

Controlling Infectious Disease to Maintain a Healthy Education Environment. Quick Reference Guide

Final April 19th 2017

1. Introduction

This document provides those working within education settings with a quick reference to infection prevention and control.

For full guidance staff should refer to All Wales Infection Prevention and Control Guidance for Educational Settings, 2017.

A variety of organisms can cause infectious disease, which can result in absence from education settings. Outbreaks ¹ of gastrointestinal illness such as Norovirus can affect large numbers of learners and staff causing significant disruption to the educational setting. Outbreaks and cases of infectious disease represent a burden to the affected individual, the education setting, parents, and the wider community through days lost from education, parents taking time off work and the potential for spread of infection into the wider community. It is therefore vitally important that clear effective guidelines for the prevention and control of infection are in place and implemented within all education settings.

¹ An outbreak can be defined as:

- Two or more cases of infection linked either by time, place, or person (e.g. both cases attended the same event/ both ate the same food/ both have been in contact with someone infectious); or
- An increase in the number of cases of disease normally observed.

2. Welcoming Individuals to the Education Setting

When any learner begins attending an education setting it is beneficial to clearly communicate key infection prevention and control expectations and requirements. Included below is an example of a letter that provides key information but can be amended to relate specifically to your setting.

[Insert school address]

[Insert date]

Dear Parent/Carer,

As a nursery/ school we place great importance on creating a safe and healthy environment for all children to maximise attendance, improve life chances and general well-being.

When welcoming learners we feel it is useful to provide parents/carers with key information which will reduce the risk of your child getting an infection. With your help we can minimise the risk associated with circulating infectious diseases and request you follow this advice:

Cases of infectious disease

- If your child has symptoms suggestive of an infection, they should not attend nursery/school. Please keep them at home and contact your doctor, local pharmacy or NHS Direct Wales on 0845 4647
- If your child has diarrhoea and/or sickness it is essential that they do not attend nursery/school. Please keep them at home until diarrhoea and/or sickness has stopped for at least 48 hours.
- Inform us immediately if your child has an infectious disease. This will enable the nursery/school to undertake any action if necessary.

Vulnerable/at risk children

If your child is particularly at risk of becoming ill from an infectious disease, either
because they have a medical condition which affects their immunity or are not
vaccinated (this includes if they have not had a full course of a vaccine), please let us
know. This is important so we can tell you about any infectious diseases within the
school that could put your child at risk.

Vaccinations

 Please ensure your child is up to date with recommended vaccinations. The routine immunisation schedule for Wales is attached which outlines the vaccinations your child should have been offered.

• If you are concerned that your child has not received all of their vaccinations please speak to your doctor as soon as possible. To find your nearest doctor's/GP surgery, visit: http://www.wales.nhs.uk/eng.

If you have any further questions or queries please contact the nursery/school on xxxxxxxxxxx.

Yours sincerely,

The Routin	The Routine Immunisation Schedule Wales from May 2016		
Age Due	Diseases Protected Against		
2 months	 Diphtheria, tetanus, pertussis (whooping cough), polio, and Haemophilus influenzae type b - Injection Pneumococcal Injection Rotavirus gastroenteritis - Oral Meningococcal group B- injection 		
3 months	 Diphtheria, tetanus, pertussis (whooping cough), polio, and HIB- injection Rotavirus oral 		
4 months	 Diphtheria, tetanus, pertussis (whooping cough), polio, and HIB - Injection Pneumococcal -Injection Meningococcal group B-Injection 		
Between 12 and 13 months	 Hib/Meningococcal group C -Injection Measles, Mumps and Rubella - Injection Pneumococcal Injection Meningococcal group B-Injection 		
2 and 3 years old and children in school reception class, year 1,2 and 3	Influenza (flu) – each year from September Nasal spray.		
3 years and four months	 Diphtheria, tetanus, pertussis (whooping cough) and polio - Injection Measles, Mumps and Rubella Injection 		
14 years old (school year 9)	Human Papillomavirus-Two injections		
14 years	 Diphtheria, tetanus and polio -Injection Meningococcal groups A, C, W and Y (ACWY). Injection 		

3. Period to keep Individuals away from the setting.

Individuals with a suspected or confirmed infectious disease should not attend the education setting during the time they are considered infectious.

Main Points:

- Please refer to the tables below for guidance as to whether an individual should not attend the setting from an infectivity perspective. If uncertain individuals should remain at home and seek advice from NHS Direct Wales 08454647, their local pharmacy or GP
- It must be remembered that the periods for which individuals should be kept away from education settings within this document are based upon period of infectivity and not upon a risk assessment of whether individuals are well enough to attend
- Individuals (learners or staff) with diarrhoea and/or vomiting should not attend the educational setting until they have had no symptoms for at least 48 hours
- Individuals with unexplained rashes should be considered infectious until health advice is obtained
- Educational settings should keep a record of learners and staff with a medical condition or receiving treatment that may affect their immunity e.g. chemotherapy or high dose steroids. This is of upmost importance during outbreaks/ incidents of infectious disease
- If additional advice is required or an outbreak is suspected please contact your local health protection team (numbers are listed in Section 1) so appropriate advice can be provided
- In the event of a learner or parent not co-operating with advice to keep learners away from the education setting please seek advice from your local health protection team.

Rashes/ Skin Infections

Infection or Complaint	Period individual to be kept away from educational Setting/ child minder	Comments
Athlete's foot	None, attendance at discretion of health care professional.	Athlete's foot is not a serious condition. Treatment is recommended.
Chickenpox	Until all vesicles (blisters) have crusted over.	See: Pregnant Women at section 7 and Vulnerable Individuals at Section 8.
Cold sores, (Herpes simplex)	None, attendance at discretion of health care professional.	Avoid kissing and contact with the sores. Cold sores are generally mild and self-limiting.
German measles (rubella)*	Four days from onset of rash.	Preventable by vaccination and contained within the UK routine immunisation schedule (MMR x2 doses). See: Pregnant Women at section 7.
Hand, foot and mouth	None, attendance at discretion of health care professional.	Contact your local Health Protection Team if a large number of learners are affected. Keeping individuals from the setting may be considered in some circumstances.
Impetigo	Until affected areas are crusted and healed, or 48 hours after starting antibiotic treatment.	Antibiotic treatment speeds healing and reduces the infectious period.
Measles*	Four days from onset of rash.	Preventable by vaccination and contained within the UK routine immunisation schedule (MMR x2). See: Pregnant Women at section 7 and Vulnerable Individuals at Section 8.
Molluscum contagiosum	None, attendance at discretion of health care professional.	A self-limiting condition.
Ringworm	None, attendance at discretion of health care professional.	Treatment is required.
Roseola (infantum)	None, attendance at discretion of health care professional.	None.
Scabies	Individual can return after first treatment.	Household and close contacts require treatment.
Scarlet fever*	Individual can return 24 hours after starting appropriate antibiotic treatment.	Antibiotic treatment is recommended for the affected child.

Infection or Complaint	Period individual to be kept away from Educational Setting/ child minder	Comments
Slapped cheek/fifth disease. (Parvovirus B19)	None (once rash has developed) attendance at discretion of health care professional.	See: Pregnant Women at section 7 and Vulnerable Individuals at Section 8.
Shingles	Individual only to be kept away from setting if rash is weeping and cannot be covered.	Can cause chickenpox in those who are not immune, ie have not had chickenpox. It is spread by very close contact and touch. If further information is required, contact your local Health Protection Team, See: Pregnant Women at section 7 and Vulnerable Individuals at Section 8.
Warts and verrucae	None, attendance at discretion of health care professional.	Verrucae should be covered in swimming pools, gymnasiums and changing rooms.

Diarrhoea and vomiting illness

Infection or Complaint	Period individual to be kept away from	Comments
	Educational Setting/ child minder	
Diarrhoea and/or	48 hours from last episode of diarrhoea	
vomiting	or vomiting.	
E. coli O157 VTEC	Should be kept away from setting for 48	Learners aged 5 years or younger and those who have difficulty in
Typhoid* [and	hours from the last episode of diarrhoea.	maintaining good personal hygiene need to be kept away from the
paratyphoid*]	Some individuals may need to be kept	education setting until there is proof they are not carrying the germ
(enteric fever)	away from setting until they are no	(microbiological clearance)adhering to hygiene practices need to be
Shigella (dysentery)	longer excreting.	kept away from setting. This guidance may also apply to some people
		the individual has been in contact with that may also require
		microbiological clearance. Please consult your local Health Protection
		Team for further advice.
Cryptosporidiosis	Keep away from setting for 48 hours	Individuals should not be permitted to swim for two weeks after the
	from the last episode of diarrhoea.	last bout of diarrhoea has ended.

Respiratory Illness

Infection or Complaint	Period individual to be kept away from Educational Setting/ child minder	Comments
Flu (influenza)	Until recovered.	See: Vulnerable Individuals section 8.
Tuberculosis*	Always consult your local Health Protection Team.	Requires prolonged close contact for spread.
Whooping cough* (pertussis)	48 hours from starting antibiotic treatment, or 21 days from onset of illness if no antibiotic treatment.	Preventable by vaccination and contained within UK routine immunisation schedule. After treatment, non-infectious coughing may continue for many weeks. Your local Health Protection Team can assist in tracing people the individual may have had contact with if necessary.

Other Infections

Infection or Complaint	Period Individual to be kept away from Educational Setting/ child minder	Comments
Conjunctivitis	None, attendance at discretion of health care professional.	If an outbreak/cluster occurs, consult your local Health Protection Team for advice
Diphtheria *	Must not attend setting Always consult with your local HPT.	Preventable by vaccination and contained within the UK routine immunisation schedule. Family contacts must be kept away from setting until cleared to return by your local Health Protection Team. Your local Health Protection Team will consider the risk that any contact the individual has had with others if necessary.
Glandular fever	None, attendance at discretion of health care professional.	
Head lice	None, attendance at discretion of health care professional.	Treatment is recommended only in cases where live lice have been seen.
Hepatitis A*	Individuals should be kept away from setting until 7 days after onset of jaundice (or 7days after symptom onset if no jaundice).	In an outbreak of hepatitis A, your local Health Protection Team will advise on control measures.
Hepatitis B*, C*, HIV/AIDS	None, attendance at discretion of health care professional.	Hepatitis B and C and HIV are blood borne viruses that are not infectious through casual contact.
Meningococcal meningitis*/ septicaemia*	Until recovered.	Several types of Meningococcal disease are preventable by vaccination. There is no reason to keep siblings or other close contacts of the individual from attending education settings. In the case of an outbreak, it may be necessary to provide antibiotics with or without meningococcal vaccination to close school contacts. Your local Health Protection Team will advise on any action is needed.

Infection or Complaint	Period Individual to be kept away from Educational Setting/ child minder	Comments
Meningitis* due to other bacteria	Until recovered.	Hib and pneumococcal meningitis are preventable by vaccination. There is no reason to keep siblings or other close contacts of a case away from setting. Your Health Protection Team will give advice on any action needed.
Meningitis viral*	None, attendance at discretion of health care professional.	Milder illness. There is no reason to keep siblings and other close contacts of the individual away from setting. Tracing people the individual has had contact with is not required.
MRSA	None, attendance at discretion of health care professional.	Good hygiene, in particular handwashing and environmental cleaning, are important to minimise spread. If further information is required, contact your local Health Protection Team.
Mumps*	Keep away from setting for five days after onset of swelling.	Preventable by vaccination and contained within the UK routine immunisation schedule (MMR x2 doses).
Threadworms	None, attendance at discretion of health care professional.	Treatment is recommended for the individual and household contacts.
Tonsillitis	None, attendance at discretion of health care professional.	There are many causes, but most cases are due to viruses and do not need an antibiotic.

^{*}Denotes a notifiable disease. It is a statutory requirement that doctors report a notifiable disease to the proper officer of the local authority (usually a Consultant in Communicable Disease Control or Consultant in Health Protection). In addition, organisations may be required via locally agreed arrangements to inform their local Health Protection Team. Regulating bodies may wish to be informed – please refer to local policy.

Outbreaks: if an outbreak of infectious disease is suspected, please contact your local Health Protection Team.

- Further information regarding vaccine preventable diseases and vaccines can be found at: https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book.

^{*}Lists of notifiable diseases and advised periods that individuals should be kept away from settings are reviewed and updated periodically and can be accessed at: http://www.legislation.gov.uk/uksi/2010/659/schedule/1/made

4. Good Infection Prevention and Control Practices

Hand washing



Hand washing is one of the most important ways of controlling the spread of infections, especially those that cause diarrhoea, vomiting and respiratory disease. The recommended hand washing method is the use of liquid soap, warm water, and paper towels or hand drier. Hands should always be washed after using the toilet, before eating or handling food, after handling animals and whenever visibly dirty. Further information can be found in Chapter 9 of the *All Wales Infection Prevention and Control Guidance for Educational Settings, 2017.* Further interactive resources can be accessed via E-bug

Coughing and sneezing



Coughing and sneezing easily spread infections. When coughing or sneezing individuals should be encouraged to cover their nose and mouth with a tissue. Tissues should be disposed of appropriately and hands washed after using or disposing of tissues. Spitting should be discouraged.

Further interactive resources can be accessed via E-bug

Cleaning of blood and body fluid spillages



Spillages of blood, faeces, saliva, vomit, nasal and eye discharges should be cleaned up immediately by individuals wearing appropriate Personal Protective Equipment (PPE). When blood and body fluid spillages occur, use a cleaning product that is effective against both bacteria and viruses, ensuring the manufacturer's instructions are followed. Never use mops for cleaning up body fluids. Suitable spillage kits with the necessary equipment to safely deal with blood and body fluid spillages should be available at all times and staff should be aware of their application. Further guidance is available within Chapter 15 of the *All Wales Infection Prevention and Control Guidance for Educational Settings*, 2017.

Sharps injuries and bites



If skin is broken, encourage the wound to bleed and wash thoroughly using soap and water. Individuals who have been bitten should contact a GP, occupational health or A&E department immediately. A local policy should be in place for individuals to follow.

Further information regarding Blood Borne Virus exposure can be obtained in Chapter 19 of the *All Wales Infection Prevention and Control Guidance for Educational Settings, 2017* or your local health protection team.

Toilet Facilities



Transmission of germs from toilets is commonly associated with direct contact with the toilet but germs can also be transmitted by touching contaminated surfaces within the toilet environment. These surfaces include toilet handles, toilet seats, hand washing sinks etc. Adequate environmental cleaning and personal hygiene measures within the toilet areas are vital. To assist educational settings in maintaining adequate toilet standards a checklist can be found in appendix 4 of the *All Wales Infection Prevention and Control Guidance for Educational Settings, 2017.* Education settings should undertake this checklist each term to ensure standards are maintained.

5. Animals



Pets and other animals in education settings can pose a risk of infection, including gastro-intestinal infections, fungal infections and parasites. Before deciding to keep animals in the educational setting or allowing visitors to bring them in sensible protocols and infection prevention and control precautions must be in place. There should be a written policy with regard to animals in an education setting.

Further information and guidance can be found in Chapter 21 of the *All Wales Infection Prevention and Control Guidance for Educational Settings, 2017* or your local health protection team.

6. Farm Visits



Whilst it is popular to visit farms and zoos, there are a number of infections that can be passed on to learners and staff from infected animals. Serious outbreaks have been associated with visits to farms and zoos (e.g. Escherichia *coli* O157 (E. *coli* O157). Even farm animals that look clean and healthy will carry a range of germs such as campylobacter, salmonella and cryptosporidium which can be passed on and cause infection in humans. They can also carry the bacteria Escherichia *coli* O157 (E. *coli* O157), which is very infectious and can cause extremely severe or lifethreatening illness.

It is vital that education settings have a policy on such visits, which is known and followed by all staff.

Pregnant women should have received two doses of MMR vaccination before becoming pregnant, if not received then MMR should be given after the delivery of the baby.

7. Pregnant Women



Pregnant women should have received 2 doses of MMR vaccination before becoming pregnant, if 2 MMR have not be received prior to pregnancy MMR vaccinations should be given after delivery of the baby.

If a pregnant woman develops a rash or is in direct contact with an individual with a potentially infectious rash, she should be advised to inform her doctor or midwife immediately for further investigation. Some specific risks include;

- Chicken pox
- Rubella (German Measles)
- Slapped cheek disease (Parvovirus B19)
- Measles.

The greatest risk of exposure to such infections for pregnant women usually comes from their own child/ children, rather than a work place or place of study. All pregnant women should receive vaccination against pertussis and influenza during each pregnancy. Further information and guidance is available within Chapter 18 of the All Wales Infection Prevention and Control Guidance for Educational Settings, 2017 or your local Health Protection Team.

8. Vulnerable Individuals



Some medical conditions make individuals more vulnerable to infections that would rarely be serious in others; these include those receiving treatment for leukaemia or other cancers, those on high doses of steroids or other with conditions that seriously reduce immunity. Education settings will normally have been made aware of such individuals. These individuals are particularly vulnerable to chickenpox, measles or parvovirus B19 and, if exposed to either of these, the learner/parent/carer should be informed promptly and further medical advice sought.

9. Vaccinations



Immunisation status should always be checked at entry to an education setting and at any time when further vaccination is required in line with UK schedule. Learners should be encouraged to remain up to date with their vaccinations and to arrange catchup doses of any missed immunisation through their G.P or school nursing service. For the most up-to-date immunisation advice see the NHS Direct Wales website www.nhsdirect.wales.nhs.uk or the school health service can advise on the latest national immunisation schedule available on page 15 of this document.

In addition to the routine immunisation schedule, there is also a Meningococcal ACWY catch up programme for all young people born after 1st September 1996 and those under 25 years of age starting university for the first time.

Age due	Diseases protected against	Vaccine given ar	nd trade name	Usual site ¹
Age due	Diphtheria, tetanus, pertussis (whooping	vaccine given ai	id trade flame	OSuai Site
	cough), polio and <i>Haemophilus</i> influenzae type b (Hib)	DTaP/IPV/Hib	Pediacel or Infanrix IPV Hib	Thigh
2 months old	Pneumococcal (13 serotypes)	Pneumococcal conjugate vaccine (PCV)	Prevenar 13	Thigh
	Meningococcal group B (MenB) ²	MenB ²	Bexsero	Left thigh
	Rotavirus gastroenteritis	Rotavirus	Rotarix	By mouth
	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib	Pediacel or Infanrix IPV Hib	Thigh
3 months old	Rotavirus	Rotavirus	Rotarix	By mouth
	Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib	Pediacel or Infanrix IPV Hib	Thigh
4 months old	MenB ²	MenB ²	Bexsero	Left thigh
	Pneumococcal (13 serotypes)	PCV	Prevenar 13	Thigh
	Hib and MenC	Hib/MenC booster	Menitorix	Upper arm/thigh
	Pneumococcal (13 serotypes)	PCV booster	Prevenar 13	Upper arm/thigh
12 months old	Measles, mumps and rubella (German measles)	MMR	MMR VaxPRO ³ or Priorix	Upper arm/thigh
	MenB ²	MenB booster ²	Bexsero	Left thigh
2 and 3 years old and children in school reception class, year 1,2 and 3	Influenza (each year from September)	Live influenza vaccine	Fluenz Tetra ^{3,4}	Both nostrils
3 years 4	Diphtheria, tetanus, pertussis and polio	DTaP/IPV	Infanrix IPV or Repevax	Upper arm
months old	Measles, mumps and rubella	MMR (check first dose given)	MMR VaxPRO ³ or Priorix	Upper arm
Girls aged 12 to 13 years (school year 8)	Cervical cancer caused by human papillomavirus (HPV) types 16 and 18 (and genital warts caused by types 6 and 11)	HPV (two doses 6-12 months apart)	Gardasil	Upper arm
14 years old	Tetanus, diphtheria and polio	Td/IPV (check MMR status)	Revaxis	Upper arm
14 years old (school year 9)	Meningococcal groups A, C, W and Y disease	MenACWY	Nimenrix or Menveo	Upper arm
65 years old	Pneumococcal (23 serotypes)	Pneumococcal polysaccharide vaccine (PPV)	Pneumovax II	Upper arm
65 years of age and older	Influenza (each year from September)	Inactivated influenza vaccine	Multiple	Upper arm
70 years old	Shingles	Shingles	Zostavax ³	Upper arm

10. Outbreak Management

An outbreak is defined as two or more cases of infection linked by time, place, or person, or an increase in the number of cases of disease normally observed.

Both the local HPT and EHO should be informed by the educational setting by telephone as soon as an outbreak of any disease is suspected to enable prompt and appropriate action to be taken to prevent further spread.

Accurate documentation of all individual cases that are thought to be part of an outbreak is vitally important. Staff are advised to ensure that all records are accurate and up to date, an example of an outbreak record form can be found below.

If further assistance is required, please contact your local Health Protection Team.

Outbreak Action	Sign	Date and Time
Inform local Health Protection Team as soon		
as you suspect an outbreak.		
Remind staff to report their own illnesses as		
well as those attending the educational		
setting		
Identify a member of staff to be responsible		
for maintaining records of all involved in the		
outbreak including the following		
information;		
Name of individual involved		
Class affected		
 Symptoms of each individual 		
 Absence and return dates 		
Identify an individual who will;		
Arrange for symptomatic individuals		
to be taken from the setting		
Keep ill individuals away from non		
infected individuals until they are		
taken from the setting		
 In cases of diarrhoea and/ or 		
vomiting remind individual/ parent/		
carer that affected individual must		
not return to the setting until after		
48 hours of being free of symptoms		
Review the list of vulnerable		
contacts/ pregnant women.		

Identify an individual to be responsible for	
communicating information provided by the	
local Health Protection Team.	

11. Useful Contact Numbers

Agency	Contact Number
Health Protection Team, Public Health Wales	
North Wales	01352 803234
Mid and West Wales	01792 607387
South East Wales (Gwent)	01495 332219
South East Wales (Cardiff)	0300 00 300 32
Local Authority Environmental Health Department	
North Wales	
Isle of Anglesey County Council	01248 752820
Conwy County Borough Council	01492 575283
Denbighshire County Council	01824 706405
Flintshire County Council	01352 703386
Gwynedd Council	01766 771000
Wrexham County Borough Council	01978 315752
Mid and West Wales	
Carmarthenshire County Council	01267 228706 / 228939
Bridgend County Council	02920 873823
Powys County Council	0845 602 7037
Pembrokeshire County Council	01437 775631
City and County of Swansea	01792 635640
Neath Port Talbot County Borough Council	01639 685623
Ceredigion County Council	01545 572151
South East Wales	
Rhondda Cynon Taf County Council	01443 425525 / 425575
Merthyr Tydfil Borough Council	01685 725029 / 725260
Cardiff Council	02920 873819 / 873832
Vale of Glamorgan Council	02920 873819 / 873832
Blaenau Gwent County Borough Council	01495 357813 / 355964

Caerphilly County Borough Council	01443 811342
Monmouth County Council	01873 735497 / 635701
Newport City Council	01633 851700 / 851719
Torfaen County Borough Council	01633 647261 / 647258

School Nursing Services	Contact Number
Aneurin Bevan UHB	01633 618003
Cwm Taf UHB (North)	01685 351322
Cwm Taf UHB (South)	01443 443303
Cardiff and Vale UHB Cardiff West:	029 20 907661
Cardiff East:	029 20 734161
Vale of Glamorgan	01446 732784
Betsi Cadwaladr University Health Board (West)	01286685564
Betsi Cadwaladr University Health Board (Central)	01745 448788 EXT 3806
Betsi Cadwaladr University Health Board (East)	01244 813486
Abertawe Bro Morgannwg University Health Board	01639684412
Hywel Dda University Health Board	01267 227638/ 227742
Powys Teaching Health Board	01547521207