in conjunction with mechanical action and a rinsing process (i.e. you must wipe or scrub all the surfaces and then rinse them thoroughly with clean running water). It is not usually an effective way to decontaminate fixed surfaces, such as kitchen worktops, because they cannot be rinsed properly ⁽⁵⁾.
- **Heat** – Heating is an effective method of decontaminating items such as clothes, cleaning utensils and fabrics (e.g. by hot machine-washing or steam

KEY FACT

The main sources of infection are people, domestic animals, contaminated raw food and water.

cleaning). Heat is also used to reduce microbial contamination of foods to a level that is safe for consumption. Generally, the higher the temperature achieved, the more germs are killed.

- **Hygienic cleaners and chemical disinfectants** – These can be used to effectively decontaminate sites and surfaces where the former methods are inadequate or impractical, e.g. to decontaminate kitchen work surfaces and toilets, and when there is infection in the school.

The effectiveness of any hygiene procedure not only depends on the efficacy of the product used, but also the way the procedure is applied, i.e. in the right way, at the right time. Developing hygiene protocols for use in school will help ensure that staff apply procedures correctly and that the risks of infection to children and staff are minimised. The head teacher should ensure that staff are informed of, and aware of the importance of good hygiene practice and that they are kept up to date with hygiene procedures.

Schools should educate children about the importance of hygiene through the Personal and Social Education (PSE) curriculum. Children's physical development depends upon the attention given to proper nutrition, sufficient exercise, appropriate hygiene, safety and positive healthy choices. Children need to appreciate the relationship between diet and growth, between exercise and wellbeing, and between personal hygiene and disease. Staff can help raise children's awareness of good hygiene practices by teaching them about the importance of;

- hand washing
- nose wiping and disposal of tissues
- the spread of infection through coughing and sneezing
- food and kitchen hygiene.

To ensure staff are aware of and are able to carry out good hygiene practices, head teachers should;

- ensure the school, its furniture, furnishings and fittings are tidy, clean and hygienic ^(6,7)
- have a documented programme of cleaning for the entire school and a protocol for the immediate removal of potentially infectious spills of blood and body fluids (e.g. vomit or faecal material)
- monitor cleaning contracts
- ensure cleaning staff are appropriately trained and aware of national guidance, e.g. regarding colour coding of cleaning equipment and COSHH regulations ⁽⁸⁾
- include hygiene procedures in staff induction and training
- obtain information from sources such as the school nurse and local authority Environmental Health Department, and keep up to date with current recommendations
- use notices, posters and staff meetings to promote good hygiene practices
- keep a list of notifiable diseases and make sure staff are familiar with local guidelines and procedures for notifying the CCDC and EHO of outbreaks of disease
- notify the CCDC should any notifiable disease occur in your school
- display a list of addresses and telephone numbers for key health contacts including your nearest Accident and Emergency Department, Health Centre, EHO and CCDC.

Do

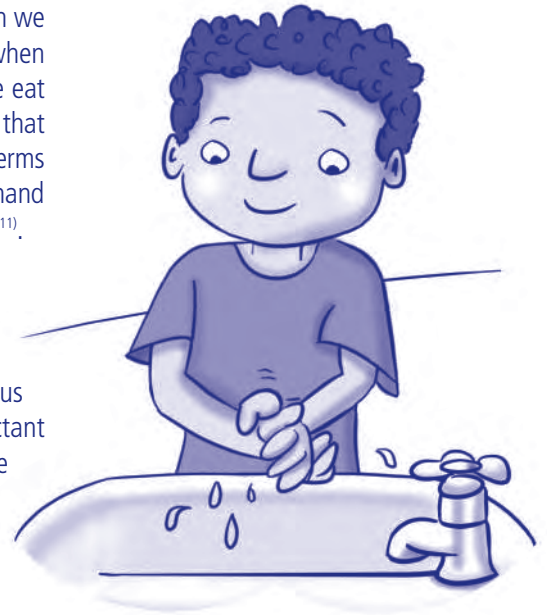
- ✓ ensure the school premises are clean and safe before the children arrive each day
- ✓ ensure surfaces are cleaned regularly, kept dry and well maintained
- ✓ make sure you are familiar with the school's procedure for removing spills of blood and body fluids
- ✓ ask the local Infection Control Nurse for advice about selecting suitable disinfectants for use in school
- ✓ follow the manufacturer's instructions regarding the use of disinfectants and cleaning products
- ✓ ensure rubbish and other waste is removed promptly and is not allowed to accumulate
- ✓ use waste bins with securely fitting lids to prevent access by germ-spreading insects and pests
- ✓ provide suitable, sufficient and readily accessible hand washing and drying facilities for staff and children.

The information that follows will help schools to develop their own infection control procedures and routines. For staff in residential schools, documenting these procedures will enable you to provide CSIW with evidence that you are achieving the National Minimum Standards ⁽⁹⁾.

Hand hygiene

Germes are found just about everywhere. They are transferred to our hands when we touch other people, animals, body fluids, contaminated surfaces and food, and when we cough and sneeze. They can then be passed into our bodies (e.g. when we eat food without washing our hands first), to other people, food and other surfaces that we touch. Good hand washing is the single most effective way of stopping germs from getting into our bodies and causing infection⁽¹⁰⁾. Studies show that good hand washing after using the toilet reduces the spread of gastrointestinal infections⁽¹¹⁾.

Thorough washing with liquid soap and running water removes most germs from our hands⁽¹²⁾. Liquid soap is better than solid soap because it is less likely to become contaminated. Using an antibacterial liquid soap gives better protection. In some circumstances, e.g. when a child has an infectious disease, it may be necessary to disinfect hands with an alcohol disinfectant solution⁽¹³⁾. Nailbrushes are not recommended. Disposable paper towels are the best option for drying hands because damp towels can harbour germs⁽¹⁴⁾. Warm air dryers are not recommended.



How should we wash our hands?



1. Wet your hands under warm running water.



2. Apply a small amount of soap.



3. Rub your palms together – away from the water.



4. Scrub your fingers and thumbs and the spaces between them.



5. Scrub your nails on your palms.



6. Remember to wash the backs of your hands.



7. Rinse your hands with clean running water.



8. Dry your hands, preferably using disposable paper towels.



■ When should we wash our hands?

Everyone should wash their hands;

- whenever they look dirty
- after touching any potentially contaminated surface (e.g. drains, cleaning cloths, waste bins, soil)
- after using the toilet or helping a child to use the toilet
- after contact with blood or body fluids (e.g. faeces, vomit, respiratory secretions) including after coughing, sneezing or blowing your nose, or caring for the sick
- after touching animals, their cages, feeding utensils or toys
- immediately before handling any food and immediately after handling raw food (especially poultry)
- before and after dressing a wound, giving or applying any medication, or applying contact lenses.

Coughing and sneezing

Everyone should cover their mouth and nose when coughing and sneezing to prevent germs spreading. If we cough or sneeze onto our hands, we are likely to spread germs to anything we touch, including other people. To help stop germs spreading, make sure that children and staff are equipped with paper tissues and know how to use them. Encourage everyone to put their used tissues in a bin and to wash their hands after contact with respiratory secretions.

Activities

1. Teach children that washing their hands removes germs that might otherwise make them ill. Demonstrate good hand washing.
2. Ask the children to help draw or paint a poster that you can display as a reminder to wash their hands after using the toilet.
3. Children will follow the example set by staff. Make sure you wash your own hands.

Do

- ✓ encourage both staff and children to wash their hands frequently
- ✓ use designated hand wash basins, not sinks used for food preparation or cleaning
- ✓ regularly check that there are sufficient supplies of liquid soap and paper towels available
- ✓ ensure that the hot water temperature is adequate for hand washing, but not so hot that scalding could occur
- ✓ supervise younger children's hand washing (particularly when requested by the CCDC or EHO during an outbreak of gastrointestinal infection)
- ✓ encourage children to wash their hands before eating
- ✓ teach children to cough or sneeze into a tissue and dispose of it carefully.

Don't

- ✗ assume young children know how to wash their hands
- ✗ use a single cloth to clean a group of children's hands
- ✗ use a bowl of water to rinse children's hands.

Toilet hygiene

Although toilet bowls are highly likely to be contaminated with germs, the risk of transmission is usually low ⁽¹³⁾. However, transmission may occur through direct contact with the contaminated surface, e.g. by touching the toilet, splashing or by spraying during flushing. Therefore, toilets should be checked regularly throughout the day, and cleaned and disinfected as necessary. The frequency of cleaning and maintenance procedures will depend on how many children use the facilities and whether they have good toilet habits. Although chemical disinfectants are effective, germs multiply quite rapidly in the wet environment so a continuous release or sustained action disinfectant may be useful ⁽¹³⁾.

Frequent hand contact sites, such as toilet flush handles, taps, doorknobs and waste bins are likely to be contaminated with germs and have a high risk of transferring infection. It is therefore essential to clean and disinfect these sites regularly.

Where possible, use disposable cleaning cloths. If you use reusable cloths, decontaminate them after each use and at least once a day. You can decontaminate cloths and other cleaning utensils by hot machine-washing (at least 60°C), by boiling or by using an appropriate chemical disinfectant, and then drying them as rapidly as possible. Staff should not use cloths used to clean the toilet area in other areas of the school. Cleaning equipment should be colour-coded to help prevent this.

If you use mops to clean heavily contaminated areas, e.g. spills of vomit or faeces, they must be cleaned in a designated sink, rinsed with a disinfectant, wrung as dry as possible and then dried quickly, preferably at high temperatures and then stored with the mop head facing upwards ⁽¹³⁾. Never clean a mop in a sink that is used for food preparation. Disposable or detachable mop heads that you can hot machine-wash are ideal.

Apart from cleanliness and reducing the risk of infection, head teachers should also think about the following points regarding the toilet facilities;

- accessibility
- whether there are sufficient and suitable toilets for staff and children, including facilities for those with special needs available throughout the school day ⁽¹⁵⁾
- whether locks on the inside of toilet doors are functional and can be opened from the outside in an emergency
- whether there are adequate and appropriate sanitary disposal units for female staff and children (many girls start menstruating before they leave primary school)
- supervision of hand washing and toileting for young children and those with special needs
- how child to staff ratios will be affected if staff need to escort children to the toilet.

Do

- ✓ encourage staff and children to wash their hands after using the toilet
- ✓ clean and disinfect toilets and frequent hand contact surfaces regularly (as is practical and especially when visibly dirty)
- ✓ wear disposable gloves for tasks where contact with body fluids is anticipated
- ✓ wash your hands when you have finished cleaning
- ✓ ensure adequate supplies of toilet paper, liquid soap and paper towels are available at all times ^(4, 16).

Don't

- ✗ use toilet cleaning cloths in other areas of the school
- ✗ leave mops or cloths lying in dirty water
- ✗ allow dirty cloths or mops to be reused
- ✗ resort to limiting access to toilets as a solution to misuse. Address the causes of the problem and involve the pupils in identifying solutions.

Activities

1. Monitor the toilet area over the course of one day. Every hour, assess how many children use the area and note whether the toilet area appears clean or requires cleaning. Use this assessment to establish an effective cleaning routine.
2. Read about Bog Standard at www.bog-standard.org – a campaign to promote better toilets for children – and get staff and children involved ⁽¹⁶⁾.
3. Explain to children that it is important to keep the toilet area clean. Ask children to tell you if they find the toilet/washroom dirty.

Food poisoning

Germs that cause food poisoning (gastrointestinal infections that arise from eating contaminated food) can be found in;

- raw food including meat, poultry, eggs, fish and seafood
- unwashed fruit and vegetables
- soil, intestines of humans and animals, untreated water, dust and insects.

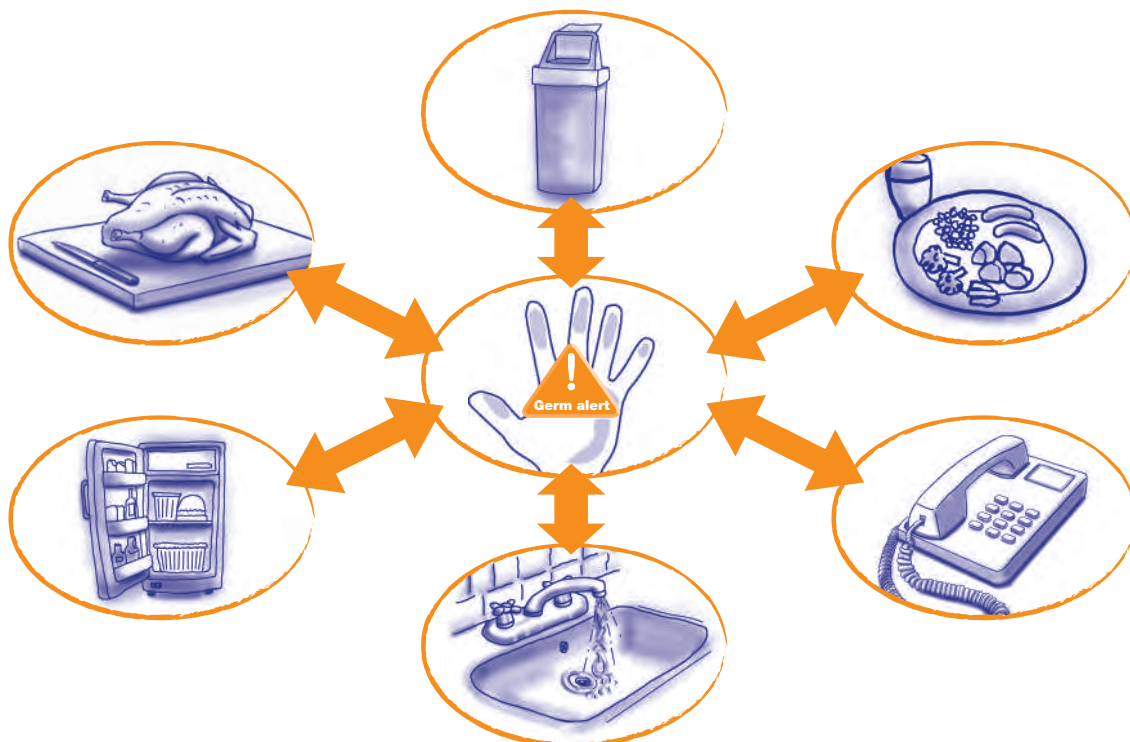
These germs include Salmonella, Shigella, Campylobacter, *E. coli*, Giardia and Cryptosporidium. If you allow these germs to survive and multiply, they can cause illness when that food is eaten. Most food poisoning germs multiply rapidly at room temperature. To restrict this growth, it is essential to keep foods such as meat, fish and dairy products in a refrigerator at or below 8°C. Sometimes these germs spread to other foods, for example via unwashed hands, contaminated chopping boards or kitchen utensils and cause illness when those foods are eaten. This is known as cross-contamination and can occur at any point in the food production chain, from the farm to the fork.

The symptoms of food poisoning can last several days and include abdominal pains, diarrhoea, vomiting, nausea and fever. The symptoms usually begin suddenly, but can occur several days after eating contaminated food. They will usually get better on their own. However, food poisoning can be dangerous, and in some cases can kill. Some types of food poisoning germs (but not all) can also spread easily from person to person (see **Gastrointestinal infections**). The germs are carried in faeces and sometimes in aerosol droplets produced during vomiting. They can spread on unwashed hands and anything they touch (e.g. taps, food, toilet flush handles, cleaning cloths) to other people.

KEY FACT

The best way to avoid food poisoning is by cooking food thoroughly and by keeping food preparation areas and hands hygienically clean.

■ Unwashed hands spread germs



When an outbreak of food poisoning is suspected, it is important to contact an EHO who will investigate the matter to discover the cause (e.g. poor hygiene in a particular kitchen, using contaminated food) and take steps to prevent further occurrences. EHOs will also alert others to the dangers, offer advice and where necessary, prosecute offenders for breaches of food safety laws.

Good food and kitchen hygiene is essential in schools because children are much more susceptible to food poisoning than adults are. Most food poisoning is preventable. The best way to avoid food poisoning is by cooking food thoroughly and by keeping food preparation areas and hands hygienically clean ⁽¹³⁾.

The Food Standards Agency Wales provides comprehensive food hygiene information and a wide range of useful leaflets and publications (many of them free of charge) ⁽¹⁷⁾.

KEY FACT

Most outbreaks of food poisoning are due to cooking food inadequately or storing food inappropriately.

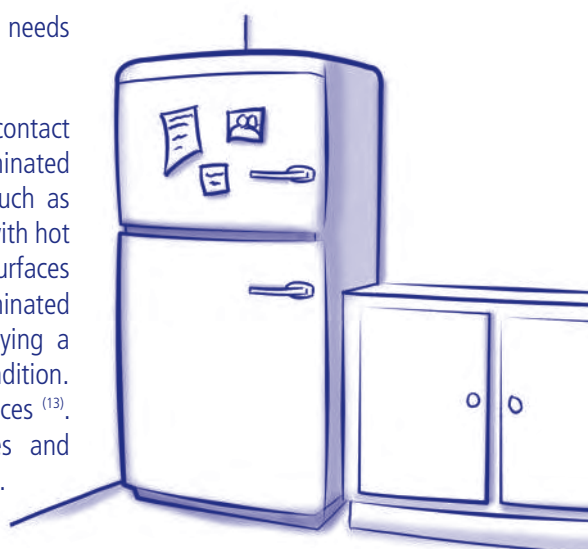
■ Food and kitchen hygiene

Food preparation areas must conform to environmental health and food safety regulations. Those responsible for preparing and handling food in the school must be fully aware of, and comply with regulations relating to food safety and hygiene. All staff responsible for food preparation and handling should receive appropriate training that includes storing, preparing, cooking and serving food safely and hygienically ⁽¹⁸⁾. In addition, you should consider;

- establishing clear routines, rotas and staff responsibilities
- monitoring and reviewing food handling procedures
- teaching children food hygiene rules and providing them with opportunities to practice these ⁽¹⁹⁾
- whether children will have access to kitchens for supervised activities
- the safe and hygienic transportation of food
- whether you have appropriate cooking and preparation utensils for the needs of staff and children.

All surfaces must be hygienically clean before use. All hand and food contact surfaces must be decontaminated immediately after contact with contaminated material (e.g. raw meat or vegetables). You can decontaminate items such as chopping boards, cooking and eating utensils by washing them thoroughly with hot water and detergent followed by rinsing. Where this is not feasible, surfaces (including dining tables and other food contact surfaces) should be decontaminated using a hygienic cleaner or by wiping to remove debris and then applying a disinfectant. Surfaces should be rapidly dried and maintained in a dry condition. Wiping with a cloth and a cleaning product does not decontaminate surfaces ⁽¹³⁾. Frequent hand contact surfaces, such as taps, handles, door handles and refrigerator handles should be regularly decontaminated using a disinfectant.

Where possible, use disposable cleaning cloths. Any reusable cloths should be decontaminated after each use and at least once a day by hot machine-washing (at least 60°C), by boiling or by using an appropriate disinfectant, and then drying as rapidly as possible. Do not use kitchen cloths in other areas of the school.



Staff must take great care to prevent germs from raw food transferring to cooked and ready-to-eat food. You can reduce the risk of cross-contamination by;

- using different colour-coded chopping boards and knives for raw and ready-to-eat foods
- washing hands and disinfecting surfaces immediately after contact with raw food
- using disposable cleaning cloths
- keeping raw meat and defrosting food covered
- storing raw meat in a covered container at the bottom of the refrigerator so that juices cannot drip onto cooked and ready-to-eat food.

KEY FACT

You cannot see, taste or smell germs. Good hygiene is the only way to ensure food is safe.

■ Drinking water

Schools must provide a wholesome supply of drinking water ⁽¹⁵⁾. Children need to drink 3 to 4 glasses of water during the school day. Drinking water coolers and water bottles should be cleaned regularly to reduce the risk of contamination. Detailed guidance on water in schools is available from the Welsh Assembly Government ⁽²⁰⁾.



■ Fruit tuck shops

The Welsh Assembly Government published guidance on fruit tuck shops in 2000 ⁽²¹⁾. It is very important that everyone washes their hands before handling fruit. This includes children involved in selling the fruit and those buying. It is worth reminding children that they should wash their hands before eating the fruit. Fruit should be washed before it is eaten. It is also important that worktops and utensils used to prepare the food are kept clean.

■ Packed lunches

Packed lunch boxes can provide food poisoning germs with an ideal environment in which to grow. It is therefore important that parents/carers who provide packed lunches are aware of the importance of good food hygiene, and prepare and store their child's food safely. This could be achieved by sending a copy of this booklet or a reference sheet with the main food hygiene messages home with every child. Encourage parents/carers to;

- wash their hands and clean and disinfect food preparation surfaces before they handle food and after contact with raw food
- avoid cross-contamination between raw and ready-to-eat foods
- use an airtight rigid lunch box that they wash and dry thoroughly before use
- check food is fresh and within its use-by or best-before date
- freshly prepare food each day (less storage time gives less opportunity for germs to grow)
- check food labels to make sure food is stored at the right temperature
- consider using a freezer pack or cool bag to help keep their child's lunch chilled
- remind their child to wash their hands before opening their lunch box.

Activities

1. Explain to children that not washing their hands before eating can make them ill. Make sure children have the opportunity to wash their hands before eating.
2. Discuss food hygiene rules with the school's catering staff. Ensure that kitchen hygiene rules are displayed in the kitchen as a reminder to staff.
3. Encourage caterers to conduct regular checks to ensure staff are adhering to hygiene procedures and that kitchen surfaces and appliances are correctly maintained. For example by making sure food is stored properly, surfaces and appliances (e.g. cupboards, refrigerators, dishwashers) are free from food debris, that the refrigerator is running at the correct temperature, and that staff are washing their hands at the appropriate times.

Don't

- ✗ drink unpasteurised milk or give it to children
- ✗ eat raw or lightly cooked eggs or uncooked dishes made with them
- ✗ eat meat that is undercooked or still pink
- ✗ eat pâté or ripened soft cheese (e.g. camembert, brie and blue cheeses) if you are pregnant
- ✗ allow young children to eat any of the above foods
- ✗ allow animals on kitchen surfaces
- ✗ refreeze food once it has defrosted
- ✗ reheat food more than once
- ✗ allow children into the kitchen, unless you are using it solely for a supervised activity.

Do

- ✓ wash your hands before touching food and immediately after handling raw food, especially meat and poultry
- ✓ clean and disinfect kitchen work surfaces immediately before use and immediately after contact with raw food
- ✓ regularly clean and disinfect hand contact surfaces (e.g. handles, taps)
- ✓ regularly clear food debris from surfaces (e.g. cupboards, refrigerators, microwaves), and clean and disinfect them
- ✓ ensure all cooking and eating utensils are properly cleaned before use
- ✓ use a bin with a lid and clean and disinfect it regularly
- ✓ wash fruit and vegetables well (especially if they are to be eaten raw)
- ✓ avoid contact between cooked and raw foods (e.g. use separate chopping boards and knives)
- ✓ check use-by dates and avoid damaged food or packages
- ✓ keep refrigerators set at or below 5°C (thus ensuring food remains below 8°C – the legal limit), and freezers at or below minus 18°C
- ✓ cook food thoroughly and evenly (especially meat). Thorough cooking will destroy most germs. However, all parts of the food must reach at least 70°C
- ✓ serve cooked food immediately, or cool and refrigerate it within 1 to 2 hours. Germs can multiply quickly in food left to stand at room temperature.

Classroom and sports equipment

Classroom and sports equipment can become contaminated with germs from unwashed hands, spills of body fluids, or by children putting items in their mouths (e.g. sucking pens and rulers). Although germs will not grow in the absence of water, some germs can survive on dry surfaces in sufficient numbers to present a risk of infection. Young children frequently put items in their mouths therefore contaminated equipment can become a source of infection.

Ideally, where young children are present (e.g. in reception classes) items should be washed and disinfected between uses by different children⁽²²⁾. Although this practice may be overly cautious and somewhat impractical on a day-to-day basis, keeping equipment hygienically clean when there are infectious children present is an important way to prevent further transmission^(5, 23). There may be times when it is necessary to suspend certain types of communal activities (e.g. cookery, swimming, sports, and activities with sand or water) to help prevent the spread of specific infections. The CCDC will be able to advise you on this.

Activities

1. Teach children that germs can spread from one person to another via surfaces such as classroom equipment. Discourage them from putting such items in their mouths (e.g. pens).
2. Keep a checklist to ensure you clean all equipment regularly. Urge children to let you know if items need cleaning.

Do

- ✓ carry out appropriate risk assessments (including assessment of potential infection risks) on activities and the environment in which they take place
- ✓ use equipment that is easy to clean and decontaminate
- ✓ clean equipment as frequently as practical and whenever visibly soiled
- ✓ clean hard/plastic items by washing them with water and detergent, followed by thorough rinsing and drying

- ✓ disinfect hard/plastic items that cannot be washed, rinsed and dried thoroughly
- ✓ launder soft items and fabrics in a washing machine, taking care to follow the manufacturer's washing instructions (see **Clothing and other fabrics**)
- ✓ clean and disinfect equipment regularly during an outbreak of illness
- ✓ immediately decontaminate items that are contaminated with body fluids (e.g. blood, vomit, nasal and eye discharge, saliva, urine, faeces)⁽¹³⁾
- ✓ decontaminate hard/plastic items using a chemical disinfectant or disinfectant/alcohol wipes. If the item is visibly soiled, wash it thoroughly first

- ✓ decontaminate soft items and fabrics by laundering them on a hot wash (at least 60°C). If the item cannot be laundered on a hot wash you may need to destroy it (see **Clothing and other fabrics**)
- ✓ if a soiled item belongs to a child, if appropriate, place it in a sealed waterproof bag for the child to take home for decontamination
- ✓ discourage children from bringing toys and valuable items into school
- ✓ drain, clean with detergent and dry receptacles used for water activities after each use
- ✓ protect sandpits from contamination by using a cover and change the sand regularly. Sandpits make tempting toilets for animals and are an ideal medium for transmitting germs such as *Campylobacter*
- ✓ replace soft modelling materials and dough regularly
- ✓ store equipment in clean containers or cupboards
- ✓ wash your hands after handling contaminated items
- ✓ ensure children wash their hands after playing outside, and after water play, sand play or time in a ball pool.

Don't

- ✗ allow children to take equipment into the toilet area
- ✗ put items back into storage if they are dirty
- ✗ allow animals to contaminate equipment, sports fields or playgrounds.

Clothing and other fabrics

If the school provides any clothing (e.g. sports strips, spare clothes) or other fabrics (e.g. bed linen in boarding schools) these could potentially become a source of cross-contamination and pose a health risk. Laundering fabrics between uses reduces contamination and the risk of infection ⁽¹³⁾.



Activities

1. Teach children that clothing requires regular laundering to prevent germs and odours building up. Remind them to have their sports kits laundered after every use.
2. Discuss with staff the appropriate procedure for dealing with a child whose clothing is soiled with body fluids (e.g. vomit). Ensure staff have access to appropriate supplies (e.g. waterproof laundry bags and spare clothing).

Don't

- ✗ house washing machines in food preparation areas
- ✗ rinse soiled fabrics. Flush any solid material (e.g. vomit, faeces) into a toilet and then put items in the washing machine, using the pre-wash cycle followed by a hot wash
- ✗ store clean laundry where it may become contaminated by dirty laundry.

Do

- ✓ wear disposable gloves and a disposable apron when handling soiled fabrics
- ✓ make sure all staff know how to care for a child whose clothing or bed linen is soiled with blood or body fluids
- ✓ if appropriate, place soiled items in a sealed waterproof bag for the child to take home and launder
- ✓ ensure boarder's clothing and bed linen is regularly and adequately laundered and is returned to the correct child ⁽⁹⁾
- ✓ decontaminate fabrics that may be contaminated with germs using detergent and hot water washing (at least 60°C)
- ✓ if lower temperatures are necessary, consider adding a suitable laundry disinfectant to the wash to destroy the germs
- ✓ be aware that dry cleaning does not inactivate all germs, e.g. hepatitis B
- ✓ use products that remove organic residues (e.g. faeces, urine and blood stains) from fabric as they could harbour germs
- ✓ launder cloths and towels used in the kitchen separately from clothes and bed linen
- ✓ wash hands after contact with soiled linen
- ✓ make sure dirty laundry is transported and stored safely.

Dealing with spills

You should regard all spills of blood and body fluids (e.g. faeces, vomit, urine, nasal secretions) as potentially infectious and immediately clean and disinfect any contaminated surfaces ⁽²⁴⁾. Each school should have a protocol for dealing with such spills and cleaning staff should be appropriately trained.

If you need to use a mop to clean a heavily contaminated area, e.g. a spill of vomit or faeces, it must be cleaned in a designated sink, rinsed with a disinfectant, wrung as dry as possible and then dried quickly, preferably at a high temperature and then stored with the mop head facing upwards ^(13, 24). Ideally, you should use disposable mop heads or mops with heads that you can remove and wash at a high temperature in a washing machine.



Do

- ✓ wear disposable gloves and a plastic apron whilst cleaning spills of blood and body fluids
- ✓ use disposable paper towels to wipe up the spill and discard in a plastic bag
- ✓ disinfect all surfaces contaminated with body fluids using a disinfectant that will kill both bacteria and viruses
- ✓ after removing the spill, clean the area with a freshly prepared solution of detergent and water
- ✓ wash hands after removing gloves
- ✓ put any waste into a plastic bag for disposal (according to local guidelines)
- ✓ follow the manufacturer's instructions when using disinfectants and cleaning products
- ✓ ensure disinfectants are stored in a locked cupboard after use
- ✓ consider steam cleaning fabric or carpeted areas as soon as possible after contamination or contact the CCDC for further advice ⁽²⁴⁾.

Don't

- ✗ use bleach products on carpets or wooden surfaces, or in confined unventilated areas
- ✗ use bleach on spills of urine.

Pets in school

Animals within the school can significantly enhance children's education. However, they can pose a risk of infection. Even if they are apparently healthy, they can carry intestinal germs such as Salmonella and Campylobacter. They can also bring germs into the school on their fur and paws. Sensible precautions can help to reduce the risk of infection to an acceptable level. However, you should consider children's allergies (e.g. children with asthma may be affected by the presence of animals) or anxieties before introducing animals and consult parents/carers.

You must ensure that a knowledgeable person is responsible for the animals kept within the school and that there is no risk of contravening safety legislation. Any animals on the premises must be safe to be in the vicinity of children and not pose a health risk. The school should have a written policy to ensure full understanding of;

- the types of animal allowed
- their control and permitted behaviour whilst on the school premises
- areas where animals are not allowed
- any insurance liability of owners and handlers.

Activities

1. Review your policy on keeping animals. Make sure it includes all animals kept on the premises and any animals that visit. Check that vaccinations and treatments are up to date.
2. Make notes of each animal's daily feeding and care routines, together with contact details for the vet and display it by each animal's housing. This will ensure continuity of care if the responsible person is absent.
3. Ensure children understand that animals may carry germs and that they need to wash their hands after touching animals.



Don't

- ✗ allow animals to foul play areas
- ✗ allow pets in kitchen areas. If an animal does enter a food preparation area, all surfaces must be decontaminated before preparing food
- ✗ clean pet cages and tanks in a kitchen sink
- ✗ allow children access to cat litter trays
- ✗ permit children to play with animals without supervision.

Do

- ✓ ensure animals have been declared healthy by a vet and have received all relevant vaccinations before they are brought into school
- ✓ ensure that if an animal becomes ill, prompt diagnosis and treatment by a vet is obtained
- ✓ ensure that animals are provided with suitable housing and food, are regularly exercised, groomed and examined for signs of illness or injury
- ✓ treat cats and dogs for worms and fleas regularly and trim claws to reduce the risk of scratches
- ✓ ensure that everyone washes their hands after they have touched animals or their equipment
- ✓ clean pet living quarters and items such as cat litter trays daily
- ✓ keep animal feeding areas clean. Animals should have their own feeding dishes that are washed separately from other dishes and utensils, using a hygienic cleaner or disinfectant
- ✓ keep pet food separate from food for human consumption
- ✓ remove cat and dog food that has not been consumed by the animal within 20 minutes of it being given to them, or cover the feeding receptacles
- ✓ discourage children from 'kissing' pets and allowing animals to lick their faces
- ✓ have a member of staff responsible for the care of the animals
- ✓ remove animal blood or body fluids (e.g. faeces) promptly (see **Dealing with spills**).

Farm visits

Visits to farms can provide valuable educational opportunities for children. However, farm animals do carry a range of germs that may cause infections in humans, such as *E. coli* 0157, which can spread from the hands to the mouth. It is therefore essential to take precautions to prevent staff and children from picking up an infection during a visit. Detailed advice and recommendations are provided by the Health and Safety Executive and by the National Assembly for Wales^(25,26). Anyone who organises a farm visit should ensure that the farm facilities meet these recommendations and that they follow the advice provided for teachers. If a member of the group falls ill (e.g. with diarrhoea or vomiting) after the visit, that person should see their doctor and explain that they have had recent contact with farm animals.



Activities

1. Explain to children how germs carried by animals can spread to humans. Ask children to design a poster to help remind others how to avoid picking up infections when they visit farms.
2. Prior to any visit, discuss arrangements with the farm management. Satisfy yourself that the farm has appropriate facilities and hygiene precautions in place.

Do

- ✓ contact the farm before the visit to ensure the farm is well managed and has adequate hand washing facilities
- ✓ ensure staff and children understand the importance of good hand hygiene
- ✓ discuss appropriate hygiene rules with children and supervising staff before the visit and ensure that everyone follows them
- ✓ ensure children wear boots or sturdy outdoor shoes during the visit
- ✓ cover any cuts and abrasions on hands with a waterproof dressings
- ✓ wash hands thoroughly before eating, after any contact with animals or their faeces, after using the toilet and before leaving the farm
- ✓ only eat food for human consumption in designated eating areas
- ✓ clean or change your footwear before leaving the farm and wash your hands after contact with soiled footwear.

Don't

- ✗ have close facial contact with animals
- ✗ eat, drink or chew anything except in a designated eating area
- ✗ eat food that has fallen to the ground
- ✗ eat animal food
- ✗ put fingers or other items such as pens in your mouth during the visit.

Illness absence

Schools should have a policy about keeping children away from school who are ill or infectious, which is discussed with parents/carers. This must include procedures for contacting a parent or another designated adult if a child becomes ill whilst in school. Any child who is acutely unwell should be kept away from school until they are well enough to benefit and participate. In addition, even if they appear well, it is necessary to keep children who have certain infectious diseases away from school for an appropriate period to help prevent others from becoming infected. The table below provides guidance on appropriate absence periods for some common infections ^(24, 27, 28).

You can obtain further information and a useful poster entitled 'Guidance on infection control in schools and nurseries' from the Health Protection Agency ⁽²⁴⁾.



Disease	Absence period
Chickenpox	For 5 days after rash appears
Conjunctivitis	None
Diarrhoea and vomiting	Until 48 hours after the last episode of diarrhoea or vomiting
Hand, foot and mouth disease	None
Hepatitis A	Young children - 7 days after onset of jaundice. There is no need for older children with good hygiene to be absent, provided they are well enough to attend school ⁽²⁸⁾
Impetigo	Until lesions are crusted or healed
Measles	For 5 days after rash appears
Mumps	For 5 days after onset of swollen glands
Pertussis (whooping cough)	For 5 days after commencing antibiotics
Ringworm	Until treatment is started
Rubella (German measles)	For 5 days after the onset of the rash
Scabies	Until treated
Scarlet fever	For 5 days after commencing antibiotics
Threadworms	None
Tuberculosis	CCDC will advise on necessary action

Your policy and procedures for absence periods for children who are ill or infectious should have regard to;

- confidentiality
- the rights of the individual with regards to equality of access and opportunity
- medical advice and the procedures related to infectious, notifiable and communicable diseases
- the role of the school nurse/doctor and the use of the school's medical/sick room

- the care of a sick child while awaiting collection or whilst boarding ⁽⁹⁾
- the implications for other children and staff
- the need to notify the Local Education Authority/Educational Welfare Officer and draw up an educational plan if any child is likely to be away from school on medical grounds for more than four weeks ⁽²⁹⁾.

The information on gastrointestinal infections in the following pages is based on recommendations from the Health Protection Agency ⁽²⁷⁾. You can obtain further information from the National Public Health Service for Wales and NHS Direct Wales ^(30, 31). However, if you are ever in doubt, consult the CCDC.

Don't

- ✗ forget that sick absence periods also apply to staff.

Do

- ✓ make the school's illness absence policy available to parents/carers
- ✓ check with parents/carers that children are registered with a General Practitioner (GP) and encourage them to keep their children's vaccinations up to date
- ✓ ensure staff are aware that they need to keep their own vaccinations up to date
- ✓ keep abreast of changes to the national immunisation schedule, which can be accessed at www.immunisation.nhs.uk ⁽³²⁾
- ✓ make parents/carers aware that they need to inform you if their child has any illness or condition
- ✓ regularly update emergency contact numbers and children's medical details
- ✓ make contingency arrangements when parents/carers cannot be contacted or cannot collect a sick child
- ✓ keep abreast of current health issues
- ✓ consider having a named member of staff who can co-ordinate the school's response to outbreaks of infection
- ✓ immediately notify the head teacher if you suspect a child has an infectious disease
- ✓ inform the CCDC and follow the advice given if you suspect an outbreak (two or more cases of an infectious disease) ⁽²⁴⁾
- ✓ notify other parents/carers of occurrences of infections and provide regular updates during outbreaks
- ✓ seek advice from your school nurse, doctor or CCDC if in doubt.

Immunisations

Immunisation is an effective public health intervention, saving two million lives a year worldwide. Thanks to decades of immunisation, we rarely see childhood diseases such as whooping cough, polio and measles, which were once common in Wales, causing widespread death and disability.

The national outbreak of mumps, which peaked in 2005, emphasised that infections are always ready to return, but that immunisation can still bring them under control. Due to a decade of too few children receiving the measles, mumps and rubella (MMR) vaccine, 2006 saw the first UK death from measles in 14 years, and although the number of infections is low, it is increasing.

Many children entering school are still missing out on the protection vaccination provides. Around one in four children enter primary school with incomplete immunisations. Many pupils also miss the teenage boosters that extend the protection gained from vaccination into adulthood. The table below shows the immunisation schedule for children starting their immunisation programme after 4 September 2006 ⁽³²⁾. You can find further information on the NHS immunisation website ⁽³²⁾.

KEY FACT

Immunisation is the safest and most effective way to protect children from serious diseases.

When to immunise	What is given	How it is given
Two months old	Diphtheria, tetanus, pertussis, polio and Hib (DTaP/IPV/Hib) Pneumococcal (PCV)	One injection One injection
Three months old	Diphtheria, tetanus, pertussis, polio and Hib (DTaP/IPV/Hib) Meningitis C (Men C)	One injection One injection
Four months old	Diphtheria, tetanus, pertussis, polio and Hib (DTaP/IPV/Hib) Pneumococcal (PCV) Meningitis C (Men C)	One injection One injection One injection
Around 12 months	Hib and meningitis C (Hib/Men C)	One injection
Around 13 months	Measles, mumps and rubella (MMR) Pneumococcal (PCV)	One injection One injection
Three years four months to five years old (Before school entry)	Diphtheria, tetanus, pertussis and polio (dTaP/IPV or DTaP/IPV) Measles, mumps and rubella (MMR)	One injection One injection
13 to 18 years old (Before leaving school)	Tetanus, diphtheria and polio (Td/IPV) (+ MMR if not received 2 doses)	One injection

Hib = *Haemophilus influenzae* Type b vaccine, which protects children from a serious form of bacterial meningitis.

Some children who are considered to be at particular risk of a disease due to ill health or lifestyle factors may require additional immunisations.

Although immunisations are provided by the NHS, the school has an important role in supporting these programmes and disseminating information, particularly at the time of school entry, during school-based immunisation programmes, and in response to outbreaks of vaccine-preventable diseases.

Gastrointestinal infections

Gastrointestinal infections take many forms, but the main symptoms are vomiting, diarrhoea and abdominal pain. Diarrhoea is an increase in bowel frequency (three or more bowel movements within 24 hours may be indicative). A child with diarrhoea may also have loose bowel motions. There are many causes of diarrhoea, but sudden diarrhoea in children is usually due to infections caused by viruses, bacteria such as *E. coli*, Salmonella, Campylobacter and Shigella, and certain parasites such as Giardia. Infection is also the most common cause of vomiting in children. Sudden uncontrolled vomiting may indicate a viral infection. However, other important causes should be considered, such as ingestion of a harmful substance.

Gastrointestinal infections usually last only a short time, but symptoms can vary from mild to severe. For young children, gastrointestinal infections can be dangerous because of the risk of dehydration. If the faeces are very watery and accompanied by fever, vomiting or failure to feed, then urgent medical attention is required.

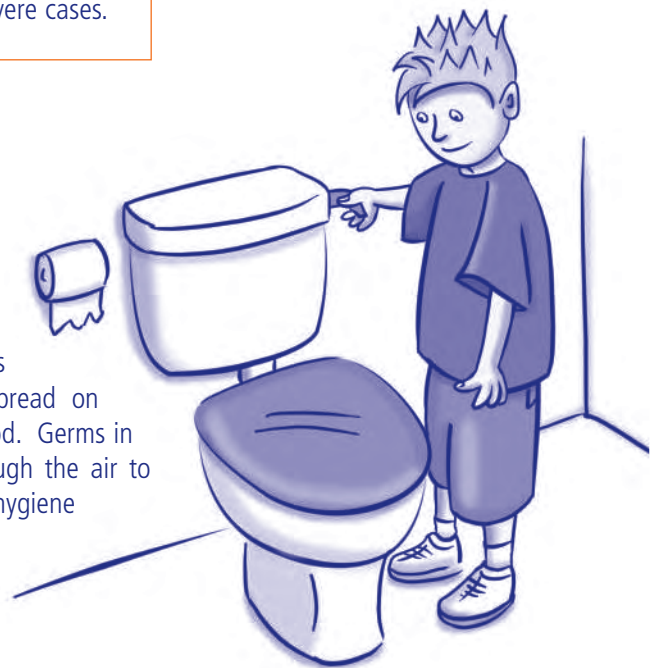
KEY FACT

Good hygiene is essential to prevent the spread of gastrointestinal infections.

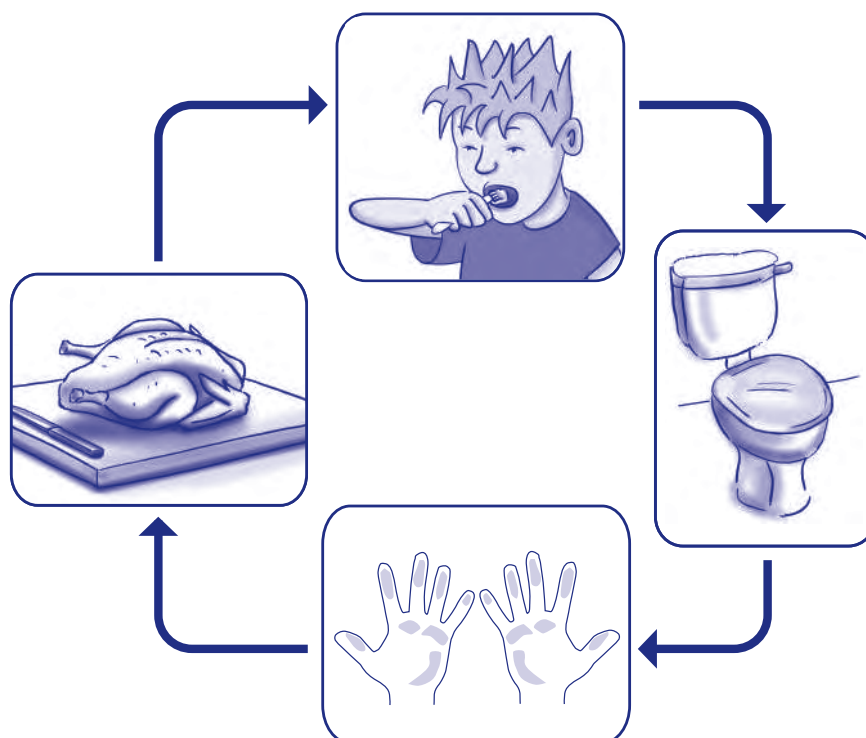
Incubation period:	Varies depending on the germ involved and can be from one hour to several days but is usually between 12 and 48 hours
Period of infectiousness:	Varies depending on the germ involved
Absence period:	Until at least 48 hours after symptoms have ceased
Treatment:	Treatment involves bed rest and making sure the patient drinks plenty of water to replace lost fluids. Intravenous fluid replacement is necessary for patients that become dehydrated. Antibiotics and hospitalisation may be necessary in severe cases.

Transmission

Gastrointestinal infections often arise by consuming food or water that is contaminated with germs (see **Food poisoning**). Infection can also occur through contact with animals (e.g. by putting unwashed hands into the mouth after touching an animal or surfaces contaminated by them). The germs can spread to others by the faecal-oral route. Germs are carried in faeces and spread on unwashed hands, e.g. to taps, flush handles, other children and food. Germs in aerosol droplets produced during vomiting can also spread through the air to others (e.g. Small Round Structured Virus or Norwalk virus). Good hygiene is essential to prevent gastrointestinal infections spreading.



■ How germs spread



KEY FACT

Germs spread easily from hands to food and kitchen surfaces. Good hand hygiene helps to prevent this.

■ Campylobacter

Campylobacter is the commonest cause of food poisoning in Wales. It causes severe diarrhoea and abdominal pain, 1 to 11 days after infection. Campylobacter bacteria are found in the intestines of birds (particularly poultry) and animals (particularly cattle and domestic pets). Transmission occurs through consuming undercooked meat (especially poultry), unpasteurised milk (or bird-pecked milk on doorsteps) and untreated water. It can also occur through contact with pets. Campylobacter can spread from person to person via the faecal-oral route. However, this is uncommon because the germs cannot survive long on surfaces.



■ Salmonella

Salmonella is the second most common cause of food poisoning. The bacteria are found in the intestines of wild and domestic animals, birds (especially poultry), reptiles, amphibians (e.g. terrapins), and occasionally humans. Infection is usually due to ingesting contaminated food (most commonly meat, raw eggs, milk and dairy products). It can result from eating cooked food that has been contaminated by raw food (e.g. by using the same knife to cut raw meat and bread), or failing to cook food thoroughly. It can also occur through faecal contamination from a person or animal. Faecal-oral transmission is common in outbreaks. Symptoms appear 12 to 72 hours after infection and include watery and sometimes bloody diarrhoea, abdominal pain, nausea, vomiting, headache and fever.

■ *Escherichia coli* (*E. coli*)

Most of the *E. coli* bacteria found in the human intestine are harmless. However, vero-cytotoxin-producing *E. coli* (VTEC) 0157 is a particularly nasty form that causes bloody diarrhoea. Symptoms occur within 1 to 14 days of infection. It is a serious infection that spreads easily amongst children and can cause kidney failure.

Cattle are often carriers of VTEC 0157 and one of the main sources of infection is beef. Outbreaks are often linked to consuming contaminated beef and beef products (e.g. undercooked burgers) but also milk, yoghurt, cooked meats, meat pies, cheese, salami, raw vegetables, unpasteurised apple juice and water. They have also occurred through contact with animals, particularly on farms or in animal sanctuaries. The infection can spread rapidly from person to person via the faecal-oral route, particularly in situations where children are in close contact.

Dealing with gastrointestinal infections

- You must bar anyone with vomiting or diarrhoea from school until at least 48 hours after symptoms have ceased.
- At boarding schools, if the child cannot go home, then try to allocate the affected child/children dedicated toilet facilities.
- If a staff member who handles food develops diarrhoea or vomiting, seek advice from the CCDC.
- Remove any spills of faeces or vomit immediately, and clean and disinfect the surrounding area.
- In the event of children vomiting or having diarrhoea, clean and disinfect toilet seats, flush handles, taps and toilet door handles immediately in addition to the routine cleaning schedule. In the case of a suspected or actual outbreak, take advice from the EHO or CCDC on increasing cleaning frequencies.
- If you suspect that children are part of an outbreak of gastrointestinal infection (two or more cases of diarrhoea or vomiting), inform the CCDC and EHO (according to local guidelines) immediately⁽²⁴⁾. You will need to liaise closely with the CCDC and EHO to prevent further spread.
- Keep accurate records of symptoms, children affected and dates of onset of illness.
- Good hygiene is important at all times. However, during an outbreak, the CCDC or EHO may recommend more stringent hygiene procedures that will help to prevent further cases. This may include;
 - tracing and destroying contaminated food
 - using an alcohol disinfectant solution to decontaminate hands
 - more frequent and rigorous disinfection of surfaces and equipment
 - discontinuing cooking lessons, water and sand play
 - notifying all parents/carers of the outbreak
 - possible temporary closure of the school for thorough environmental cleansing.

Do

- ✓ consider the possibility that a child who is vomiting may have ingested a harmful substance
- ✓ take a vomiting child to the nearest Accident and Emergency Department if ingestion is suspected or if vomiting is accompanied by severe headache, stiff neck, severe abdominal pain, rash (particularly if widespread), or an inability to tolerate strong light or sound, or other symptom of meningitis
- ✓ give the child water to drink if no other symptoms are present
- ✓ contact parents/carers to collect a child with vomiting or diarrhoea
- ✓ ensure children's hands are thoroughly washed after every visit to the toilet and before eating
- ✓ ensure staff with symptoms remain away from school for the whole of the required period
- ✓ understand that some infectious causes of diarrhoea and vomiting in children may only cause symptoms of abdominal pain in adults (e.g. *Shigella*). The adult should still be regarded as infectious and stay away from school.

Don't

- ✗ give a vomiting child anything to eat
- ✗ leave a vomiting child unattended.

Threadworms

Threadworms are the most common intestinal parasite in Wales. They are sometimes called 'pinworms', or more accurately *Enterobius vermicularis*. The usual symptom is itching of the skin around the bottom (anus) caused by the female worms laying eggs on the skin around the anus. Scratching the anal area leads to the eggs being transmitted on fingers to the mouth, often on food eaten with unwashed hands. Repeated scratching can cause the skin to become infected and broken. Threadworm is transmitted directly from hand to mouth, and indirectly via contact with clothing, bedding, food or other articles contaminated with the worm's eggs. If threadworm eggs are present on these articles, they can remain viable for up to 3 weeks.

Incubation period:	15 – 28 days
Period of infectiousness:	Possibly indefinite if untreated
Absence period:	None
Treatment:	Oral drugs usually provide effective treatment but their use must be combined with hygienic measures to break the cycle of reinfection. All cases should see their GP or pharmacist for advice. If a member of the household has threadworms, the entire family will need to be treated. It is important to continue treatment as directed by the GP.



Do

- ✓ advise parents/carers to take their child to the GP for immediate treatment
- ✓ discourage scratching of the anal area
- ✓ encourage frequent changes of underclothes, night clothes and bedding and daily morning baths or showers
- ✓ advise parents/carers to ensure the infected child washes their hands immediately on waking
- ✓ advise parents/carers to ensure the infected child wears clean underpants to sleep in
- ✓ encourage parents/carers to wash clothing and bedding at 60°C to ensure threadworm eggs are destroyed
- ✓ encourage staff and children to practice good personal hygiene at all times, especially careful hand washing after visiting the toilet and before eating.

Don't

- ✗ ignore signs of infection (e.g. anal irritation); inform the parent/carer if you suspect their child has threadworms.

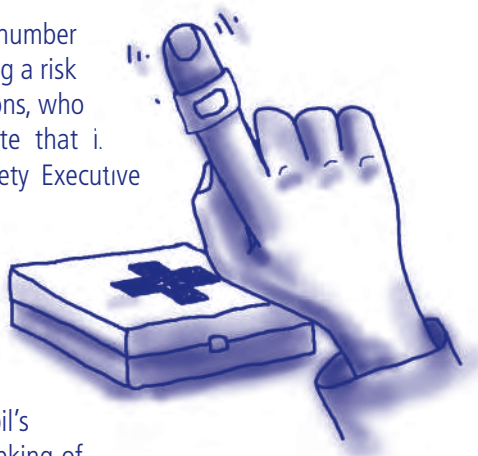
First aid

The Health and Safety (First Aid) Regulations 1981 require that all schools have a sufficient number of first aid boxes ⁽³³⁾. The appropriate number should be determined using a risk assessment. You may wish to provide a first aid box in each classroom and have a kit for taking on outings. A designated staff member should check the contents of each first aid box regularly against a list and replace the contents as necessary. Minimum contents should include;

- a leaflet giving general guidance on first aid, e.g. Health and Safety Executive leaflet 'Basic advice on first aid at work' ⁽³⁴⁾
- twenty individually wrapped sterile adhesive dressings (assorted sizes)
- two sterile eye pads
- four individually wrapped triangular bandages (preferably sterile)
- six safety pins
- six medium-sized (approximately 12 cm x 12 cm) individually wrapped sterile unmedicated wound dressings
- two large (approximately 18 cm x 18 cm) sterile individually wrapped unmedicated wound dressings
- one pair of disposable gloves.

You should not keep any tablets, creams or medicines in the first aid box. The box should be clearly identifiable and must be easily accessible to staff but kept out of reach of children.

Schools should have a sufficient number of first aiders (determined following a risk assessment) at appropriate locations, who hold a current first aid certificate that is approved by the Health and Safety Executive (HSE). At least one member of staff who has a current first aid training certificate should be on the premises or on outings at all times. Written parental permission should be requested at the time of a pupil's admission to the school to the seeking of any necessary emergency medical advice or treatment in the future. You must keep a signed record of any accidents to children, and notify HSE of any serious injury or death to any child in your care or adults on the premises.



Do

- ✓ ensure the school has a satisfactory first aid policy ⁽⁷⁾
- ✓ wash hands thoroughly after performing first aid procedures (after removing gloves)
- ✓ clean up any blood and body fluid spills immediately
- ✓ ensure that any first aid training undertaken is updated every three years
- ✓ ensure that all staff including agency staff and volunteers are aware of the school's first aid policies and procedures and know who the appointed first aiders are.

Don't

- ✗ panic when an accident occurs. Keep calm and reassure the injured person.

References

1. Welsh Assembly Government (2006) *Mind the germs! Infection control guidance for nurseries, playgroups and other childcare settings*. Available at: new.wales.gov.uk/topics/health/protection/communicable-disease/germs/?lang=en.
2. Welsh Assembly Government (2004) *Immunisation fact sheet*. Available at: new.wales.gov.uk/topics/health/protection/immunisation/leaflets/?lang=en.
3. Welsh Assembly Government (2005) *Your guide to pre-school immunisations for 3- to 5- year olds*. Available at: new.wales.gov.uk/topics/health/protection/immunisation/leaflets/?lang=en.
4. Children's Commissioner for Wales (2004) *Lifting the lid on the nation's school toilets*. Available at: www.childcom.org.uk.
5. International Scientific Forum on Home Hygiene (IFH) (2001) *Recommendations for selection of suitable hygiene procedures for use in the domestic environment*. Intramed Communications s.r.l., Italy. Available at: www.ifh-homehygiene.org.
6. Workplace (Health, Safety and Welfare) Regulations 1992. Statutory Instrument 1992 No. 3004. London: HMSO. Available at: www.opsi.gov.uk.
7. The Independent Schools Standards (Wales) Regulations (2003). Welsh Statutory Instrument 2003 No. 3234 (W314). London: HMSO. Available at: www.opsi.gov.uk.
8. Control of Substances Hazardous to Health (COSHH) Regulations 2002. Statutory Instrument 2002 No.2677. London: HMSO. Available at: www.opsi.gov.uk.
9. Welsh Assembly Government (2002) *National minimum standards for boarding schools*. Available at: www.csiv.wales.gov.uk.
10. Horton R (1996) Handwashing: The fundamental infection control principle. *British Journal of Nursing* **4**(16):926-933.
11. Worsley MA, Ward KA, Privett S, Parker L and Roberts JM (eds) (1994) *Infection Control: A Community Perspective*. England: Infection Control Nurses Association.
12. Gould D (1994) Making sense of hand hygiene. *Nursing Times* **90**(30):63-64.
13. IFH (1998) *Guidelines for prevention of infection and cross infection in the domestic environment*. Intramed Communications s.r.l., Italy. Available at: www.ifh-homehygiene.org.
14. Gould D (1996) Hand hygiene to prevent infection in the community. *Health Visitor* **69**(8):325-329.
15. The Education (School) Premises Regulations (1999) Statutory Instrument 1999 No. 2. ISBN 0 11 080331. London: HMSO. Available at: www.opsi.gov.uk.
16. Education and resources for improving childhood continence (ERIC) (2003) *Bog standard campaign – Promoting better toilets for pupils*. Available at : www.bog-standard.org.
17. Food Standards Agency – Wales. Available at: www.food.gov.uk/aboutus/publications.
18. Department of Health (1990) Food Safety Act. London: HMSO.
19. National Assembly for Wales (2003) *Nutritional standards for school lunches*. Circular No. 03/2003. Available at: www.learning.wales.gov.uk.
20. Welsh Assembly Government (2006) *Think water – Guidance on water in schools*. Available at: www.new.wales.gov.uk/topics/health/improvement/children/schools/nutrition/?lang=en.

-
21. Welsh Assembly Government (2000) *Fruit tuck shops in primary schools: A practical guide to planning and running a school fruit tuck shop*. Available at: www.new.wales.gov.uk/topics/health/improvement/children/schools/nutrition/?lang=en.
 22. Hale and Polder (1996) *The ABCs of safe and healthy child care. A handbook for childcare providers*. Department of Health and Human Services. US Public Health Services, CDC.
 23. Jackson P, O'Sullivan D, Cleary V, Slaughter R, McLeod B, Theophilus M, Phillips F, Cruise K, Daley S, Thomson I and Adie B (1999) *Health matters in early years*. In Lambeth, Southwark and Lewisham.
 24. Health Protection Agency and Department of Health (2006) *Guidance on infection control in schools and nurseries*. Available at: www.hpa.org.uk and www.wiredforhealth.gov.uk.
 25. Health and Safety Executive (2002) *Avoiding ill health at open farms – Advice to farmers (with teacher's supplement) Agricultural Information Sheet No 23 (revised)*. Available at: www.hse.gov.uk.
 26. National Assembly for Wales (1999) *Health and safety of school pupils on educational visits: A good practice guide*. Circular No. 2/99. Available at: www.learning.wales.gov.uk.
 27. Health Protection Agency (2003) *Guidelines on the management of communicable diseases in schools and nurseries: Evidence based data on the incubation periods and periods of infectiousness of infectious diseases*. Available at: www.hpa.org.uk.
 28. Working Group of the PHLS Advisory Committee on Gastrointestinal Infections (2004) Preventing person-to-person spread following gastrointestinal infections: Guidelines for public health physicians and environmental health officers. *Communicable Disease & Public Health* 7(4):362-384.
 29. National Assembly for Wales (1994) *The education of sick children*. Circular No. 57/94. Available at: www.learning.wales.gov.uk.
 30. National Public Health Service for Wales – Infection and Communicable Disease Service. Available at: www2.nphs.wales.nhs.uk/icds/.
 31. NHS Direct Wales. Telephone: 0845 46 47. Available at: www.nhsdirect.wales.nhs.uk.
 32. Department of Health (2006) NHS immunisation information. Available at: www.immunisation.nhs.uk.
 33. Health and Safety Executive (1981) Health and Safety (First Aid) Regulations. Statutory Instrument 917. London: HMSO.
 34. Health and Safety Executive (1997) *Basic advice on first aid at work*. IND(G)215L. Sudbury: HSE Books. Available at: www.hse.gov.uk.

Acknowledgements

This publication has been adapted by the Welsh Assembly Government from a national guidance document for UK childcare settings, which was developed in collaboration with the Community Practitioners' and Health Visitors' Association (Amicus/CPHVA) and the Infection Control Nurses Association (ICNA) and is broadly based on 'Health matters in early years – In Lambeth, Southwark and Lewisham'; an excellent local guidance document ⁽²³⁾. With permission from Reckitt Benckiser, the sponsors of the UK guidance document, we have expanded and adapted the information specifically for staff working in schools in Wales. The Welsh Assembly Government would like to thank those who were involved in producing the UK guidance document for their support;

- Janet Howard
- Vivien Cleary
- Pat Jackson
- Fiona Phillips
- Lynn Parker.

The Welsh Assembly Government would also like to thank the following for their support with this publication;

- Pat Cole, Educational Project Advisor
- Karen Stocker, Freelance Medical Writer
- Obi Amadi, Lead Professional Officer, Amicus/CPHVA
- Jean Lawrence, Chairperson ICNA, Director Infection Prevention & Control, Leeds Mental Health Teaching NHS Trust
- National Public Health Service for Wales (NPHS)
- Food Standards Agency – Wales.

The Welsh Assembly Government would especially like to thank the following organisations for their continuing support with this publication;



Community Practitioners' and Health Visitors' Association (Amicus/CPHVA)



Infection Control Nurses Association (ICNA)



Reckitt Benckiser, the makers of Dettol.

Notes