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Public Health, Health Protection

Managing Infections:

A Guide for Child Care Settings

Infection Prevention and Control

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About this Document

This document aims to provide guidance and support to child care settings, including nurseries, children's centres and day centres surrounding Infection Prevention and Control (IPC). It covers standard precautions for IPC and also offers some advice on how to manage an outbreak in the child care setting.

Introduction

Child care settings are an ideal environment for the spread of infection and infectious diseases. Therefore, the setting must endeavour to provide a safe environment and good infection control measures are essential. This can only be achieved through education and awareness and the involvement of everyone. Staff, parents/carers and children can only adhere to good hygiene practices if they are provided with adequate facilities. These should be available at all times, not just during an outbreak. Parents should be encouraged to ensure that their child receives all appropriate routine vaccinations when they are due, unless there are true medical reasons why they should not. Failure to have a child immunised may put children who are too young to have been immunised or who have other medical conditions that prevent them from being immunised at risk.

Young children may be more susceptible to infection and infectious diseases because:

- They have an immature immune system and will not have had previous encounters with some micro-organisms which cause infection.
- They will not have completed their full course of childhood immunisation.
- The degree of close contact with other young children.
- They have a lack of understanding due to their age of the importance of good hygiene practices.
- The tactile nature of children’s play and their natural intimacy with others.

A child who has contracted an infectious disease usually shows general signs of illness before development of a rash or other typical symptoms. Thus the child may complain of shivering attacks or feeling cold, headache, vomiting, sore throat or just vaguely feeling unwell. Such symptoms, when a particular infectious disease is prevalent, should make the staff suspicious. In these circumstances, parents should be advised to consult their doctor. In the meantime, the child should be kept separate from other children and kept warm and comfortable. If symptoms appear very serious or distressing, staff should call an ambulance to ensure immediate assessment and/or treatment for the child. Staff must inform the parents/carers of all children who use the setting if there is a known circulating disease.

Spread of Infections

An infection is caused by a micro-organism that is pathogenic**.** This means that the organism is capable of causing disease in its host**,** such as bacteria or viruses. There are two main ways of transmission for pathogenic micro-organisms, direct contact and indirect contact[1]

Direct contact spread:

- Skin contact e.g. holding hands can be a way of transmission for scabies and ringworm.
- Head to head contact can also facilitate the transmission of head lice.

Indirect contact spread:

- Aerosol (small droplet) spread - small droplets in the air caused by coughing or sneezing are inhaled or ingested (swallowed) by another person. Examples of such diseases are Norovirus, colds, measles and mumps.
- Droplet spread - droplets in the air caused by coughing or sneezing and then inhaled or ingested (swallowed) by another person. As these droplets are larger than for aerosol spread they cannot be carried long distances so close contact with the infected person is required. An example of such a disease is influenza.
- Faecal/oral route of spread - For some diseases e.g. gastroenteritis and Hepatitis A, the infecting organism is excreted in the faeces (motions). The hands of an infected person may become contaminated after they wipe themselves and, after inadequate hand washing when going to the toilet, the infecting organisms may be transferred to others' hands and subsequently to their mouths.

From the above, it is clear that different diseases will need diverse approaches to prevent their transmission within the child care setting.

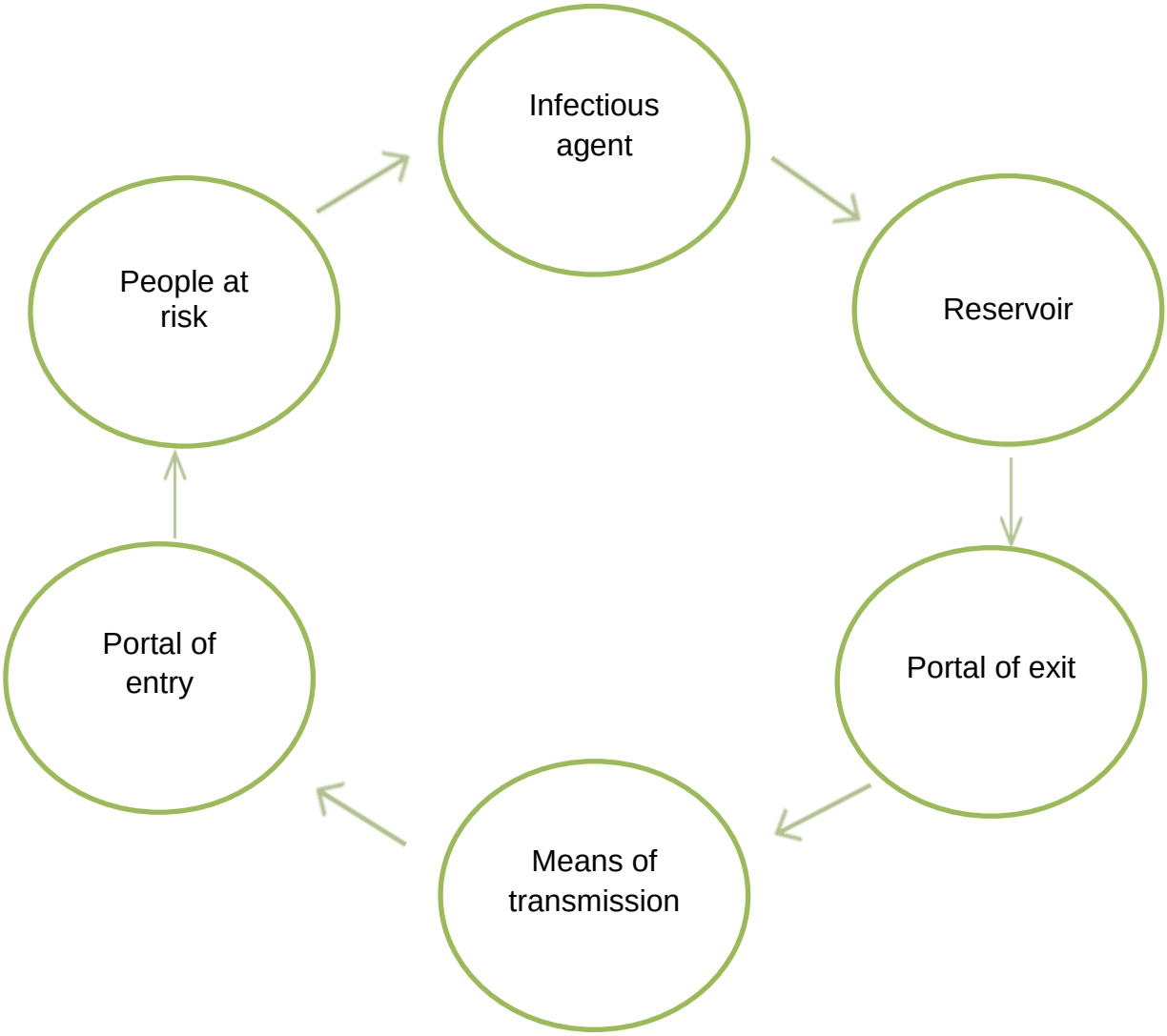
3a.The chain of infection

The chain of infection describes the factors that must be present for an infection to occur. If one of the links is not there then an infection is unlikely to occur.

1. The infectious agent is the micro-organism, so the bacteria or virus.
2. The reservoir is the where the infection comes from, so people, animals, food etc.
3. The portal of exit is the way in which the infectious agent leaves the reservoir.

[1] The Royal Marsden NHS Foundation Trust (2011). Infection Prevention and Control. In: L. Dougherty and S. Lister (eds.) The Royal Marsden Hospital Manual of Clinical Nursing Procedures, eighth edition. West Sussex: Wiley Blackwell, 93-154.

4. Means of transmission is how the infectious agent is transmitted, so airborne, blood borne etc.
5. The portal of entry is the way in which the infectious agents enter the body, so mouth, nose, wounds etc.
6. The person at risk is determined by a number of factors including age, medical conditions, suppressed immune system etc.



Actions to prevent the spread of infections.

There are points during the chain of infection that can be 'broken' by certain measures therefore preventing an infection occurring. This can include hand washing and the use of personal protective equipment (PPE).

Standard Infection Prevention and Control Precautions

4a. Hand Hygiene

Hand washing is one of the most important ways to prevent the spread of infections. Hands become easily contaminated e.g. after having been to the toilet or having changed a nappy. Germs on a child's hand can easily pass to other children's hands and staff members by direct touch (e.g. holding hands) or by contamination of objects (e.g. via contaminated toys). Once on the hands it is easy for germs to get into the mouth. Many infections are spread in this way. If hands are thoroughly washed, the number of germs they carry will be greatly reduced. Washing hands before eating helps to further reduce the risk of ingesting (swallowing) germs that may have contaminated the hands.

Hands must be washed:-

- Before preparing, serving or eating food
- After using the toilet
- After changing a nappy
- After any cleaning procedure, including spillages
- After handling soiled clothing
- After dealing with waste
- When hands look or feel dirty.

Children must be encouraged to wash their hands after every visit to the toilet and always prior to eating.

It is important that information regarding hand hygiene is given to parents/carers and children to follow, this may be in the form of posters on walls and in particular above sinks. Cotton (terry) towels are not recommended. The most satisfactory method of drying hands is with good quality disposable paper towels. Use disposable gloves where possible. Remove jewellery i.e. rings with stones or ridges, wristwatches or bracelets before washing hands. The use of nailbrushes is not recommended, as they are a potential source of infection. Parents/carers should be encouraged to promote good hand hygiene in the children.

Alcohol gels

It is important to note that alcohol is not a cleansing agent, to be used in place of hand washing, and that visible dirt must be removed with liquid soap and warm water. Alcohol does not have any lasting action and has limited activity against bacterial spores. Alcohol hand rubs or gels can however offer a practical and acceptable alternative to hand washing in some situations, as long as hands are not visibly dirty and have not undertaken a dirty procedure e.g. nappy changing.

4b. Cleaning[2]

i. Environment

Cleaning of the general environment must be undertaken daily. It may help to have a cleaning schedule in place so that all staff know what needs cleaning, when it needs cleaning and how. For general cleaning a general purpose cleaning fluid used following manufacturers guidelines will be enough to ensure the environment is clean. For areas like toilets and kitchens a disinfectant may be used. Child care settings must adhere to the Control of Substances Hazardous to Health (COSHH) regulations and the manufacturer's guidance when using chemicals. Please note that there are specific regulations regarding hygiene in the kitchen, for advice about this please contact your local Environmental Health Department

Toilet seats, flush handles and toilet bowls/potties must be disinfected every day or when visibly contaminated. Other surfaces that may have been touched by contaminated hands e.g. door handles and taps should also be cleaned daily. In addition, there should be arrangements for regular checks on toilet areas so that any accidental spillage or contamination can be dealt with promptly. Toilets should be flushed every morning to prevent the build-up of bacteria which may lead to Legionnaires Disease. As there will be children who are still in nappies attending the setting there must also be appropriate changing facilities.

Nappies must be changed in a designated area away from play facilities, and not where food or drink is prepared or consumed. Soiled nappies should be wrapped in a plastic bag before disposal in a bin. The nappy disposal bin should have a foot-operated lid. Where there are substantial numbers of used nappies or sanitary products arrangements must be made for appropriate disposal (e.g. a contract with a registered waste disposal company). Staff should ensure that nappy changing mats are wiped with a medicated universal wipe and dried **after each use** and every morning and evening where practicable. It is good practice to supply disposable roll which can be used on the mat to lay babies on, this must be removed appropriately disposed of immediately after use. Changing mats should be checked weekly for tears. If the plastic cover is torn, the mat should be replaced. Hand washing facilities (which includes hand wash basin, liquid soap, paper towels and a foot operated bin) must be available within the nappy changing area/room.

ii. Equipment

Shared equipment is a potential source of transmission of infection. Objects which can become contaminated when handled by children or put in their mouths are of

[2] Health Protection Scotland (2015) Infection Prevention and Control in Childcare Settings (Day Care and Childminding Settings). Available from: https://www.documents.hps.scot.nhs.uk/hai/infection-control/guidelines/infection-prevention-control-childcare-2015-v2.pdf [Accessed on 19.12.18]

particular significance where cleaning is concerned e.g. high chairs or toys. Communal toys should be washable and must be regularly cleaned in hot water and detergent then dried. It is recommended that this is carried out on a weekly basis but in practice this should be where reasonable and practicable. It is also good practice to ensure that toys are cleaned when visibly soiled. Ensure that manufacturer's guidance and instructions are followed when cleaning toys.

Check toys regularly to make sure that they remain in a safe condition and are physically clean. If a toy becomes unsafe or dirty remove it from use immediately. Do not put damaged or dirty toys back into storage or leave them out for children to play with. Keep a check list to ensure all toys are cleaned regularly and establish a rota for cleaning. Hands should be washed after handling toys which have not been cleaned.

Be aware that toys can become contaminated with body fluids; including blood, nasal and eye discharge, saliva, urine and faeces and **must** be cleaned before other children are allowed to play with them. It is essential that staff are particularly vigilant in removing and cleaning toys if it is known that the child using them has an infection. **Never** use second hand toys.

Toys provide an excellent route for spreading respiratory viruses such as influenza or respiratory syncytial virus. Therefore toys should be removed if they have been placed in a child's mouth or near nasal secretions. If these viruses are known to be circulating in the local community during the winter months in particular, then staff may wish to consider selecting easier to clean toys for continuous provision in the setting. Make sure the toys are not left on the floor where they may be a danger to others or become dirty or contaminated. Children should be supervised whilst playing with toys to ensure that the toys are played with appropriately and toys must not be allowed to be taken to the toilet areas.

Play Equipment	Care Instructions
Soft toys	Soft toys are not recommended for use in the setting, but if they are used, they should be on a cleaning schedule, and should be washed with detergent and hot water on a monthly basis and when visibly dirty. This schedule will also assist in identifying for disposal any damaged toys or toys that cannot easily be cleaned.
Playdough	It is important that children wash their hands before and after use. Skin lesions must be covered. Play dough should be routinely disposed of after a week. In event of an outbreak playdough must not be used and any that has previously been used should be disposed of immediately.
Plastic and wooden toys	Toys should be cleaned after use using hot soapy water and dried thoroughly. (This includes play homes and play tables). Toys should be inspected regularly for breakages and discarded if not intact. Broken toys may harm children and could harbour bacteria.
Electrical and	Non-electrical toys should be surface wiped after use with a damp

mechanical toys	cloth that has been rinsed in hot water and detergent and then dried. Ensure that electrical toys have been unplugged form the mains prior to cleaning. The surface of electrical toys must be wiped with a cloth which has been wet with detergent and water solution and well wrung out. Avoid wetting the toys too much.
Water equipment and sandpits	Water play trays should be emptied immediately after use and dried. They should be stored deflated or inverted. Fresh water should be added each day. Children with open sores or wounds should not play in the water. All water play equipment should be cleaned using detergent and water and dried after use. Sandpits should be covered for protection and sand kept clean by regular sieving. The sand should be changed regularly.
Ball pools	Ball pools should be cleaned using a general-purpose detergent and hand-hot water. The balls are usually cleaned in a string bag. Clean the ball pool at the same time with general-purpose detergent and hand-hot water. Dry with paper towels, or a clean towel that you wash after use. Inspect balls and pool before use and clean as necessary, or follow the manufacturers' instructions. Do not allow children to eat or drink in the ball pools. Do not allow children who feel unwell to enter the ball pool. Remove any litter or damaged balls. If a child has a toilet accident in the ball pool, all children should be removed from the ball pool and all the balls and the ball pool cleaned at the same time. If you use a cleaning contractor, make sure that there is a written record to show the cleaning has been done.
Books	Books should be wiped regularly and inspected for signs of infestation, damp, mildew and discharged when necessary. Books that are visibly soiled/contaminated with blood or body fluids must be discarded.

Storage of toys

Toys must be stored in a designated washable rigid container which has a lid and this container must be washed regularly.

Multisensory rooms

A robust cleaning schedule must be in place for these rooms. All surfaces must be cleaned weekly with hot water and detergent. Water in bubble tubes carries a theoretical risk of Legionella dispersal where these are not changed regularly and according to manufacturer's instructions. If the seal should break then this can cause a potential hazard. It is advisable to discuss the maintenance of the tubes/water with the device manufacturer.

iii. Laundry

If staff wear a uniform they should be washed after each wear according to the manufacturer's instructions. Any linen that the setting uses i.e. towels, flannels etc.

should be washed after each use and preferably single person use only. All clean linen should be kept in a clean area away from dirty linen.

Any soiled linen or clothing must be placed in a red soluble bag and washed separately to other linen. If it is a child's clothing then it should be placed in a red bag with the child's name on and given to the parent/carer on collection of the child. They should be notified that the clothing is soiled and advised to wash at the highest temperature stated in the washing instructions.

4c. Managing body fluids

It is likely that there is a risk of coming into contact with bodily fluids in a child care setting, particularly as some children who use the services may still be in nappies or using a potty. All spillages of body fluids (e.g. urine, vomit, faeces or blood) should be dealt with immediately. When dealing with a spillage staff should wear disposable gloves and a disposable apron, and try to absorb as much of the spillage as possible with absorbent paper towelling. This can be disposed of in a plastic waste sack or flushed down the toilet if in small amounts. If indoors, clean the area with an appropriate detergent, rinse, dry and ventilate the area. For spillages outside, sluice the area with hot water and always remember to wash your hands after removing gloves.

4d. Personal Protective Equipment

Personal protective equipment (PPE) comes in many forms. The most commonly used include gloves and aprons. All PPE must be single use and disposable. PPE should be worn at point of care if there is a risk of coming into contact with blood or body fluids. PPE must also be worn when handling waste and cleaning potties.

4e. Waste Management

It is important that waste is managed effectively to reduce the risk of infections spreading.

All bins throughout the setting should be a pedal lid bin, to ensure that waste cannot be removed from the bin by anyone and also to contain the waste and prevent overfilling. There should also be appropriate bins for different waste streams.

Waste produced	Waste stream
General household waste	General landfill
Cardboard, paper, plastic etc	Recycling
Nappies, wipes not infectious	Deep landfill
Infectious waste	Orange bags – special disposal.

The setting should have a schedule for emptying the bins and ensure that bins are kept clean. Ensure that the main bin is in a place that cannot be accessed by

animals and is away from play areas. Follow the local waste collection guidelines for days that the main bin will be emptied.

4f. Exposure incidents [3]

Exposure incidents cover any situation whereby someone has come into contact with a potential source of infection or chemical. This can be via a break in the skin either from a bite or sharps injury, or via the eyes, nose or mouth.

If the exposure is a potential source of infection then it is important that quick action is taken. If the injury is a bite or scratch and breaks the skin then the following action should be taken:

1. Bleed it – squeeze the site to encourage blood to flow. Do not suck the wound.
2. Wash it – run it under warm running water.
3. Dry it – dry with paper towels then dispose of them appropriately.
4. Cover it – cover it with a bandage or plaster to prevent other ,matter entering the wound.
5. Seek medical advice – if there is a risk that you could have been exposed to a blood borne virus then you need to seek medical attention immediately.
6. Report it – follow your local guidelines and report the injury to the appropriate person.

If the exposure was from a chemical or other substance going in the eyes, mouth or nose then the following actions need to be taken:

1. Rinse using water.
2. Remove contact lenses if wearing.
3. Use eye wash kits if available.
4. Seek medical advice.
5. Report it - follow your local guidelines and report the injury to the appropriate person.

[3] The Royal Marsden NHS Foundation Trust (2011). Infection Prevention and Control. In: L. Dougherty and S. Lister (eds.) The Royal Marsden Hospital Manual of Clinical Nursing Procedures, eighth edition. West Sussex: Wiley Blackwell, 93-154.

Food Hygiene

If a child care setting provides food, drink or reheats food provided by parents, then you **must** comply with food safety and hygiene regulations. Nurseries are classed as non-domestic properties and they must ensure they are registered with the Local Council. The property must also be registered as a business that handles food and is required by food safety law to comply with the food safety management system (HACCP).

The food standards agency (FSA) have produced 'Safer foods, better business' system. Depending on the type of child care setting, the pack may differ. For example for a Children's Centre the pack 'Safer foods, better business for caterers' is the most appropriate and can be found at https://www.food.gov.uk/business-guidance/safer-food-better-business-for-caterers. This guidance provides information on all aspects of food hygiene and provides some checklists to work from.

It is vital that all staff who work with food have some level of food hygiene training. The 'Safer food, better business' packs provide some guidance on the kind of topics that should be covered in the training. The City of Lincoln Council website has information on some food hygiene training providers.

The City of Lincoln Council Food, Health and Safety Team are introducing a Food Business Star Award and publishing the results of inspections, more information can be found at www.lincoln.gov.uk.

All child care settings where food and drink are provided, must be registered with Environmental Health. If staff are handling food and contract certain communicable diseases, or develop septic lesions on the exposed skin, there may be a risk of food contamination. Staff must inform their line manager if they are suffering from any of the following diseases:

- Typhoid Fever
- Paratyphoid Fever
- Other Salmonella infections
- Staphylococcal infections likely to cause food poisoning e.g. impetigo, septic skin lesions, exposed infected wounds, boils etc.
- Dysentery
- Diarrhoea - the cause of which has not been established
- Hepatitis A (infective jaundice)
- E.coli O157

The child care setting must not permit a person known or suspected to be suffering from any of the above diseases, to work in any food handling area or in any capacity in which there is a likelihood of directly or indirectly contaminating food. Any staff member who develops symptoms of vomiting and/or diarrhoea or other symptoms associated with the above diseases should not return to work in any capacity in a food handling area until he/she has been symptom free for at least 72 hours.

Your local Environmental Health Team will carry out the investigation and management of individuals with typhoid and paratyphoid fever and E.coli O157 infection. The Health Protection Team, Health Visitor or Environmental Health Officer (EHO) can be a good source of information.

Outbreak Management

An outbreak is defined as “two or more people that have the same disease or similar symptoms and are linked in time, place and/or association of person". It may also be defined as a situation in which the number of cases of the same illness exceeds the expected number. Outbreaks of infectious disease may occur from time to time in child care settings. Their importance depends on several factors:

- The severity of the disease
- The number of children affected
- The mode of transmission
- The amount of anxiety they generate in parents and staff
- Whether any specific action is necessary to stop further cases (e.g. immunisation, improving food-handling practices).

6a. Recognising an outbreak.

There are several ways in which child care setting may become aware that they have an outbreak of an infectious disease:-

- Several children may be ill with the same illness
- There may be a sudden increase in the number of absentees
- Parents/carers may advise the Centre that their children are suffering from an infectious disease
- The local Health Protection Team staff may contact staff at the setting.

6b. What to do in the event of an outbreak.

In the event of an outbreak staff must:-

- Inform the Local Authority Health Protection Team. Discuss and agree with the Local Authority Health Protection Team any measures deemed necessary to control the spread of infection.
- Notify Environmental Health if suspected food borne.
- Contact parents/carers of the children affected to arrange for them to be collected.
- Monitor the level and reasons for absenteeism within the setting.
- Inform the appropriate line management when facilities within the setting are not adequate for infection control.

For the initial assessment of the situation the Health Protection Team need to know:

- How many children are ill?
- What are the symptoms?
- When did each child fall ill i.e. when did symptoms first start?

N.B. Staff must also follow the setting's own internal policies for reporting an outbreak.

Cleaning during outbreaks

- Following an outbreak it is essential that a full deep clean of the environment is carried out. It is the responsibility of the setting to make arrangements for that to take place. After an outbreak of viral gastroenteritis or Norovirus, it is best practice to have carpets steam cleaned by a contractor with specialised equipment. During an outbreak additional cleaning materials may be required. For example, if the cause of the outbreak was due to a viral infection then the use of good quality hypochlorite bleach may be required, the Health Protection Team or the Environmental Health Officer will advise.

6c. Role of the Health Protection Teams

Local Authority Health Protection Team

The Local Authority Health Protection Team consists of three Registered Nurses. They offer a countywide service and provide support and guidance on issues related to Infection Prevention and Control.

The Health Protection Team will assess the situation and decide what, if any, further action is necessary either to investigate the source of the outbreak or to stop further spread. The setting should make every attempt to provide the information requested by the Health Protection Team or staff working on their behalf (e.g. Environmental Health staff). If suggested it is important that staff, parents and children comply with requests for specimens, and to follow guidance for control of spread of diseases. During such a situation certain play activities e.g. water and sand play, may need to be suspended as there may be a potential for the transmission of infection.

If you have concerns the local Health Protection Team will advise on the appropriate action. Where necessary the Health Protection Team will visit the setting and offer further advice on information for parents/carers and steps that may need to be taken to prevent further cases. Where appropriate the Health Protection Team will speak to groups of staff or parents/carers to answer their questions and concerns. For certain infectious diseases (e.g. some cases of meningitis) the Local Authority Health Protection Team may deem it necessary for letters to be sent home to all parents/carers of all children who use the setting.

What will the Health Protection Team do in the event of an outbreak?

- Once notified of an outbreak in the child care setting the Health Protection Team will send out a notification email to the Whole Health Economy.
- The Health Protection Team will also give IPC advice and guidance there and then and offer advice on practical steps to take to help prevent the spread of infection.
- The Health Protection Team will also contact the setting daily to get an update on the outbreak and offer any more support or guidance needed.

Environmental Health

If an outbreak of food poisoning is suspected, the Environmental Health Department will be asked to investigate. In some cases they may also be asked to assist the Health Protection Team in the assessment and control of prolonged outbreaks of diarrhoea and/or vomiting which are not thought to be due to food poisoning (e.g. dysentery).

6d. Exclusions

There will be certain situations where staff and children have to be excluded from the child care setting. For a full list please see Appendix C.

i. Staff [4]

Staff with infections can place children at risk; therefore staff suffering from particular conditions must be excluded from their work. For staff that present with diarrhoea and vomiting should be excluded until they are symptom free for a period of 48 hours from the last episode. Staff with respiratory conditions, where there is potential to spread infections such as colds, must exercise good respiratory cough etiquette including good hand hygiene, however staff that are diagnosed with influenza, must be excluded from work until they are completely symptom free.

New staff must complete a pre-employment questionnaire prior to commencing work. Female workers of child bearing age should ensure that they are immune to rubella (German measles) and chickenpox as they may be at risk of exposure to these infections. A blood test can confirm immunity if unsure of previous vaccination status or exposure to the disease. Such women are advised to seek the advice of their Occupational Health department or family doctor regarding this and consider any necessary immunisation e.g. MMR and/or varicella vaccine where appropriate. There is minimal risk to other children or staff from an HIV infected child attending the child care setting, provided sensible hygiene practices are in place. For further advice and to ensure best practice is in place contact your Local Health Protection Team.

[4] Public Health Agency (undated) Infection Prevention and Control: Best practice advice for nurseries and childcare settings. Available from: http://www.publichealth.hscni.net/sites/default/files/Nursaries_Infection_Prevention_LR_07_11%20%282%29.pdf [Accessed on 14.11.18]

If a staff member is ill with an infection then they must follow the exclusion guidelines for each illness and remain off work until they are safe to return.

ii. Children

Some infections are minor and not admitting a child to the setting cannot be justified but in other cases, e.g. diarrhoea and vomiting, keeping the child away from the centre could significantly reduce the risk of spreading infection. For some other infections, the organisms which cause disease are commonly found among apparently healthy people and this will influence the advice on whether it is appropriate not to admit children.

There are some general rules about non admittance:

1. Children who are not well should not attend the child care setting, even if they are not infectious, but in specific circumstances staff may use their discretion about attendance with confirmed non-infectious illness.

2. Children with diarrhoea and/or vomiting should not attend the child care setting (unless the diarrhoea is known to be due to a non-infectious cause e.g. coeliac disease). This rule also applies to staff. Children and staff should stay away until they have been **symptom free for 48 hours**.

3. Some children may have other illnesses, which affect their immunity (e.g. leukaemia, HIV disease). The parents of these children should be warned if there are cases of infectious diseases in the setting, particularly chicken pox, shingles or measles.

4. Children who have been prescribed antibiotics can attend the setting before they have completed the course providing they feel well enough.

The poster entitled **'Guidance on Infection Control in Schools and other Child Care Settings'** is displayed at the settings and can be downloaded by visiting the website: **www.hpa.org.uk**

Notifiable diseases

This is a list of notifiable diseases under the Health Protection regulations:[5]

- Acute encephalitis
- Acute infectious hepatitis
- Acute meningitis
- Acute poliomyelitis
- Anthrax
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Enteric fever (typhoid or paratyphoid fever)
- Food poisoning
- Haemolytic uraemic syndrome (HUS)
- Infectious bloody diarrhoea
- Invasive group A streptococcal disease
- Legionnaires' disease
- Leprosy
- Malaria
- Measles
- Meningococcal septicaemia
- Mumps
- Plague
- Rabies
- Rubella
- Severe Acute Respiratory Syndrome (SARS)
- Scarlet fever
- Smallpox
- Tetanus
- Tuberculosis
- Typhus
- Viral haemorrhagic fever (VHF)
- Whooping cough
- Yellow Fever

[5] Public Health England (2010) Notifiable diseases and causative organisms: how to report. Available from https://www.gov.uk/guidance/notifiable-diseases-and-causative-organisms-how-to-report#list-of-notifiable-diseases [accessed 20.12.18]

Vaccination and immunisation

Preventing an illness is much better than trying to treat it once it has developed. There are now many safe and effective vaccines against potentially fatal illnesses. Some are given routinely to all of the population, others only to individuals thought to be at high risk of certain infections. The recommended immunisation schedule for children in the UK is outlined below.[6]

Immunisation information is available from **www.immunisation.nhs.uk**

Age due	Diseases protected against	Vaccine given	Usual site
8 weeks old	Diphtheria, tetanus, pertussis (whooping cough), polio, *Haemophilus influenzae* type b (Hib), and hepatitis B	DTaP/IPV/Hib/HepB	Thigh
	Pneumococcal (13 serotypes)	Pneumococcal conjugate vaccine (PCV)	Thigh
	Meningococcal group B (MenB)	MenB	Left thigh
	Rotavirus gastroenteritis	Rotavirus	By mouth
12 weeks old	Diphtheria, tetanus, pertussis, polio, Hib, and hepatitis B	DTaP/IPV/Hib/HepB	Thigh
	Rotavirus	Rotavirus	By mouth
16 weeks old	Diphtheria, tetanus, pertussis, polio, and Hib, and hepatitis B	DTaP/IPV/Hib/HepB	Thigh
	Pneumococcal (13 serotypes)	PCV	Thigh

[6] Public Health England (2018) *The routine immunisation schedule: from autumn 2018*.Available from: https://www.guidelinesfornurses.co.uk/immunisation-and-vaccination/phe-routine-immunisation-schedule-guideline/454136.article. [Accessed on 20.12.18]

	MenB	MenB	Left thigh
1 year old (on or after the child's first birthday)	Hib and MenC	Hib/MenC	Upper arm/thigh
	Pneumococcal	PCV	Upper arm/thigh
	Measles, mumps, and rubella (German measles)	MMR*	Upper arm/thigh
	MenB	MenB booster	Left thigh
Eligible paediatric age groups†	Influenza (each year from September)	Live attenuated influenza vaccine LAIV*‡	Both nostrils
3 years 4 months old or soon after	Diphtheria, tetanus, pertussis, and polio	DTaP/IPV	Upper arm
	Measles, mumps, and rubella	MMR (check first dose given)*	Upper arm
Girls aged 12 to 13 years	Cervical cancer caused by human papillomavirus (HPV) types 16 and 18 (and genital warts caused by types 6 and 11)	HPV (two doses 6–24 months apart)	Upper arm
14 years old (school year 9)	Tetanus, diphtheria, and polio	Td/IPV (check MMR status)	Upper arm
	Meningococcal groups A, C, W, and Y disease	MenACWY	Upper arm

Staff vaccinations

If any staff member is identified as 'at risk' from their pre-employment questionnaire then additional support and guidance should be sought from the GP or Occupational Health department.

It is advised that all staff working in the child care setting have the influenza vaccination.

Contacts

Infection Prevention & Control Team Health Protection, Public Health, Lincolnshire County Council Tel: 01522 553729 Email:healthprotectionteam@lincolnshire.gov.uk	A Lincolnshire Public Health Team, with specialist staff employed by County Council, to provide Infection Prevention & Control advice
Public Health England (East Midlands) Seaton House London Road Tel: 0344 225 4524 – Option 1	Public Health England (PHE) works at a regional level with other agencies to understand, respond to and/or co-ordinate responses to health threats
Environmental Health District Council	Environmental Health Officers work with local partners to investigate suspected and confirmed cases of food poisoning and water borne illnesses

APPENDIX A:

Hand Washing

Step 1: Wet hands and apply liquid soap

Step 2 : Rub hands together palm to palm

Step 3: Interlace fingers and rub hands together.

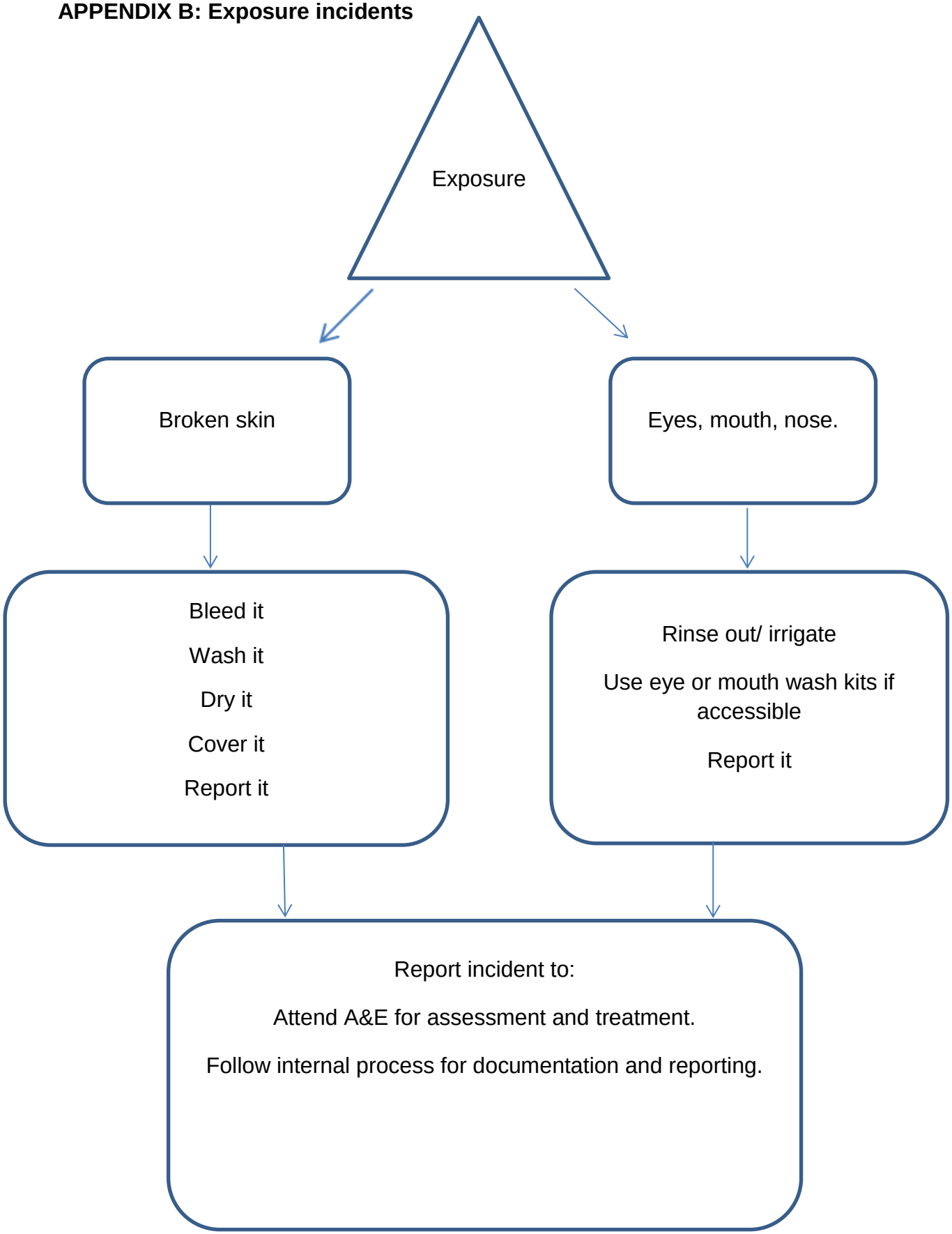
Step 4: cup fingers together and rub hands

Step 5: Rub thumbs in palm of hands

Step 6: Rub wrists with palm of hands

Step 7: Make sure you rinse all the soap off your hands under running water and then dry your hands thoroughly

APPENDIX B: Exposure incidents



APPENDIX C: Exclusion table [7]

Infection	Exclusion period	comments
Athlete's foot	None	Athlete's foot is not a serious condition. Treatment is recommended.
Chicken pox	Five days from onset of rash and all the lesions have crusted over	
Cold sores (herpes simplex)	None	Avoid kissing and contact with the sores. Cold sores are generally mild and heal without treatment
Conjunctivitis	None	If an outbreak/cluster occurs, consult your local HPT
Diarrhoea and vomiting	Whilst symptomatic and 48 hours after the last symptoms.	See section in chapter 9
Diphtheria *	Exclusion is essential. Always consult with your local HPT	Preventable by vaccination. Family contacts must be excluded until cleared to return by your local HPT
Flu (influenza)	Until recovered	Report outbreaks to your local HPT.
Glandular fever	None	
Hand foot and mouth	None	Contact your local HPT if a large numbers of children are affected. Exclusion may be considered in some circumstances
Head lice	None	Treatment recommended only when live lice seen
Hepatitis A*	Exclude until seven days after onset of jaundice (or 7 days after symptom onset if no jaundice)	In an outbreak of hepatitis A, your local HPT will advise on control measures
Hepatitis B*, C*, HIV	None	Hepatitis B and C and HIV are blood borne viruses that are not infectious through casual contact. Contact your local HPT for more advice

[7] Health Protection Agency (2010) Guidance on Infection Control in Schools and other Child Care Settings. HPA: London.

Impetigo	Until lesions are crusted /healed or 48 hours after starting antibiotic treatment	Antibiotic treatment speeds healing and reduces the infectious period.
Measles*	Four days from onset of rash and recovered	Preventable by vaccination (2 doses of MMR). Promote MMR for all pupils and staff. Pregnant staff contacts should seek prompt advice from their GP or midwife
Meningococcal meningitis*/ septicaemia*	Until recovered	Meningitis ACWY and B are preventable by vaccination (see national schedule @ www.nhs.uk). Your local HPT will advise on any action needed
Meningitis* due to other bacteria	Until recovered	Hib and pneumococcal meningitis are preventable by vaccination (see national schedule @ www.nhs.uk) Your local HPT will advise on any action needed
Meningitis viral*	None	Milder illness than bacterial meningitis. Siblings and other close contacts of a case need not be excluded.
MRSA	None	Good hygiene, in particular handwashing and environmental cleaning, are important to minimise spread. Contact your local HPT for more information
Mumps*	Five days after onset of swelling	Preventable by vaccination with 2 doses of MMR (see national schedule @ www.nhs.uk). Promote MMR for all pupils and staff.
Ringworm	Not usually required.	Treatment is needed.
Rubella (German measles)	Four days from onset of rash	Preventable by vaccination with 2 doses of MMR (see national schedule @ www.nhs.uk). Promote MMR for all pupils and staff. Pregnant

		staff contacts should seek prompt advice from their GP or midwife
Scarlet fever	Exclude until 24hrs of appropriate antibiotic treatment completed	A person is infectious for 2-3 weeks if antibiotics are not administered. In the event of two or more suspected cases, please contact local health protection team.
Scabies	Can return after first treatment	Household and close contacts require treatment at the same time.
Slapped cheek /Fifth disease/Parvo virus B19	None (once rash has developed)	Pregnant contacts of case should consult with their GP or midwife.
Threadworms	None	Treatment recommended for child & household
Tonsillitis	None	There are many causes, but most cases are due to viruses and do not need an antibiotic treatment
Tuberculosis (TB)	Always consult your local HPT BEFORE disseminating information to staff/parents/carers	Only pulmonary (lung) TB is infectious to others. Needs close, prolonged contact to spread
Warts and verrucae	None	Verrucae should be covered in swimming pools, gyms and changing rooms
Whooping cough (pertussis)*	Two days from starting antibiotic treatment, or 21 days from onset of symptoms if no antibiotics	Preventable by vaccination. After treatment, non-infectious coughing may continue for many weeks. Your local HPT will organise any contact tracing

* 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).

APPENDIX D: Reporting Form

Name of Child care setting:

Date Outbreak started:

Outbreak type: (D&V/respiratory etc.)

Child's name	Address and Contact number	Date Symptoms started	Time symptoms started	Date excluded	Date returned

APPENDIX E: Action Card – Diarrhoea and Vomiting

Date: **Name of setting:** **Contact number:** **Completed by:**	
Action	**Y/N**
Inform the Health Protection Team at the Local Authority or PHE if out of hours who will give you immediate infection control advice. Inform the Environmental Health Department in case the cause is a food source	
Notify parents of those children affected so they can be collected and appropriate care given at home.	
Make sure PPE is readily available and appropriate waste disposal is in place.	
Increase hand washing with soap and hot water. Encourage children to wash their hands more frequently. Ensure hot water, liquid soap and paper towels are available for hand hygiene in all toilets. Staff should reinforce good hand hygiene especially after going to the toilet and before eating and drinking – supervision of children's hand washing maybe required.	
Increase cleaning of hard toys with appropriate detergent. Remove soft toys and sand pits etc. from use.	
Ensure cleaning staff are made aware of the situation so that environmental cleaning can be increased, especially within toilets and carpeted areas, Staff undertaking cleaning should wear disposable gloves. Regular checks on toilet cleanliness must be made especially at busy times. *If a child vomits :* *Cover the vomit with paper towels and clean area thoroughly with hot water and detergent*	
Make a list of symptomatic children and staff. The list should include name and address, telephone number, date when symptoms commenced, date sent home and date returned to the Centre. The Environmental Health Officers may require this information to follow up cases. Ensure the list is updated daily as parents/carers and staff informs the Centre with further details or as the children return.	
Do not admit children who have symptoms until they are symptom free for 48 hours. Advise staff members who have symptoms to stay off work until they are symptom free for 48 hours.	
Do a deep clean of the environment at the end of the day.	
Restrict visitors in to the setting and do not admit new children until outbreak has concluded.	