

chapter seven

Promoting a Healthy Environment in an ECCE Setting

LEARNING OUTCOMES

After reading this chapter you will be able to:

- ▶ identify the routes of infection
- ▶ promote good hygiene measures in an ECCE setting
- ▶ explain the benefits of hand washing
- ▶ promote a healthy environment in the ECCE setting
- ▶ sterilise children's feeding equipment
- ▶ identify the benefits of rest and sleep for children
- ▶ discuss risk factors and prevention measures for sudden infant death syndrome (SIDS)
- ▶ develop policies and procedures to promote a healthy ECCE environment.

INTRODUCTION

In the previous chapter we discussed how to keep children physically safe in an ECCE setting. This chapter expands on that topic and explores the role of hygiene. It is very important to observe the rules of hygiene and create a hygienic environment in the ECCE setting. Good hygiene prevents the spread of illnesses and infections (discussed in Chapters Two and Three) and helps to keep children safe in the ECCE setting. After reading this chapter you will be aware of hygiene risks in the ECCE setting and the steps that must be taken to deal with these risks.

INFECTION

Infection is caused when a germ or pathogen enters the body and multiplies, causing illness. There are two types of pathogens: bacteria and viruses. Chapter Three discussed some of the main viruses that pose a risk in the ECCE setting. Viruses and bacteria multiply quickly in the right conditions and are spread in three different ways:

- 1 direct contact
- 2 indirect contact
- 3 faeco-oral transmission.

Direct contact

Some infections are spread by direct contact with the pathogens that cause the infection. Direct contact can occur by touching (e.g. ringworm) or through breaks in the skin that allow pathogens to enter the bloodstream. This is known as **inoculation** and occurs when bacteria and viruses enter the body through cuts and grazes, providing a direct route of entry.

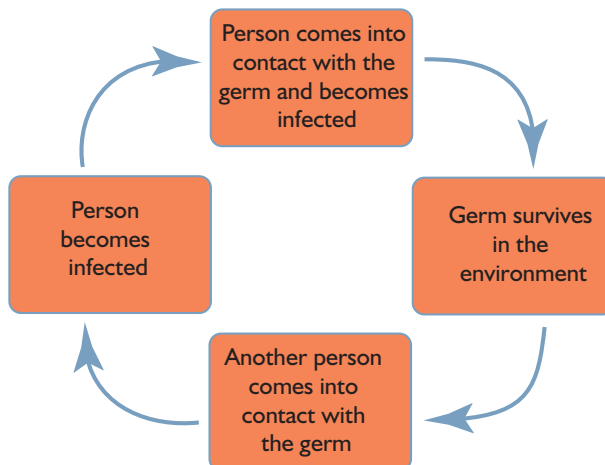
Indirect contact

Indirect contact occurs when the child encounters the pathogens indirectly, for example by inhalation or ingestion. **Inhalation** is when germs are spread by breathing in droplets in the air, for example from coughing and sneezing. Many colds, flus and other childhood viruses are spread in this way. **Ingestion** refers to swallowing bacteria and viruses. This can occur by ingesting contaminated food/drink or by putting toys or fingers into the mouth. Salmonella and E. coli are both spread by ingestion.

Faeco-oral transmission

Faeco-oral transmission occurs when germs are spread from the back passage to the mouth. This occurs when a child scratches or touches their bottom and then touches their mouth, thus **ingesting** the germs. Hand washing reduces the risk of faeco-oral transmission. Threadworms, gastroenteritis and diarrhoea are all spread by this method.

The chain of infection



Four steps are needed for infection to be spread, as illustrated in Figure 7.1.

Figure 7.1 The chain of infection

- 1 **A person comes into contact with the germ and becomes infected.** It is not always obvious if a child is carrying an illness. Some infected children will be asymptomatic, meaning they do not show any symptoms. Also, most illnesses have an incubation period during which the child is infectious but is not yet showing symptoms. Because of this it should be assumed that staff and children in the ECCE setting have an infection and safety procedures should be followed.
- 2 **The germ survives in the environment.** Bacteria and viruses are very hardy and can survive for some time in the environment. Even a small number of germs can be enough to cause illness, so hygiene measures are very important to kill any germs that enter the environment.
- 3 **Another person comes into contact with the germ.** A second person now comes into contact with the germ through one of the transmission methods described above (direct contact, indirect contact, faeco-oral transmission).
- 4 **This person becomes infected.** Adults with a well-developed and well-functioning immune system will be able to fight off most infections. However, children's immune systems are still developing and they are at a higher risk of developing an infection if they come into contact with pathogens. This risk is increased for young children in the ECCE setting.

PREVENTING INFECTION IN AN ECCE SETTING



Figure 7.2 Measures for preventing infection

Hand washing

Every day our hands encounter thousands of germs when we touch contaminated surfaces or food, touch people and animals, and handle raw food. Washing hands with soap and running water will remove these germs and break the chain of infection. Hand washing is very important in an ECCE setting to prevent infection being spread. Staff must act as good role models for children and model the correct hand washing technique as recommended by the HSE and shown in Figure 7.3.

How clean are your hands?
The most important way to prevent food poisoning is to wash your hands properly. But while we may think we are careful enough, research shows that many people's hands are still far from clean, even after they feel they've washed them properly.

Go through the motions - thoroughly
So follow this handwashing routine:

- before handling, cooking or eating food, and after handling raw meat or eggs
- after activities such as going to the toilet, changing nappies and petting animals
- more frequently when anyone in your household is sick.

Soap
Wet your hands thoroughly under warm running water and apply soap to them.

Rub
Rub your hands together to make a lather and spread it over all areas of your hands and wrists, making sure it covers palms, backs, wrists, fingernails and fingers, and rubbing between each finger and round your thumbs. It's this action which helps the soap dislodge and remove dirt and germs.

Rinse
Rinse the soap off completely under a stream of clean running water.

Dry
Dry your hands thoroughly, using a clean hand towel or hand dryer, not a tea towel or your clothes.



Area most frequently missed during hand washing *
Less frequently missed *
Not missed *

HELPLINE
NI 0800 085 1683
ROI 1850 40 4567
www.safefood.eu

safefood - It's in your hands

* Adapted from Taylor L (1978), An evaluation of handwashing techniques, J Nursing Times, 12 January.

Figure 7.3 Hand washing technique

Tip

It can be difficult to get young children to lather their hands with soap for long enough to kill germs effectively. Teach children songs to sing while washing their hands to encourage them to scrub for long enough. For example:

Wash, wash, wash my hands
 Make them nice and clean.
 Rub the bottoms, and the tops
 And fingers in between.
 (Sung to the tune of 'Row, Row, Row Your Boat')

Or:

Twinkle, twinkle, little star
 See how clean my two hands are.
 Soap and water, wash and scrub,
 Get those germs off, rub a dub.
 Twinkle, twinkle, little star
 See how clean my two hands are.
 (Sung to the tune of 'Twinkle, Twinkle')

Standards of hand washing in an ECCE setting need to be higher than in a home setting because of the larger number of people in the setting. You must follow these guidelines.

- ▶ Keep your nails short and clean – germs can get trapped underneath longer nails. Nail extensions and false nails are not suitable for everyday wear in an ECCE setting. Similarly, rings will trap dirt, so they should not be worn, but a plain gold or silver band is allowed.
- ▶ Always use warm water and liquid soap when hand washing, and use a nail brush to remove dirt from under fingernails.
- ▶ Use paper towels to dry hands and throw away after use to prevent infection.
- ▶ Cover any cuts with a waterproof dressing to prevent cross-infection.
- ▶ Demonstrate to children how to wash their hands and supervise hand washing to ensure that they follow the correct procedure.
- ▶ As you will be washing your hands frequently, the skin on your hands may dry out. Prevent this by using a hand cream at home to keep skin in good condition.

ECCE staff should wash their hands:

- ▶ before starting a shift
- ▶ before eating, smoking, handling or preparing food or feeding a child
- ▶ before preparing meals, snacks and drinks
- ▶ after using the toilet or helping a child use the toilet
- ▶ after nappy changing
- ▶ after playing with or handling items in the playroom
- ▶ after dealing with bodily fluids – wiping runny noses, cleaning up vomit, etc.
- ▶ after handling waste
- ▶ after removing disposable gloves or aprons
- ▶ after handling pets or pet litter.

Children should be taught to wash their hands:

- ▶ after playing with pets
- ▶ after using the bathroom
- ▶ after sneezing, blowing their nose or coughing
- ▶ after touching an open cut or sore
- ▶ after playing outside
- ▶ before and after eating.

Hand washing products

Soap and anti-bacterial alcohol-based gels should be used for hand washing.

- ▶ **Soap** should be provided in all toilets in the setting and staff and children should be reminded to use it when hand washing. Liquid soap should be used as bar soap can be a source of contamination. The soap provided should be suitable for sensitive skin and anti-bacterial soap should be provided in the food preparation area.
- ▶ **Alcohol-based gels** are readily available over the counter in chemists and should have an alcohol content of 60% to be effective. Alcohol-based gels work best on hands that are not visibly dirty; hands should also be washed with soap. Children should be supervised when using alcohol gels so to ensure they do not ingest the gel.

Immunisation

Some diseases have such serious side effects that it is recommend that we immunise against them. Immunisation involves exposing the body to a treated form of the

illness which will not make the person sick but will activate the body's defence system and make the person immune to further contact from the disease. The HSE has devised a schedule of recommended vaccinations for young children and it is recommended that all children are vaccinated. ECCE settings should keep records of what vaccinations children have. All staff members should be fully immunised.

Exclusion periods

When a child becomes ill they must be excluded from the setting until such time as they are no longer contagious. This is to prevent other children and staff becoming infected with the illness. Exclusion periods range from 48 hours to a week, depending on the illness. (There is a table outlining the exclusion periods for various common childhood illnesses in Appendix II.)

Wearing protective clothing

As an ECCE worker you will be involved in the physical care of children, wiping noses, nappy changing and toileting. When you are dealing with bodily fluids you must wear protective clothing. Gloves and aprons are usually used in an ECCE setting when dealing with bodily fluids such as urine, mucus and vomit. Wearing protective clothing helps to prevent the spread of infection and cross-infection through cuts and grazes.

Gloves and an apron should be worn when:

- ▶ changing nappies
- ▶ cleaning potties
- ▶ cleaning up blood or bodily fluids (e.g. vomit)
- ▶ cleaning in general
- ▶ handling waste.

Gloves and aprons should be disposable and thrown away after each use.

Cleaning up spillages of blood and bodily fluid

Any blood or bodily fluid spillages must be cleaned up immediately to prevent contamination. The HSE recommends the use of chlorine-based disinfectants to disinfect the area after a spillage of blood/bodily fluid.

Management of cuts

In the course of the rough and tumble of normal play, children will get cuts and bruises. Cuts and breaks in the skin must be covered to stop germs entering through

the break in the skin. Absorbent materials should be used to stop the child bleeding and the cut covered with waterproof dressing. Gloves should be worn by staff members throughout.

FIRST AID KIT

Every ECCE setting must have a fully stocked first aid kit. Under the Child Care (Pre-school Services) (No. 2) Regulations 2006, a first aid kit for **children** must contain the following.

Table 7.1 Children's first aid kit

	1–5 children	6–25 children	26–50 children
Hypoallergenic plasters	12	20	20
Sterile eye pads (bandage attached)	2	6	6
Individually wrapped triangular bandages	2	6	6
Small individually wrapped sterile, unmedicated wound dressings	1	2	4
Medium individually wrapped non-stick, sterile, unmedicated wound dressings	1	2	4
Individually wrapped antiseptic wipes	8	8	10
Paramedic shears	1	1	1
Latex gloves – non-powdered latex or Nitril gloves (latex-free)	1 box	1 box	1 box
Sterile eye wash (where there is no running water)	1	2	2

In addition to a first aid box you could usefully have a fever scan thermometer and a pair of tough cut scissors.

MEDICINE CABINETS

Under the 2006 Regulations medicine cabinets must be placed out of reach of children and kept under lock and key. Medicines, sprays and lotions should **never**

be stored in the first aid box and should be stored separately in the medicine cabinet. All medicines must be kept in their original containers and clearly labelled.

STERILISING BABIES' FEEDING EQUIPMENT

Feeding equipment for babies up to one year old must be sterilised. Sterilisation removes harmful bacteria that a baby's developing immune system cannot yet deal with. Before sterilising, wash all bottles, teats and covers in warm soapy water, using a bottle brush, to remove any milk residue. This should be done as soon after feeding as possible to prevent bacteria from multiplying. Three methods of sterilisation can be used.

- 1 Steam sterilising** is a fast and efficient way of sterilising. The bottles, teats and caps are placed in the steam steriliser, following the manufacturer's instructions. Steam sterilising usually takes about ten minutes and is relatively hassle free.

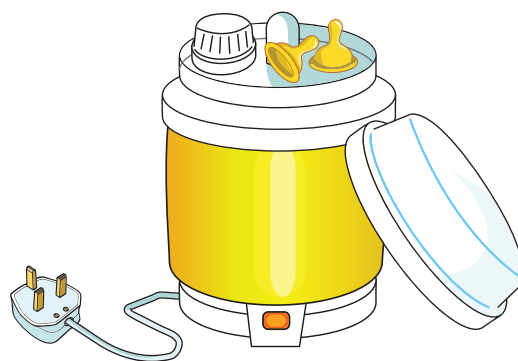


Figure 7.4 Steam sterilising

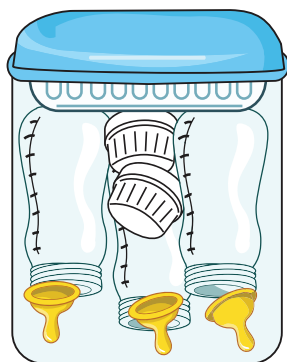


Figure 7.5 Chemical sterilising

- 2 Cold water chemical sterilising** involves immersing the feeding equipment in a diluted disinfectant such as Milton. Chemical sterilisation usually takes about 15–30 minutes.

- 3 Boiling** is another method of sterilisation. Immerse the feeding equipment in a saucepan filled with cold water, cover the pan, bring to the boil and boil for at least three minutes.



Figure 7.6 Boiling

Note: Whichever method you use, you must be careful when removing the now sterile feeding equipment. Do not touch the equipment with your bare hands; use tongs to remove it. **Never** touch the teat of the bottle with your hands; use sterile tongs.

FOOD SAFETY AND HYGIENE

Food safety means protecting food from contamination by foreign objects, poison/chemicals and harmful bacteria (HSE 2012a). Food spoilage is caused by enzymes and micro-organisms and occurs when food is contaminated or prepared in a dirty kitchen or when the person handling the food is careless or unhygienic. Enzymes are the chemicals naturally present in fruit and vegetables, which cause food to ripen and then over-ripen. Micro-organisms include bacteria, yeasts and moulds. Food poisoning is caused when these micro-organisms get into food, which is then eaten. Bacteria carriers include: careless and unhygienic food handlers; a dirty food preparation area; dirty equipment, utensils and kitchen cloths; and flies, vermin and household pets in the kitchen.

Food poisoning

The most common bacteria that cause food poisoning in humans are:

- ▶ **Salmonella:** found in the intestines of humans, birds and animals.
- ▶ **Staphylococci:** found in the human body, nose, mouth, throat, cuts and boils.
- ▶ **Clostridium:** carried in the intestines of humans, birds and animals.

The symptoms of food poisoning are similar to those of viral gastroenteritis and include nausea, vomiting, diarrhoea, fever, and abdominal pain and cramps. Food poisoning can occur up to 36 hours after the ingestion of contaminated food.

Food poisoning is very serious but is entirely preventable by following basic food hygiene rules. Kitchen staff must clean and disinfect surfaces regularly to prevent bacteria flourishing. Equipment must be washed after use and stored in clean, dry presses. Kitchen cloths must be clean and kept separately from cloths used in other areas of the setting to prevent contamination. Animals should never be let into the kitchen and the kitchen should be kept free of flies. The kitchen should be bright, well ventilated and airy, the sink disinfected regularly and the floor swept and washed daily.

If the setting is operating a kitchen, all staff should receive **hazard analysis and critical control point (HACCP)** training. HACCP is a food safety management system that helps workers to identify biological, chemical and physical hazards and analyse the risk of how likely the hazard is to occur. After assessing the hazard and risk, the critical control point must be identified. This is the step in the food preparation process when the risk of the hazard occurring is high and must be controlled.

REST AND SLEEP IN THE ECCE SETTING

Sleep and rest are essential for health. During sleep, the cells of the body regenerate and are replenished, allowing healing to take place. Sleep is also essential for the brain to rest and to process what has happened during the day. Adults need approximately eight hours' sleep a night, but young children need much more sleep. A child in pre-school will need 12 hours' sleep, which can be made up with naps during the day in addition to sleep at night. Under the Pre-School Regulations (DoHC 2006), ECCE settings must provide facilities for rest and sleep. A sleep room must be available for children to nap during the day and rest areas should be made available for children who do not sleep during the day.

Sudden infant death syndrome (SIDS)

SIDS, sometimes known as cot death, is the sudden and unexplained death of an infant or young child. Despite many decades of research it is not clear what causes SIDS. However, research has identified factors that increase the risk of SIDS. The environment also has a role to play. Risk factors for SIDS include:

- ▶ the baby being put to sleep on their front
- ▶ the mother smoking during pregnancy or the baby being exposed to smoke after birth – the risk increases with every cigarette the mother smokes a day and with every smoker in the home
- ▶ overheating the baby by over-dressing or having too high a temperature in the room
- ▶ sharing a bed with a baby.

Preventing SIDS in the ECCE setting

A separate sleep room will be needed. The temperature must be tightly controlled, and kept between 16°C and 20°C. A thermometer must be available in the room and the temperature checked and recorded every hour. Babies must always be put **back to sleep** and **feet to foot**. In other words, they must be put to sleep on their backs, with their feet to the foot of the cot. This position is currently recommended as best practice in preventing SIDS. Cots should not contain pillows or duvets as these present a suffocation hazard. Babies should be checked regularly to make sure blankets do not slip over their head. When ECCE staff put children down to sleep, they should dress children as lightly as possible, in a nappy, vest and babygro. Bibs and ribbons present a strangulation hazard and should not be worn by children when asleep or upset. Tummy time, when the baby spends time on their stomach, should be encouraged to strengthen the muscles in the baby's stomach, shoulders and neck.

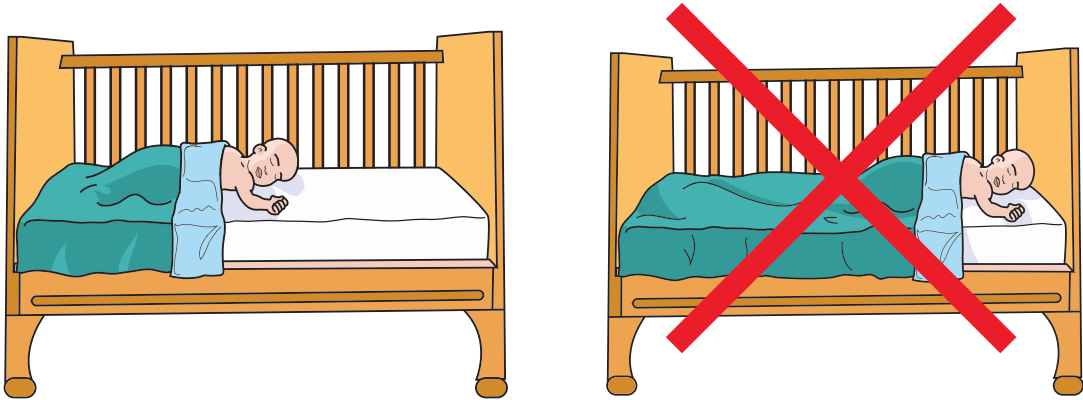


Figure 7.7 Put babies 'back to sleep' and 'feet to foot'

Preventing SIDS at home

The same guidelines for preventing SIDS in the ECCE setting apply at home. Babies should be put to sleep in a cot in their parents' room and the cot should remain in the parents' room for at least the first six months. Sharing a bed with the child is discouraged as the baby can become overheated. In particular, the baby should never sleep in the parents' bed if:

- ▶ either parent smokes
- ▶ either parent has been drinking or has taken drugs or medication that may make them sleep more heavily
- ▶ either parent is extremely tired
- ▶ the baby is less than three months old
- ▶ the baby was born prematurely (before 37 weeks)
- ▶ the baby weighed less than 2.5kg (5.5lb) at birth.

Parents must never fall asleep with a baby in their arms on an armchair, couch or beanbag. Some research shows that giving a child a soother every time they are placed to sleep reduces the risk of cot death, but the use of a soother will be down to the parents' personal choice.

POLICIES AND PROCEDURES IN ECCE SETTINGS

In order to meet Standard Nine of Síolta – Health and Welfare – the setting must devise and implement a range of policies and procedures (CECDE 2006). Component 9.1 states that:

The setting has implemented a full range of policies and procedures to prevent the spread of infectious diseases, reduce exposure to environmental hazards and stress, and deal effectively and efficiently with medical situations that may arise.

This is supported by component 9.2:

The setting endeavours, through the implementation of a range of policies, procedures and actions, to promote the health of all children and adults.

Siolta requires that settings implement a range of policies and procedures covering the following categories:

- ▶ overarching statements
- ▶ health and safety
- ▶ child welfare
- ▶ curriculum
- ▶ partnership with families and liaison
- ▶ human resources
- ▶ administration.

What are policies and procedures?

A *policy* is a statement of principles, values or intent that guides or usually determines decisions and actions to achieve an organisation's goals. . . . *Procedures* spell out precisely what action is to be taken in line with the relevant policy and outline the steps to be followed or the way a task is to be performed. (Willoughby 2008:21)

Essentially, policies comprise the **rules** of the setting (e.g. promoting healthy eating) and a procedure outlines how exactly the policy is to be **implemented** (e.g. a ban on unhealthy food, regular healthy eating week).

Drawing up policies and procedures



Figure 7.8 Stages in developing policies and procedures

- 1 **Initiate the process:** Set up a working group; choose which policies are to be drawn up.
- 2 **Plan:** Begin to plan the policy; gather the information necessary – best practice, legal requirements – to write a comprehensive policy.
- 3 **Execute:** Devise the policy.
- 4 **Control:** Check the policy to ensure that it reflects the views of the working group; make adjustments; decide whether to accept the document.
- 5 **Close:** The working group signs off the document and the policy/procedure is put into practice; a review date is set.

When writing your policies and procedures, ensure that they are:

- ▶ **Inclusive:** Involving every member of the setting and all diverse groups in the setting.
- ▶ **Realistic:** Easily put into practice in the ‘real world’.
- ▶ **Fair:** The policy and procedure should explain why they are needed and how they will improve the setting.
- ▶ **Consultative:** Everybody should be included in the process – staff, parents and children.
- ▶ **Applicable:** Policies and procedures should be a good fit for the setting and easy to put into practice.
- ▶ **Reviewed:** All procedures should be reviewed regularly to keep up to date with best practice and legislative requirements.
- ▶ **Distributed:** Policies and procedures are designed to be used. They should therefore be distributed to each member of staff and parents so that they can be implemented (McPartland 2012).

The Child Health and Well-being module requires you to be familiar with the following policies:

- ▶ security
- ▶ fire evacuation
- ▶ first aid
- ▶ accident and incident
- ▶ illness
- ▶ exclusion
- ▶ notifiable illnesses
- ▶ healthy eating.

Signpost for reflection

ECCE settings are required to have many policies and procedures to promote a safe and healthy environment. How can staff, parents and children work together to ensure that all of these are implemented?

Table 7.2 Policies in an ECCE setting

Policy	What the policy should include
Security policy	Measures taken to secure the setting, including use of CCTV, access systems and passwords Garda vetting procedure
Fire evacuation policy	Evacuation procedure and evacuation routes How often the evacuation procedure is to be practised Name of designated fire officer
First aid policy	Definition of 'first aid' List of trained first aiders Contents of first aid kit Procedure for keeping first aid qualifications up to date Legal requirements
Accident/incident policy	Definition of 'accident' and 'incident' List of legal obligations Procedure to be followed in the event of an accident/incident, including completion of accident books
Illness policy	Definition of 'illness' Procedure to be followed if a child becomes ill while in the pre-school, including the provision of a quiet room Procedures to prevent illness, including staff hygiene, children's hygiene, cleaning routines and kitchen hygiene
Exclusion policy	Definition of 'exclusion'; circumstances under which exclusion is necessary Exclusion periods for staff and children for a range of illnesses as per HSE guidelines
Notifiable illnesses policy	Definition of 'notifiable illness' List of notifiable illnesses Procedure for informing the HSE of a notifiable illness
Healthy eating policy	Definition of 'healthy eating' How the setting promotes healthy eating, e.g. healthy eating week Examples of healthy lunches and a list of 'banned' food