A Study Guide on Children’s Health
Health Education and Teacher Education.

In 1997, the Scottish Office Education and Industry Department (now the Scottish Executive Education Department) initiated a series of collaborative projects on health issues with the Teacher Education Institutions in Scotland. Other key partners were HM Inspectors of Education, the Health Education Board for Scotland, and the Scottish Executive Health Department. The aim was to develop a coherent approach to health education within teacher education courses in Scotland. This project is the final contribution to the series.

A Study Guide on Children’s Health is designed for use in independent learning. It provides information, in an interactive way, about some common childhood health conditions. Students undertaking teacher education courses will find it a helpful guide. It may also be of value to students undertaking social work, community education and general degree programmes as well as to teachers and related professionals.

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Acknowledgments

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The authors are grateful to all those members of organisations who contributed their advice and experience.
The aim of this guide is to enable you to learn more about a range of common health issues facing children in schools. While the guide has been developed mainly for students following a primary education pre-service course, a great deal of the information contained will be helpful to school teachers and students undertaking training in secondary school education, community education and social work.

The guide provides basic, general information and does not attempt to replicate medical guidelines. It focuses on the practical nature of dealing with a range of health conditions, in a succinct and informative way.

The concept of the health promoting school has become central to the health and well-being of all its members. There are three key aspects, which combine to provide a vehicle for promoting and maintaining health:

• time allocated within the curriculum for health education;
• the personal, social and emotional development of pupils and care of staff through the ethos of the school;
• the links established with families and external services such as health and social work.

A natural part of the health promoting ethos is the support for pupils with health difficulties, including childhood illnesses or infections and conditions such as asthma or epilepsy. Young people can be protected from isolation and stigma by the encouragement, care and understanding of staff and the support of fellow pupils.

An integral part of the health promoting school is the role played by the school health services in providing information to schools and families about a range of health issues and in their active involvement within each school. You will find that provision varies within each area; local guidelines on support services should be consulted.

Good relationships with parents are essential to the health promoting school. In particular, children with health difficulties and their families want to be reassured that the school community offers full support. This can be achieved where there is a climate of trust established and parents are fully consulted.
The Scottish Executive has prepared guidance entitled “The Administration of Medicines in Schools”. This gives advice on the respective roles of Health and Education professionals, the development of school policies, the preparation of health care plans and the administration and storage of medicine in schools. It also contains advice on the types of training required by school staff who agree to administer medication to pupils.

All councils have guidelines and procedures for Child Protection. These ensure the safety and well-being of young people. They also provide protection and support for those adults working with young people. (The Scottish Office (1998) *Protecting Children: A Shared Responsibility*. Edinburgh: The Scottish Office.)

Guidelines have also been published to support staff working with children and young people with special educational needs, where intimate care is required (Scottish Office Education and Industry Department (1999) *Helping Hands: Guidelines for Staff who provide Intimate Care for Children and Young People with Disabilities* Edinburgh: The Scottish Office.) This report provides guidance based on existing good practice in a wide range of schools.

It is helpful, when working in or with schools, to ensure that you are familiar with the policies and strategies implemented by staff to support young people. Schools should have copies of key government policy documents and local council guidelines and procedures. The following checklist may be helpful.

- Scottish Executive guidance on handling medicines: The Administration of Medicines in Schools
- Local council guidelines on handling children’s medicines
- School policy for dealing with accidents in school
- Local council guidelines and procedures for child protection
- General information on health service provision for the school
- School policy on disseminating information about children’s conditions, both to other children and to parents
- School policy on appropriate storage of medication
- Guidelines specific to staff who provide intimate care for children with disabilities

Using the guide

The guide is divided into six units:

1. Asthma;
2. Common childhood illnesses;
3. Diabetes;
4. Epilepsy;
5. First aid basics;
6. Head lice.

Each unit contains the following sections:

How will this unit help me?

This section outlines the aims and outcomes for the unit.

Setting the scene.

This brief section provides an indication of the key symptoms or issues relating to the topic.

Developing your understanding.

This section provides activities designed to increase your knowledge and understanding of the topic. You may wish to undertake these on your own or with a partner or in a small group. In most cases, there are web sites identified for further exploration.

What would you do?

You are given situations that may arise in the school and asked to consider ways of dealing with them. Suggested action is outlined.

Want to know more?

The final section of each unit provides you with sources of information for further reading and a range of agency and web site addresses. These are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.
Unit 1: Asthma

How will this unit help me?

This unit will:

- raise your awareness of the main features and symptoms of asthma;
- enable you to identify strategies to support young people with asthma in schools.

On completion of this unit, you will be able to:

- identify the main signs and symptoms of asthma;
- identify the range of treatments available to young people;
- assess ways of responding to an asthma attack;
- evaluate the support and information resources available.

Setting the scene

What is asthma?

The word ‘asthma’ is derived from the Greek word *azein* meaning ‘to breathe hard’. Asthma is a condition that affects the airways, the small tubes which carry air to and from the lungs. In people with asthma, these airways are sensitive and can develop reactions to a range of triggers which irritate the airways and cause the symptoms of asthma to appear. The symptoms of asthma include coughing, wheezing, being short of breath and a tight chest.

What are the triggers?

Triggers can be anything that irritates the airways and provokes the symptoms of asthma to appear. Each person’s asthma is different and people have their own triggers. Common ones include: colds and flu, cigarette smoke, pollen, house-dust mites, furry or feathery pets, stress, exercise and laughter.

What happens?

The airways do three things:

- muscles around the tubes constrict, making the airway narrow;
- the airway lining starts to swell and become inflamed;
- the lining secretes a sticky mucus.

The combination of these three changes results in the tubes becoming...
narrower, making it difficult to breathe normally. Asthma symptoms such as coughing, wheezing, tightness in the chest and shortness of breath appear; this is an asthma attack. Children have commented:

*It feels like someone is standing on my lungs.*

*It feels like I am being squashed.*

*When I am having an episode it feels like a rope is being slowly tightened around my chest.*

(The National Asthma Campaign Blue Peter Asthma Survey, 1995)

### Developing your understanding

**I didn’t know that!**

**Activity 1:** The following short quiz is devised to enable you to learn a little more about asthma and how it affects young people. Each question has three answers; your task is to identify the correct one by ticking the appropriate box. The correct answers are provided at the end of the unit.

1. The number of people currently receiving treatment for asthma in the United Kingdom is estimated as:
   - a) 1.5 million
   - b) 2.6 million
   - c) 5.1 million

2. The proportion of children estimated to have asthma in the UK is:
   - a) one in 15
   - b) one in 8
   - c) one in 4

3. The inhaler to be used in the event of asthma symptoms appearing is:
   - a) preventer
   - b) reliever

4. A spacer is:
   - a) a device which makes metered dose (spray) inhalers easier to use
   - b) a device to give children more space around them
   - c) a device to help children take tablets

5. Should a child with asthma take part in sport?
   - a) yes
   - b) no
   - c) don’t know
Activity 2: Avoiding triggers

This is an activity you can complete on your own, with a partner or in a small group. The picture below highlights some of the triggers that can make people experience asthma symptoms or lead to an asthma attack.

For each of the triggers you see, list some things you could do to avoid setting it off. You can compare your ideas with the list of suggestions provided at the end of the unit.

<table>
<thead>
<tr>
<th>Trigger</th>
<th>How to reduce risk or avoid trigger:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Tobacco smoke</td>
<td>No smoking in the home where someone has asthma; Avoid smoky pubs/clubs;</td>
</tr>
</tbody>
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What would you do? Consider the following two situations and the related questions. You may find it helpful to discuss them with a partner or in a small group. Once you have shared your views read the commentary at the end of the unit.

**Situation 1**
During the lunch break, you are passing through the school playground. A boy aged nine runs up to you and tells you that his friend is having an asthma attack. The boys are not in your class.
What is your immediate response?
In what way can you help the young person?

**Situation 2**
There are three children with asthma in your class. Each has a reliever inhaler which they keep in their bag. One day, you come in after the break and find that a child without asthma has taken an inhaler out of a bag and taken a puff from it
What is your immediate response?
What further action should you take?

Want to know more? These are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

[http://www.asthma.org.uk](http://www.asthma.org.uk)
The National Asthma Campaign web site

[http://www.srs.org.uk](http://www.srs.org.uk)
The Scottish Respiratory Site provides links to a large number of sites and a range of resources.

Asthma Helpline: 08457 010203
Living with asthma raises all sorts of questions and concerns. Call the Asthma Helpline for help and advice from asthma nurses who have the time to listen to concerns and discuss what is right for you, in confidence.
For the price of a local call they give independent, up-to-date advice- no matter how small the query might seem.
The Asthma Helpline: 0845 7 01 02 03. Monday to Friday 9am to 7pm.
National Asthma Campaign Scotland
2a North Charlotte Street
Edinburgh EH2 4HR
Tel: 0131 226 2544
Fax: 0131 226 2401

A booklet aimed at parents, teachers and older children available from the NAC web site.

This pack provides everything a school could need to help it develop a good asthma policy.

Answers:

Activity 1: I didn’t know that!

1c The National Asthma Campaign estimates that 5.1 million people in the UK are currently receiving treatment for asthma.

2b The National Asthma Campaign estimates that 1.4 million children in the UK have asthma: this is approximately 1 in every 8 children.

3b The reliever helps to relieve breathing difficulties as they happen.

(Aerosol inhalers or ‘puffers’ release measured doses of medication in a fine mist, which is breathed in. **Reliever inhalers**: these are normally blue and should be taken immediately asthma symptoms appear. They relax the muscles in the airways, allowing the airways to widen and ease breathing. **Preventer inhalers** vary in colour, including brown, white, red and orange. These are taken each day and work by calming the airways, thus stopping them from swelling; they also stop the extra phlegm or mucus developing.)

4a The spacer is a large clear plastic “bubble-shaped” device which is attached to the inhaler and helps children to breathe in the medication straight down into the lungs. Spacers are useful for young children and those with severe asthma.

5a If the asthma is under control, then the child should be able to join in any kind of exercise or sport. A child with asthma should take his reliever inhaler as directed by his doctor before exercise, if required. Swimming is a particularly good form of exercise for children with asthma.

How did you get on?

You may wish to find out more about asthma or about the National Asthma Campaign. A visit to their website will be helpful: http://www.asthma.org.uk
Also, the American Lung Association has a good information site at: http://www.lungusa.org/asthma/
Activity 2: *Avoiding triggers*

*Tobacco smoke:*
No smoking in the home where someone has asthma; avoid smoky pubs clubs.

*Dust from furniture, carpets:*
House dust mite droppings is a common trigger. Dust all surfaces with a damp cloth; avoid using woollen blankets; use short-pile, synthetic carpeting, linoleum, tiles or wooden floor; keep house well-ventilated.

*Furry animals:*
Pets are not advisable if someone has asthma. Pets should be bathed weekly; do not allow them in the sitting room or bedroom.

*Having a cold or flu:*
A healthy diet, i.e. including plenty of fruit and vegetables, and regular exercise are important. A flu vaccination is sometimes advised for people with asthma; preventer inhalers should be used according to medical advice.

*Long grass and flowers:*
If the pollen count is high, keep windows closed; avoid long grass.

*Wet clothes:*
Avoid hanging wet clothes inside; prevent condensation by opening windows on good days.

*Exercise:*
Exercise is good for people with asthma if they have it under control; avoid exercising on cold days and warm up sufficiently before any exercise class.

*Food:*
Some foods can cause symptoms to appear. The most common are dairy produce, shellfish, fish, yeast and nuts. People with asthma may find that keeping a detailed food diary can help to identify trigger foods. A parent/health professional may wish to consider referral to a dietician or allergy clinic.

**Commentary:**

**What would you do?** *Situation 1*

This incident has taken place in the playground. Your first priority is to safeguard the child but at the same time, provide reassurance. You must remain calm as attacks can be very frightening:
• Ensure the child is sitting upright in a safe and comfortable position with as much privacy as possible.

• Check if the child has a reliever inhaler; this is normally blue and should be taken immediately. It will open up the air passages and allow the child to breathe more easily.

• Provide comfort to the child but do not put your arm around the child’s shoulders as this can be restrictive.

• Talk calmly to the child, encouraging slow and deep breathing. Children know what a comfortable position for them is: it may be sitting upright or leaning forward a little. Do not have the child lying down.

• Ensure that tight clothing is loosened.

• Once the child has recovered a little, offer a drink of water.

As soon as the child feels better, allow a return to normal class activities. If the reliever has no effect after five minutes and the child is becoming increasingly distressed and/or exhausted, you should arrange to call an ambulance or doctor. (The school will have agreed procedures for such an incident and normally such decisions will be made by the head teacher.) In addition, school procedures may suggest that parents are informed of the attack; try to identify what the trigger was so that parents can be fully appraised of the situation and that a similar event can be avoided.

Many children are open about having asthma and it is often discussed in a normal way in class; nevertheless, having an attack in the playground can be embarrassing. As you deal with the casualty, ask another child to go and tell another teacher or responsible adult who can ensure that the other children are cared for. You may wish to discuss the incident with the other pupils as soon as possible if you feel they are distressed or worried.

**Situation 2**

• Remain calm: the medicine in relievers (Salbutamol, sold as “Ventolin” or Terbutaline, sold as “Bricanyl”) is not normally dangerous. However, if the child is showing any signs of distress then encourage slow and deep breathing.

• Check what the child has used; it is unlikely to be harmful but if a number of doses have been inhaled, there may be increased heart rate.

• If there is concern about the child’s well-being, follow agreed procedures for contacting the doctor or ambulance service, and for informing parents.

• Once recovered, you should ensure that the child (and the class) is aware of the risk in using someone else’s medicine; open discussion about the specific use of inhalers could be incorporated into health education work.
What you can do to help

- Most schools will have a written policy about handling children’s medicines. Ensure you obtain a copy and familiarise yourself with it.

- Parents will often give the class teacher a reliever inhaler to keep in class. Make sure that each one is clearly labelled with the child’s name.

- Know your children. Find out which ones have asthma and compile an asthma register. Most children will carry their own inhaler and only in exceptional circumstances, e.g. a very young child or some children with special needs, would this not be the case.

- Ensure that at times when they may need the inhaler, e.g. during physical education classes, that it is accessible.

- Avoid triggers in the classroom, e.g. furry pets, excessive dust, strong smells and very cold air. Be aware that chemicals from science and art classes may act as triggers.

- Consider introducing asthma as part of a health education topic which focuses on medicines. Children with asthma may be willing to contribute their experiences, thus removing uncertainty and concern about asthma.
Unit 2: Common Childhood Illnesses

How will this unit help me?

This unit will:

- provide opportunities for you to increase your knowledge and understanding of a range of common childhood conditions;
- enable you, as a teacher, to respond in an informed, positive and supportive way which minimises the impact of childhood conditions on the educational progress of children in your care.

On completion of this unit you will be able to:

- use a range of sources to describe common childhood conditions and their symptoms;
- select the recommended period for children with such conditions to be kept away from school.

Setting the Scene

The widespread high uptake of immunisation plus the mass measles/rubella campaigns of autumn 1994/95 should mean that outbreaks of the previously common childhood infections (measles, mumps, rubella, whooping cough) are now very rarely seen. Chickenpox is a common infectious disease for which immunisation is not currently available, though a vaccine is under development.

During your career as a teacher you may have in your charge children with common childhood conditions. The information and guidance here is of a narrowly medical nature and is intended to aid the practical understanding of illnesses within an educational context.

The following common childhood conditions are outlined:

- mumps
- measles
- rubella
- whooping cough
- chickenpox
- meningitis
- impetigo
- verrucae
- conjunctivitis

There are some excellent web sites available and you should use those listed at the end of this section (and others which you may discover) to gather information and to settle yourself into the activities which follow.
Developing your understanding

Activity 1: **What could it be?**

For this matching game you can work on your own, with a partner, or in a small group as follows:

1. List the following childhood conditions on a sheet of paper: eczema; conjunctivitis; chicken pox; meningitis; mumps; measles; impetigo; rubella; whooping cough; verrucae

2. Read out each of the ‘description’ statements and after discussion, match to any one of the childhood conditions.

3. Read out each of the ‘symptoms’ statements and after discussion, match to any one of the childhood conditions.

4. Check the correct answers at the end of the unit.

**Description**

| D1 | A non infectious inflammation of the skin. The commonest cause is a general over sensitivity (atopy) |
| D2 | Inflammation of the transport membrane covering the white of the eye and lining the inside of the eyelids. |
| D3 | Caused by a virus called Varicella Zoster. Complications of the disease are rare. It affects mostly children under five and is a very common but usually mild childhood disease. One attack gives protection for life. |
| D4 | A normally mild viral illness which can have serious complications. A single attack normally provides lifelong immunity. |
| D5 | Caused by a virus which is very infectious. The disease itself is not usually serious, but a child with this typically feels very unwell. |
| D6 | A bacterial infection of the skin which is highly contagious and spread by direct contact between one individual and another. Although not usually a serious condition, it can be uncomfortable and distressing and spread rapidly to other children. The bacteria that cause this condition are able to enter and infect skin when it is broken by a cut, insect bite or a skin condition, |
| D7 | Caused by a bacterium called Bordetella Pertussis, which infects the lungs. |
| D8 | Caused by a virus which enters the skin through a cut or abrasion. The virus seems to act by stimulating a thickening of the skin. |
| D9 | A mild infection caused by a virus. It affects mainly children and sometimes adults where it can be more severe. Complications are very rare. |
| D10 | A rare illness caused by inflammation of the membranes that surround the brain and the spinal cord. It is always regarded as a serious threat to health. It can be caused by a variety of individual viruses and bacteria. The mildest form is virus infection. Bacterial infection can be fatal if not treated early. |
### Symptoms

| S1. | Pain around the ear or while chewing/swallowing. Swelling under the jaw and inflammation of the salivary glands – usually spreads from one side of the face to the other. Older children may get a mild fever, headache and stiff neck. |
| S2. | A mild, short-lived fever, non-itchy rash and swollen neck glands and base of skull. Joint pain in some children. Sometimes the eyes may appear inflamed and red and children have a runny nose. The rash appears on the face and spreads downwards to the neck and limbs. |
| S3. | Eyes become red and itchy and they may sting, burn or feel gritty. Vision can be slightly blurred. There is a thin, watery discharge which can be clear or yellow. Often develops during a cold or throat infection. |
| S4. | Sudden onset of fever, rapid breathing, vomiting, severe headache and high temperature although hands and feet may be cold. Dislike of bright light, stiff neck and drowsiness or confusion. A bruising-like rash of tiny red spots turning into purple marks may be visible. These symptoms may not show at the same time. The characteristic rash is a feature in about 75% of cases. Symptoms can easily be mistaken for flu or a bad cold. Irrespective of the details, you would know this child was very ill and that prompt action was needed. |
| S5. | Can affect any part of the body, but is usually seen on the face, particularly around the nostrils, mouth and ears. Skin is red, with thin-walled blisters, containing yellow or honey-coloured fluid. The blisters burst, leaving raw, moist sores that gradually enlarge. Straw coloured crusts form as the surface of the sores dries. |
| S6. | In healthy children the disease is usually mild and considered as a mere inconvenience. After infection there can be mild fever and after a few days a rash of itchy red spots appear which become thin, clear blisters. These spread from the chest and back to all over the body and then become scabs or crusts which fall off within 10 days. The rash comes in crops so spots of different ages are seen side by side. This disease occurs mainly in late autumn and winter. |
| S7. | Causes redness, dry skin, swelling and sometimes blisters which can weep fluid. Intense itching causes rubbing and scratching and, if severe, may also cause psychological distress. This condition typically affects skin on elbows and wrists and behind the knees. It can however affect all parts of the body. Strongly linked with asthma and hay fever. |
| S8. | Symptoms include a high temperature, runny nose, red eyes and dry cough. White spots appear inside the mouth. A blotchy red spotty rash appears, first on the face and behind the ears, and then spreads down to cover the whole body. As the rash fades, a brownish discoloration of the skin occurs. Cough may be the last symptom to disappear. |
| S9. | One or more small speckled lesions found mainly on the soles of the feet or on and around the toes. Sometimes described as having a “pepper pot” appearance. They are dark brown in colour with a rough crumbly surface, sometimes covered by a layer of hard skin. |
| S10. | Mild fever, loss of appetite and a dry cough. The cough becomes more severe and may produce the characteristic “whoop”. Vomiting may follow the cough. |
Activity 2  Can I go back to school?

Children who are unwell with an infectious disease should not be at school or nursery. Once they are better they should return unless they pose a risk of infection to others. Whenever there is doubt about the management of a particular illness, advice should be sought from a member of the school health team/service.

For this matching exercise you can work on your own, or with a partner, as follows:

1. Match the condition to the recommended period a child, once well, should be kept away from school, by putting the correct letter in the corresponding box.

2. Check the correct answers at the end of the unit.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Recommended period to be kept away from school</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chickenpox</td>
<td>a) None</td>
</tr>
<tr>
<td>2. Impetigo</td>
<td>b) None Transmission is probably uncommon in schools.</td>
</tr>
<tr>
<td>3. Rubella</td>
<td>c) None. The virus is contagious. Affected children may go swimming but foot/feet should be covered.</td>
</tr>
<tr>
<td>4. Conjunctivitis</td>
<td>d) Until lesions are crusted or healed. If lesions can reliably be kept covered, exclusion may be shortened. It is usually recommended that children stay off school until treatment is finished. It is advisable to avoid swimming until the skin has healed.</td>
</tr>
<tr>
<td>5. Eczema</td>
<td>e) Five days from commencing antibiotic treatment. Non-infectious coughing may continue for several weeks.</td>
</tr>
<tr>
<td>6. Mumps</td>
<td>f) For five days from onset of rash. The child is infectious until spots have crusted.</td>
</tr>
<tr>
<td>7. Verrucae</td>
<td>g) For five days from onset of rash. The child is most infectious before the diagnosis is made and most children should be immune due to immunisation so that exclusion after the rash appears will prevent very few cases.</td>
</tr>
<tr>
<td>8. Whooping Cough</td>
<td>h) Five days from onset of rash. This is now a rare condition in the UK.</td>
</tr>
<tr>
<td>9. Measles</td>
<td>i) Generally, there is no reason to exclude siblings and other close contacts of a case. By the time children are well enough to return to school, they should not be infectious.</td>
</tr>
<tr>
<td>10. Meningitis</td>
<td>j) For five days from onset of swollen glands.</td>
</tr>
</tbody>
</table>
### Activity 3  
**Fact or Fib**

*See if you can identify which statements are “fact” or “fib”.*

<table>
<thead>
<tr>
<th>Fact or Fib?</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Chickenpox is highly infectious.</td>
</tr>
<tr>
<td></td>
<td>2. The onset and progression of rubella is very rapid.</td>
</tr>
<tr>
<td></td>
<td>3. A child with verrucae should be excluded from any physical activity or swimming.</td>
</tr>
<tr>
<td></td>
<td>4. Children with impetigo should be excluded from school until the infection has cleared.</td>
</tr>
<tr>
<td></td>
<td>5. As infectious diseases can easily spread, the use of towels brought from home is acceptable.</td>
</tr>
<tr>
<td></td>
<td>6. Children are more susceptible to infectious diseases than adults because their immune systems are smaller.</td>
</tr>
<tr>
<td></td>
<td>7. There is no legal duty which requires teachers to administer medication; this is a voluntary role. However, teachers are expected to take the same action in an emergency situation as a parent would take.</td>
</tr>
<tr>
<td></td>
<td>8. Any incident where there has been a potential infection of an adult or child from a known source of infection, should be reported immediately to the Department of Public Health Medicine.</td>
</tr>
<tr>
<td></td>
<td>9. Treatment of children with whooping cough does not affect the duration of the illness, and non-infectious coughing may continue for several weeks.</td>
</tr>
<tr>
<td></td>
<td>10. About 35% of children suffer from illnesses which may affect their academic progress, as well as the relationships they have with their peers and teachers.</td>
</tr>
<tr>
<td></td>
<td>11. There is no specific treatment for mumps.</td>
</tr>
</tbody>
</table>
What would you do?  

**Situation 1**

1. You discover that one of the children in your class has a rash and is feeling unwell. The child didn’t have the rash yesterday, but complained of feeling unwell. A pregnant parent helper was working with the child in the reading corner yesterday afternoon.

   *Discuss this scenario with a partner, or in a small group, before reading the commentary at the end of the unit.*

**Situation 2**

2. A child in your class has severe eczema. She arrives with a letter from home giving instructions on the use of enclosed medication – some cream for the condition and an antibiotic tablet (in a separate envelope to be taken at lunchtime).

   *Discuss this scenario with a partner, or in a small group before reading the commentary at the end of the unit.*

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**Further reading and sources of support**

[http://www.bbc.co.uk/education/health](http://www.bbc.co.uk/education/health)  
This site has an A-Z of conditions and medical terms. The parenting page is useful for childhood conditions.

[http://www.health.yahoo.com](http://www.health.yahoo.com)  
An uncomplicated and effective site which has search engines for general health topics and diseases.

[http://www.hebs.com](http://www.hebs.com)  
The HEBS web site is a comprehensive source of health education and health promotion resources, services and information, including databases on support groups.

[http://www.healthgate.com](http://www.healthgate.com)  
This US based site includes a library of health and medication information. The sections on Kids’ and Teens’ Health and MEDline search are particularly useful for childhood conditions.

[http://www.whatshouldido.com](http://www.whatshouldido.com)  
This site allows you to find descriptions of a number of commonly occurring medical complaints and advice.

An educational site-this section provides brief background information on some of the more common conditions and diseases which teachers may encounter.
Want to know more? The following are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

Which? Healthline: a telephone information service which provides information from leading medical specialists on nearly 450 health topics. Each lasts approximately 4 minutes and is charged at local call rate.

Health Education Board for Scotland (HEBS)
Woodburn House
Canaan Lane
EDINBURGH
EH10 4SG

General enquiries:
Tel: 0131 536 5500
Textphone: 0131 536 5503
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Email: admin@hebs.scot.nhs.uk

Health Promotion Library Scotland
Health Education Board for Scotland
The Priory
Canaan Lane
Edinburgh
EH10 4SG

Tel:(voice) 0845 912 5442
(text) 0131 536 5593
Fax: 0131 536 5502
e-mail: library.enquiries@hebs.scot.nhs.uk
An answer machine is available outside of opening hours.


Answers

ACTIVITY 1: What could it be?

<table>
<thead>
<tr>
<th>Disease</th>
<th>D1</th>
<th>S7</th>
<th>Disease</th>
<th>D5</th>
<th>S8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eczema</td>
<td>D1</td>
<td>S7</td>
<td>Measles</td>
<td>D5</td>
<td>S8</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>D2</td>
<td>S3</td>
<td>Impetigo</td>
<td>D6</td>
<td>S5</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>D3</td>
<td>S6</td>
<td>Rubella</td>
<td>D9</td>
<td>S2</td>
</tr>
<tr>
<td>Meningitis</td>
<td>D10</td>
<td>S4</td>
<td>Whooping</td>
<td>D7</td>
<td>S10</td>
</tr>
<tr>
<td>Mumps</td>
<td>D4</td>
<td>S1</td>
<td>Verrucae</td>
<td>D8</td>
<td>S9</td>
</tr>
</tbody>
</table>

ACTIVITY 2: Can I go back to school?


ACTIVITY 3: Fact or Fib?

1. Fact Chickenpox is transmitted by direct contact with ill children from coughing or by airborne transmission.
2. Fact.
3. Fib No exclusion from any activity is needed, though the verrucae may cause the child pain. Infected children should wear verrucae socks for swimming and all barefoot activities.
4. Fib Nursery and infant children with impetigo should be excluded from school until the crusting has resolved. The diagnosis and need for exclusion should always be confirmed with a member of the school health team of the GP. Older children may return after treatment has started.
5. Fact In premises where people gather together it is imperative that the highest standards of cleanliness and hygiene are observed. The use of towels brought from home is acceptable provided that individual towels are hung separately on pegs adequately spaced and clean replacements are provided weekly by parents.
6. Fib Their immune systems have not yet built up resistance.
7. Fact Teachers who provide support for pupils with medical needs, or who volunteer to administer medication, should seek support from the headteacher and parents. They should have access to information and training and reassurance about their legal liability.
Teachers’ conditions of employment do not normally include giving medication or supervising a pupil taking it, although staff may volunteer to do this and many are happy to do so.

8. Fact.


10. Fib – 15%.

11. Fact – Symptoms may be relieved by the application of intermittent ice, warm salt water gargling, soft foods and extra fluids.

Commentary

What would you do? Situation 1

- Seek support, perhaps from the head teacher or school nurse.
- Remain calm and reassuring to the child.
- Don’t delay taking action – this could be meningitis, measles, chickenpox or rubella. Consider other symptoms.
- Consider also the health of the other children in the class – it may be appropriate to find an area where the child who is unwell could lie down. A colleague should stay with the child to offer comfort and support and something to drink.
- Communicate with parents or emergency contact – remain calm and stress the situation is under control. If a parent/family friend is being asked to come to school, any expression of panic transmitted by the teacher may be upsetting, particularly if the parent intends driving to school, since panic may impair an individual’s judgement.
- This situation can be a worry for staff/helpers who may be in early pregnancy (or who are in contact with someone who is). All staff working in schools should therefore arrange to have their rubella immunity checked. GPs can offer the rubella vaccine to those who are not immune. Chickenpox during pregnancy can also affect the unborn child. It is important in this scenario that the parent helper is informed once the child has been diagnosed. She would then promptly inform her GP or consultant.
- Check the school administration handbook or similar for any particular administration procedures, records, etc.
Situation 2

Many pupils will need to take medication (or be given it) at school at some time in their school life. Mostly this will be for a short period only, e.g. to finish a course of antibiotics or apply a lotion. To allow pupils to do this will minimise the time they need to be off school. Medication should only be taken to school when absolutely essential. It is helpful, where possible, if medication can be prescribed in dose frequencies which will enable it to be taken outside school hours. Where medication has to be brought to school, it should be in the original container. Parents may need to obtain a separate prescription for this. Parents should be encouraged to ask their GP or dentist about this.

• Seek support from the headteacher or school nurse.

• Communicate with parents or emergency contact. Education authorities normally provide a specimen parental consent form. No pupil should be given medication without his or her parents’ written consent. You should check:

  - the pupil’s name;

  - written instructions provided by parent or doctor;

  - prescribed dose;

  - expiry date.

It is good practice for staff to complete and sign record cards each time they give medication to a pupil. In some circumstances, it is good practice to have the dosage and administration witnessed by a second adult. It might also be appropriate for parents to come to school at lunchtime to administer medicine themselves.

• Remain calm, reassuring and sensitive to the child.

• Self management – the cream can be put on the child’s finger and they can rub it on the area themselves. The teacher should ideally supervise the child in a private area in the school and offer comfort and support.

• Help the child to avoid any irritants e.g. soaps, paints.

• Ensure the classroom is not too warm.

• Check school administration handbook or similar for any particular administration procedures, records, etc. Ensure that parents know procedures.
Unit 3: Diabetes

How will this unit help me?

This unit will:

- provide information about Diabetes Mellitus and the implications for young children;
- emphasise the importance of the health and well being of the child.

On completion of this unit, you will be able to:

- recognise symptoms of diabetes;
- identify procedures for dealing with hypoglycaemia;
- develop your knowledge and understanding of diabetes in the school context.

What is Diabetes?

In Europe there has recently been a steady increase in the diagnosis of Diabetes Mellitus. Diabetes UK states that 1 in 700 children of school age has diabetes. Therefore, in your teaching career it is highly probable that you will teach a child with this condition.

Diabetes mellitus is caused by a deficiency of the hormone insulin. Insulin controls the concentration of glucose (sugar) in the blood and enables glucose to be used as energy by the body. After eating foods rich in carbohydrate, blood glucose levels rise and insulin is released into the blood. When blood glucose levels fall, for example during a PE lesson, the insulin level also falls. Therefore, insulin plays a pivotal role in regulating blood glucose levels. Diabetes occurs where the amount of glucose (sugar) in the blood is too high because the body is unable to use it properly.

Symptoms of untreated Diabetes Mellitus include:

- increased thirst;
- frequent trips to the toilet/bathroom;
- weight loss;
- extreme tiredness;
- blurred vision
- genital itching or regular episodes of thrush.

Children who have diabetes will have lost the ability to produce insulin and as a result cannot use glucose. The glucose is transported into the urinary tract causing abnormally high excretions of urine and as a direct result, increased thirst. Weight loss is due to the body breaking down fat for energy.
There are two main types of diabetes:

- **Type 1 diabetes**, where there is a severe lack of insulin in the body. Generally, people who develop diabetes under the age of 40, (especially in childhood) have this type. It is treated by insulin injections and diet. A simple blood or urine test conducted at home can measure glucose levels.

- **Type 2 diabetes** occurs either where the body produces insufficient insulin or when insulin produced by the body is not working properly. Generally, people over the age of 40 develop this type. It is treated by a combination of diet and tablets or diet and insulin injections.

**Treatment**

Most children diagnosed with diabetes will require insulin injections. This may be, typically, two injections per day - before breakfast and before the evening meal. This does depend on the age and size of the child. Parents will advise on this. If the child requires a lunchtime injection, he or she will know what to do without adult assistance, although a room should be made available. A balanced diet is essential, with the main focus on starchy foods such as potatoes, rice, cereals, bread and pasta. It is important that meals and snacks are eaten at regular intervals and in particular after periods of increased activity. Snacks should include fruit and biscuits. Sometimes these snacks will have to be eaten in class. The reason for this is that if a meal is delayed, the blood glucose levels fall causing hypoglycaemia.

Hypoglycaemia means low blood sugar. This is commonly referred to as a ‘hypo’ (a hypoglycaemic episode). Symptoms include:

- hunger;
- glazed eyes;
- lack of concentration;
- sweating.

Symptoms vary from child to child. To treat a ‘hypo’, a fast acting sugar food should be given to the child immediately. These are:

- fizzy drink (not a diet brand);
- fresh fruit juice;
- mini chocolate bar;
- jam/ honey;

The parent will be able to give you sound advice on what is effective for their child. Ideally, a fast acting sugar food should be kept in a desk drawer or filing cabinet and be accessible at all times.

In most cases, a child who loses consciousness will come round and will not be in immediate danger. On recovery, the child should be given a biscuit and a small glass of milk in order to maintain blood glucose levels.
A Study Guide on Children’s Health

Developing your understanding

Activity 1: Matching exercise

Match the key words and definitions associated with diabetes to help to develop your understanding of the illness.

The correct answers are given at the end of the unit.

<table>
<thead>
<tr>
<th>Key words</th>
<th>Match the definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin</td>
<td>A fast acting sugar</td>
</tr>
<tr>
<td>Glucose</td>
<td>A hormone</td>
</tr>
<tr>
<td>Thirst</td>
<td>A hypo symptom</td>
</tr>
<tr>
<td>Weight loss</td>
<td>Low blood sugar</td>
</tr>
<tr>
<td>Complex CHO</td>
<td>High in carbohydrate, low in fat and sugar</td>
</tr>
<tr>
<td>Balanced diet</td>
<td>Pasta, rice, potatoes, bread and cereals</td>
</tr>
<tr>
<td>Fizzy drink (non-‘diet’)</td>
<td>A major energy source in metabolism</td>
</tr>
<tr>
<td>Mini choc bar</td>
<td>A fast acting sugar</td>
</tr>
<tr>
<td>A Hypo</td>
<td>A symptom of diabetes</td>
</tr>
<tr>
<td>Sweating</td>
<td>A symptom of diabetes</td>
</tr>
</tbody>
</table>

Activity 2: Web site exploration

The purpose of this activity is to help you to learn more about diabetes by visiting the Diabetes UK web site. The web site offers up to date information about diabetes, including advice specifically aimed at young people.

Go to: http://www.diabetes.org.uk Enter the site and click on ‘search’. Type ‘Facts and Myths Quiz’ in the search window. Participate in the quiz to test your knowledge and understanding of diabetes.

What would you do? Situation - dealing with hypoglycaemia

The pupils have just returned from PE and are settling down to work on group history projects. There is a commotion and as you look over towards the noise you notice that John has collapsed to the floor. You are aware that John has diabetes. What should you do? What would the follow up procedures be? You will find commentary at the end of the unit.
Want to know more?

The following are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

**Further work:**

Use the Diabetes UK web site to search for ‘TeenZone’ and review the information provided for young people.

**Further reading and sources of support**

Diabetes UK Scotland
Savoy House
140 Sauchiehall Street
Glasgow G2 3DH

Tel: 0141 332 2700
Fax: 0141 332 4880
E mail: scotland@diabetes.org.uk

A list of resources is available on this website.

A US based site providing excellent information for teachers and advice on formulating strategies to deal with child diabetes at school.

[http://www.hebs.com](http://www.hebs.com)
The Health Education Board for Scotland.

[http://www.childrenwithdiabetes.com](http://www.childrenwithdiabetes.com)
A full and detailed American site covering all aspects of childhood diabetes.


Answers

Activity 1: *matching exercise*

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<tr>
<td>Sweating</td>
<td>A hypo symptom</td>
</tr>
</tbody>
</table>

Commentary

What would you do? *Situation - dealing with hypoglycaemia*

If a child does lose consciousness, place him or her in the recovery position. Send a child to the school office to inform the head teacher (and/or to the next classroom to summon adult help). On recovery, the child should be given a milk drink and a sweet biscuit in order to maintain blood glucose levels. Parents should be notified immediately. If it is necessary for an ambulance to be called, the head teacher will take that decision.
Unit 4: Epilepsy

How will this unit help me?  

This unit will:

• raise your awareness of the main features and symptoms of epilepsy;
• enable you to identify strategies to support young people with epilepsy in schools.

On completion of this unit you will be able to:

• recognise the main signs and symptoms of epilepsy;
• identify the range of treatments available to young people;
• assess ways of responding to an epilepsy related incident;
• evaluate the support and information resources available.

Setting the scene  

What is epilepsy?

Epilepsy can affect anyone at any age. It is the most common serious neurological condition in the world. Throughout our lives, millions of messages are sent between a vast network of cells in our brain controlling everything we do, think and feel. The body has its own mechanisms in place to ensure that these messages are received in the normal manner. However, occasionally, without warning, these messages can be scrambled, due to an upset in brain chemistry and this disturbed pattern may result in a seizure.

A seizure is caused by a temporary change in the way brain cells work. There are many different types of seizure and they affect children in different ways. No two children will experience entirely the same symptoms; each child will experience epilepsy in a way that is unique to them. During a seizure a child may experience a number of unusual sensations or movements and/or alterations in the level of consciousness. The seizure usually lasts only a matter of minutes or seconds after which the brain returns to normal. The child may or may not have a warning.

What can be the triggers?

Many children with epilepsy gain complete control of their seizures with regular use of appropriate antiepileptic medication. Triggers can include:

• Lack of food  
• Lack of sleep
• Failure to take medication  
• Stress
• Anxiety
• Excessive heat
• Menstruation
• Sudden loud noises

• Boredom
• Too much liquid
• Alcohol

How to recognise a seizure

There are many different types of seizure that a teacher would need to look out for, for example:

Tonic-clonic seizures - the child might cry out, lose consciousness and fall to the ground. The body stiffens (tonic phase) and then convulses (clonic phase). The child’s lips might turn blue and her/his mouth may fill with frothy saliva if the inside of the cheek or tongue has been bitten. The child may have been incontinent and as s/he recovers may be confused, sleepy or have a bad headache.

Absence seizures - the child is seen to stop suddenly and stare into space. Slight movements of the eyelids might be seen. These are brief periods of interrupted consciousness and can happen several times a day. This can affect the child’s ability to absorb information and it may therefore, be important for the teacher to regularly repeat information and instructions.

Myoclonic seizures - the child will experience sudden jerks or contractions in her/his muscles, which may be severe enough to throw her/him to the ground. After a brief loss of consciousness, the child should recover quickly and is not normally confused.

Atonic seizures - the child’s muscles suddenly relax, causing her/him to drop to the ground. Again, there is a brief loss of consciousness, but recovery is almost immediate.

Tonic seizures - the child’s muscles stiffen and s/he may fall down, injuring her/himself. Breathing might also become difficult.

Complex partial seizures - the child can appear awake but may be unable to communicate. Actions may seem inappropriate, for example, plucking at clothes, lip smacking, repeating her/himself, head turning, wandering aimlessly, running or undressing. The child will not usually respond to instructions or questions.

The child does not normally need to be sent home after a seizure.

For more information on seizures, see Guidelines for Teachers - How to manage epilepsy, from Epilepsy Action Scotland.

Teaching a child with epilepsy

Teachers need to be aware when a child in their class has epilepsy. They will require information about epilepsy and about first aid measures when a child is having a seizure. Teachers can also help by being supportive and
encouraging (but not over-protective). They can educate other children (and perhaps the parents of other children) about epilepsy and be wary of possible incidents of name-calling or other forms of bullying. Teachers can also observe changes in a child’s behaviour, ability or attainment. A wide range of factors may affect how well a child with epilepsy performs at school.

Teachers need to consider the implications for the classroom. For example, medication may affect a child's capacity to concentrate, or having repeated absence seizures may cause a child to miss what the teacher has said. The teacher may, therefore, need to amend his/her teaching methods, e.g. to repeat instructions or write down important information. A helpful leaflet, *Guidelines for Teachers: How to Manage Epilepsy* is available from Epilepsy Action Scotland.

**Developing your understanding**

**Activity 1: Test your knowledge**

The following quiz is devised to enable you to learn more about epilepsy. There may be more than one correct answer to each question. Tick all answers which you believe to be correct. The answers are given at the end of the unit.

1. The incidence of epilepsy amongst children is:
   a. 1 in 10
   b. 1 in 60
   c. 1 in 100
   d. 1 in 220

2. The number of children who may develop epilepsy in a school of 800 pupils is around:
   a. 1
   b. 2
   c. 4
   d. 8

3. Epilepsy is caused by:
   a. Brain injury as a result of an accident
   b. Brain damage from infections, fevers or tumours
   c. Bio-chemical abnormalities
   d. No identifiable cause
4. First aid measures for dealing with seizures in school include:
   a. Put something soft under the child’s head
   b. Try to stop the muscles from jerking
   c. Note the time and note how long the seizure lasts
   d. Call an ambulance

5. Young people who have epilepsy:
   a. Will usually have their seizures well controlled with medication
   b. Should not participate in PE and sport
   c. Are best educated in special schools
   d. May have difficulty in gaining entry to careers

_How did you get on?_

Now that you have an awareness of epilepsy, you may wish to further your knowledge by visiting the following informative web sites:

http://www.epilepsyscotland.org.uk - Epilepsy Action Scotland
http://www.epilepsy.org.uk - the British Epilepsy Association
http://www.bbc.co.uk/health/epilepsy - the BBC Health Education site

**Activity 2: The responsibility of the school**

This is an activity that you can complete on your own, with a partner or in a small group. It is likely that during your career you will teach several children with epilepsy. The approach taken by the school is vital for positive school / parent partnerships. The aim of this activity is for you to consider information that the school should obtain from parents about their child in order to assist with classroom management and organisation.

Try to identify six questions. The first one has been done for you.

1. **Tell me about your child’s condition?**

2.

3.

4.

5.

6.

If possible, discuss your list of questions with others. Compare your questions with the list at the end of the unit.
What would you do? Consider the following situations and the related questions. You can also discuss them with a partner or in a small group. Once you have considered your own ideas, read the commentary at the end of the unit.

Situation 1

Soon after the start of the new school session a pupil, whom you know to have epilepsy, becomes unwell in class. Although she does not become unconscious, she is disorientated and this behaviour is frightening for the other children who are not aware of her epilepsy.

What is your immediate response? How might you provide support for the pupil with epilepsy and reassure the other pupils?

Situation 2

During the lunch break, you hear a child calling out in an inappropriate manner to another child in your class. You can see that this pupil is upset. He suffers from epilepsy and the teasing and name-calling is related to a seizure experienced during assembly last week.

What is your immediate response? What further action should you take? A commentary is provided at the end of the unit.

Want to know more? The following are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

www.epilepsy.scotland.org.uk
Epilepsy Action Scotland
48 Govan Road
Glasgow, G51 1JL
Tel: 0141 427 4911
Helpline: 0141 427 522

Guidelines for Teachers: How to Manage Epilepsy – A helpful leaflet available from: Epilepsy Action Scotland.

British Epilepsy Association
Anstey House
40 Hanover Square
Leeds. LS3 1BE
01132 439393


Answers

Activity 1: Test your knowledge

1. The correct answer is c. Around one child in 100 will have epilepsy at some time in their young life. The condition affects around 30,000 people in Scotland.

2. The correct answer is d.

3. All of these are possible causes of epilepsy.

4. The correct answers are a. and c. You should not try to restrain the child in any way during a seizure. The child should only be moved if they are in danger because of the location. There is not normally any need to call an ambulance or other medical assistance if the seizure follows the expected pattern. It is important not to panic, or fuss or cause additional upset for the child and other children. In certain circumstances (e.g. if the seizure last longer than 5 minutes or is accompanied by a high temperature) it will be necessary to summon emergency help.

5. The correct answers are a. and d. As many as seven out of 10 children with epilepsy will usually have their seizures controlled by medication within two years of diagnosis. There is no reason for a child with epilepsy to be excluded from PE. Placing restrictions on children make them feel and appear different. Certain activities (e.g. abseiling and climbing wall bars) may not be advisable. Schools should have discussions with parents to be clear about any activities that should be avoided or the nature of supervision which needs to be provided. Teachers and instructors should have full information. It is government policy that all children should normally be educated in mainstream schools. The majority of children with epilepsy will attend mainstream schools. A broad range of employment opportunities should be available to people with epilepsy. Certain types of work are not open to people with epilepsy (e.g. airline pilot) and young people may face resistance or prejudice from some employers. Specialist career advisers and disability employment advisers can provide support and information.

Activity 2: The responsibility of the school.

Teachers should find out as much as possible about a child’s epilepsy from their parents. Positive attitudes towards epilepsy and confidence in dealing with symptoms not only benefit the child but also ensure that all pupils adopt a healthy understanding of the condition. Parent-teacher partnerships prevent the child from becoming withdrawn and can help to ascertain any learning difficulties.

Possible questions you may wish to ask:

- What type of seizure does your child have?
• How long do they last?
• What do the seizures look like?
• How might the seizures or medication affect the child’s ability to learn?
• What first aid is recommended?
• Are there any particular triggers?
• What type of medication is your child taking?
• Are there any side effects?
• Does the child experience any prior warning of a seizure? (This is known as an aura.)
• Are there any other factors of which teachers should be aware?

It is also beneficial to you if the child has an understanding of their condition and how to cope with it in a positive manner.

Epilepsy Action Scotland and the British Epilepsy Association have useful resources to help you understand epilepsy within a school context. See references at the end of this unit.

**Commentary**

**Situation 1**

This incident has taken place in your classroom. Your first priority is to safeguard the child and at the same time provide reassurance. You must remain calm and be in control of the situation. Calmly reassure the other children. Send a child to the school office to inform the head teacher (and/or to the next classroom to summon adult help).

• Note the time and how long the seizure lasts.
• Clear a space around the child away from sharp edges and equipment.
• Cushion the head (e.g. with a rolled-up jacket).
• Loosen tight clothing.
• Carefully remove glasses if worn.
• If there has been incontinence, cover the child to prevent embarrassment.
• As soon as possible after the seizure has finished, turn the child into the recovery position.
• Be supportive during the confused episode. The child may need to rest or sleep for a short time, preferably in private.
It is not necessary to send a child home after a seizure, but each child is different. It is important to follow appropriate school-parent decisions at this point, i.e. a decision will have been taken in consultation with the parents when the child’s condition was initially discussed.

After, discuss with parents/carers (and the child) the issue of informing class-mates. If agreed, conduct lessons with the class about epilepsy to ensure they are informed and knowledgeable, and that the child with epilepsy is not vulnerable to bullying.

**Do not:**

- move the child during the seizure unless they are in danger; e.g. beside water, on the road, near a fire, at the top of the stairs;
- try to stop their movements;
- put anything into their mouths or between their teeth;
- give them something to drink.

**Note**

You do not have to call a doctor or ambulance when you know the child has epilepsy and the seizure is following the normal pattern of behaviour.

**Situation 2**

Children with epilepsy can be targets for bullying and teasing in schools. In particular, there is the possibility of mockery after a seizure. Sometimes children can be excluded from activities that would help them gain skills and self-confidence. As a result they don’t feel able to assert themselves. The school environment can allow children with epilepsy to break free from over protection and isolation and they should be actively encouraged to participate in all aspects of school life in order to prevent them from being singled out as different. The class teacher should give the child support and encouragement to stand up for him/herself.

When a seizure takes place in a classroom or at an assembly, all children are affected. They may be genuinely afraid for the well being of the child. They will be upset at seeing a classmate who appeared to be fit and healthy ten minutes ago, now looking unwell or strange in behaviour and speech. When this occurs, children need factual information appropriate to their age. Children also need to be told that what has happened poses no danger to them or the child who has had the seizure and also how they can help.
Unit 5: First Aid Basics

How will this unit help me?

This unit will:

• answer some of your questions about various emergency situations, to introduce you to some basic First Aid skills; help develop your confidence in dealing with a range of injuries and illnesses.

On completion of this unit, you should be able to:

• assess an emergency situation quickly and safely;
• maintain functions of Airway, Breathing and Circulation;
• administer cardiopulmonary resuscitation (CPR) when required to adults and children;
• place an unconscious casualty into the recovery position.

Setting the scene

In an emergency situation, certain basic First Aid procedures must be followed in order to assist a casualty before the arrival of professional help. These procedures involve giving care with confidence, based on knowledge of the principles and skills of First Aid.

In some situations, this might simply involve reassuring a casualty, or dealing with a minor cut or graze, or applying ice and compression to a sprain. However, in other more serious situations, the First Aider may be called upon to prioritise multiple casualties, make safe an unconscious person, or perform CPR on a casualty who is not breathing or who has no pulse.

Before you find out about some important First Aid skills and procedures, you should read the following information about the aims and priorities of First Aid.

The aims of First Aid are:

• to preserve life
  : ensure airway is open
  : ensure breathing
  : ensure circulation

• to prevent worsening of the casualty’s condition
  : limit the effects of the condition, e.g. unconsciousness, shock, etc.
  : apply pressure to bleeding, and dress wounds
  : immobilise fractures
• to promote recovery
  : reassure casualty
  : relieve pain
  : protect from further injury

In order to achieve these aims, the First Aid procedures which must be followed in an emergency situation are:

• assess the situation;
• make the area safe;
• give emergency First Aid;
• get help.

Assess the Situation
1. Observe what has happened, looking for clues
2. Look for dangers to yourself and to the casualty

Make the Area Safe
1. Protect the casualty from danger
2. Prevent further casualties

Give Emergency First Aid
1. Assess each casualty. You must first check for consciousness or unconsciousness by trying to get a response from the casualty. This should be done by carefully shaking the casualty’s shoulders, shouting their name, and asking questions such as ‘What happened? Are you okay?’
2. Determine treatment priorities - Airway, Breathing, Circulation, Bleeding, Fractures, Other Injuries
3. Treat those with life threatening conditions first

Note: The above steps give us a Danger – Response – Airway – Breathing - Circulation procedure or D – R – A – B – C.

Get Help
Ensure that any specialist help has been summoned and is on its way

Developing your understanding

Activity 1: Learn about First Aid

The Mayo Clinic information site can be found at: www.mayoclinic.com
Click on the link to “First-Aid & Self-Care Guide”. Choose some of the first aid topics (e.g. choking, fainting and fever) and read the advice provided.

Go back and click on Resuscitation, then Mouth-to-Mouth Rescue Breathing. Read this information.
Click on **Cardiopulmonary Resuscitation**. Read this information. You should now know how to check whether an unconscious casualty’s airway is clear, and how to check that breathing and circulation are present.

**Activity 2**  
*Which order?*

Re-organise the following statements to show the correct order of first aid.  
(An ambulance has already been summoned).

1. If there is no sign of circulation, begin chest compressions.
2. Try to get a response by shaking the casualty’s shoulders and shouting, ‘Are you okay?’
3. Look, listen and feel for breathing.
4. Check for signs of circulation by noting the skin colour and looking for movement in the limbs and eyes. If you know how, check for the carotid pulse by feeling for 10 seconds at the side of the casualty’s neck.
5. Continue with CPR until professional help arrives.
6. If no response, open casualty’s airway by tilting their head back and lifting up their chin.
7. If not breathing, pinch casualty’s nose closed and give 2 full breaths into their mouth.
8. Perform 15 compressions to every 2 breaths at the rate of 100 per minute.

The correct order of statements is given at the end of this unit.

**Activity 3:**  
*CPR for infants and children*

Go to web site

www.learncpr.org/index.html

Click on **CPR for Children**. Read the information describing the CPR procedure when the casualty is a young child. Make your own notes.

Click on **CPR for babies/infants** and read the information about the correct CPR procedure. For more information, click on **Ask The Doctor** and **CPR Facts**. Now try the **Quiz**.

The information in this web site should have helped you to understand the differences in the CPR procedure for adults, young children and babies/infants.
Using the table below try to identify what you have learned without reference to the website.

<table>
<thead>
<tr>
<th>Age</th>
<th>Artificial Ventilations</th>
<th>Chest Compressions</th>
<th>Rate</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Baby/Infant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 7 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Years or Over</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(adult)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The answers are given at the end of the unit.

Activity 4: The recovery position

Finally, go to web site www.surgerydoor.co.uk

Click on Emergencies, then Emergencies. You can choose to read about a range of injuries and illnesses, but first read the information about the Recovery Position.

The step by step procedure to put an unconscious casualty into the recovery position is:

1. Kneel down beside the casualty and open their airway.
2. Take the casualty’s arm that is nearest you. Bring it towards you and place it flat on the ground, palm uppermost.
3. Bring the casualty’s other arm across and hold the hand, palm outwards, against their near cheek. With your other hand, bend the casualty’s far away leg at the knee, with the foot flat on the floor.
4. Keep the casualty’s hand pressed against the cheek to support the head while you pull the far away knee and thigh towards you, rolling the casualty on to their side.
5. Remove your hand from under the casualty’s head, and make sure the airway is still open. Place the casualty’s top leg at right angles to their body.
6. Free straight arm if necessary, ensure airway remains open and monitor the casualty at regular intervals.
If you have the opportunity in the near future, practise this procedure with a colleague, following the above steps. This will help you to carry it out in an emergency with care and confidence.

**Other Situations**

Other typical First Aid incidents which may arise in school include:

- Choking
- Cuts, grazing and bleeding
- Broken bones and dislocations
- Burns and scalds
- Sprains, strains and bruises
- Bites and stings

You can find information to help you deal with these incidents in the First Aid Manual (Revised 7th Edition) (Voluntary Aid Societies, 1999). The web site [www.surgerydoor.co.uk](http://www.surgerydoor.co.uk) has a useful section on ‘Emergencies’.

**Allergic Reactions**

Some people experience severe allergic (anaphylactic) reactions to food, insect stings, drugs or latex (rubber). Common food allergens include: milk, eggs, fish/shellfish, wheat, soy and nuts. An allergic reaction occurs because the body’s immune system over-reacts to the presence of a foreign body. Some people experience mild symptoms which can be treated with oral antihistamine. In others the reaction is severe and may be life-threatening. In severe cases, a crisis plan will have been developed with the GP or specialist clinic. This may include the administration of adrenaline by injection. In such situations, teachers should be involved in discussions about the correct emergency first aid procedures. More information is available from: The Anaphylaxis Campaign ([www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk)).

**What would you do? Situation 1**

You are called to the playground where the school janitor has collapsed. Nobody has seen what happened. What is the first thing you should do?

As a result of your assessment, you have discovered that the janitor is unconscious, is not breathing, and has no pulse. What action should you take to give him the biggest chance of survival?

The ambulance arrives, and the janitor is taken to hospital. Meanwhile, one of your colleagues appears to have been affected by the situation and faints in the staff room. She has no obvious injuries, but is unconscious, although she is breathing and has a pulse. What should you do? A commentary is provided at the end of the unit.
Situation 2

You are helping two friends to decorate their kitchen. One has removed a power socket… Your immediate reaction is to switch off the electricity at the consumer unit. The other friend phones for an ambulance. What is your next step?

Your friend is unconscious, is not breathing, and has no pulse. What next?

What is the correct CPR procedure? You continue with the CPR procedure, but you suspect that air is not getting into the casualty’s chest. Which four things should you check?

If the casualty was a child, how would the CPR procedure be different?

A commentary is provided at the end of the unit

Want to know more?

The following are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

Resources/Texts


Agencies/Support Groups

www.medicinenet.com
A site that helps answer questions

www.surgerydoor.co.uk
Provides wide-ranging information

British Red Cross
Red Cross House
1 Glebe Avenue
Stirling FK8 2HZ

Health Education Board for Scotland
Woodburn House
Canaan Lane
Edinburgh EH10 4SG
Answers

Activity 2: Which order?

The correct order of statements is:

(2 - 6 - 3 - 7 - 4 - 1 - 8 - 5)

Activity 3: CPR for infants and children

<table>
<thead>
<tr>
<th>Age</th>
<th>Artificial Ventilations</th>
<th>Chest Compressions</th>
<th>Rate</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 Year (Baby/Infant)</td>
<td>1 (mouth and nose)</td>
<td>5 (two fingers)</td>
<td>100pm</td>
<td>2-2.5cm (1/2-1 inch)</td>
</tr>
<tr>
<td>1 - 7 Years</td>
<td>1 (mouth only)</td>
<td>5 (one hand)</td>
<td>100pm</td>
<td>2.5-3.5cm (1-11/2 inch)</td>
</tr>
<tr>
<td>8 Years or Over (adult)</td>
<td>2 (mouth only)</td>
<td>15 (two hands)</td>
<td>100pm</td>
<td>4-5cm (11/2-2 inch)</td>
</tr>
</tbody>
</table>

Commentary

Situation 1

You must make a quick assessment of the casualty, based on the Danger-Response-Airway-Breathing-Circulation procedure, to indicate what needs to be dealt with first, and how to deal with it.

You must send someone to dial 999 for an ambulance, explaining the casualty is unconscious, is not breathing, and has no pulse. You must start CPR immediately in the sequence of 2 ventilations to 15 compressions.

Place the casualty into the recovery position, maintaining an open airway. Monitor regularly her breathing and pulse. Get professional help, if the unconsciousness continues.

Note: A first aid kit at work, provided for staff purposes, should include in it a leaflet giving guidance on basic first aid.

Situation 2

Please note the different technique for children and babies/infants.

You should check for a response from the casualty using the ‘shake and shout technique’ before working your way through the Response-Airway-Breathing-Circulation procedure.

Dial 999 for an ambulance, or send someone to do so, stating that the casualty
is an unconscious male who is not breathing and has no pulse. Continue with CPR.

The four things you should check are:

1. The head is tilted sufficiently far enough back
2. There is a firm seal around the mouth
3. The nostrils are closed
4. The airway is not obstructed

The correct CPR sequence for an adult is 2 ventilations to 15 compressions. For a child only one hand is used to compress the chest to a lesser depth (normally one third of the depth of the chest) than for an adult. After initially giving 5 breaths, the sequence is then 1 breath to 5 compressions.
Unit 6: Head Lice

How will this unit help me?

This unit will:

• develop your awareness of head lice as a communicable condition;
• increase your knowledge and understanding of the implications of this condition within a school context.

On completion of this unit, you will be able to:

• identify signs and symptoms;
• analyse procedures when dealing with a sensitive issue;
• evaluate methods of controlling head lice in a school environment.

Setting the scene  The facts about head lice

Head lice are tiny wingless parasitic insects which spend their whole life cycle on human head hair. Head lice have three pairs of legs ending in claws for grasping hairs. They are often not much bigger than a pinhead and rarely larger than a sesame seed. Head lice live on, or very close to, the scalp and draw blood from the skin. Nits are egg cases laid by lice, stuck to hair shafts. They are tiny (about the size of a sugar grain) white or dark and oval-shaped. Often there is no obvious indication of infection for several weeks. An early sign of infection is a rash which often appears at the base of the neck. Other indications that a child has head lice include:

• Intense itching of the scalp;
• Tiny red spots on the scalp;
• Nits seen at the base of the neck and around the ears.

Who catches lice?

Despite understandable anxiety amongst parents and teachers, public health experts advise that head lice should not be regarded as a major problem. In fact, according to one group of experts: ‘The more serious problem is excessive public and professional reactions that lead to an inflated perception of prevalence, to unnecessary, inappropriate, or ineffective action and to unwarranted anxiety and distress’ (Public Health Medicine Environmental Group, 1999).

Head lice are transmitted only by direct head to head contact. Most infections arise from contact between close friends and family, and transmission within the classroom is fairly rare. Teachers have an important role to play in countering myths about head lice and in providing parents...
with accurate information. Sometimes this will mean tactfully reassuring parents that there has not been a serious ‘outbreak’ and resisting suggestions that the school should send an ‘alert letter’ to homes when cases of head louse infection arise.

**Treatment**

Concerned parents should be encouraged to seek advice from the school nurse, family doctor or pharmacist. Teachers may have opportunities to provide factual information and pass on fact sheets, if appropriate.

The conventional treatment involves using a lotion or shampoo containing an insecticide. Chemical treatments must be used carefully, following the instructions supplied. This method will kill live lice. The treatment may require to be repeated seven days later to kill lice which have hatched after the first application. Medical authorities advise against treatment with chemicals unless there is clear evidence that a living louse has been found.

The method of ‘detection combing’ is explained in leaflets available from the school nurse, family doctor or pharmacist. Parents worried about the use of chemical treatments may prefer a ‘natural’ alternative. These typically involve regular checking with a special comb, sometimes in combination with shampoos or lotions containing oils or herbal extracts. These alternative methods will only be successful if conducted carefully, following advice.

**Developing your understanding**

**Activity 1:**  *Head lice – fact or myth?*

In the list below, can you identify which statements are facts and which are myths? The correct answers are given at the end of this unit.

<table>
<thead>
<tr>
<th>Fact or Myth</th>
<th>Statements about Head Lice</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>Nits and head lice are the same thing.</td>
</tr>
<tr>
<td>□</td>
<td>Head lice just appear.</td>
</tr>
<tr>
<td>□</td>
<td>Only people with clean hair get head lice.</td>
</tr>
<tr>
<td>□</td>
<td>Having the hair cut short will prevent the spread of head lice.</td>
</tr>
<tr>
<td>□</td>
<td>Only children catch head lice.</td>
</tr>
</tbody>
</table>

**Fact or Myth**

- Nits and head lice are the same thing.
- Head lice just appear.
- Only people with clean hair get head lice.
- Having the hair cut short will prevent the spread of head lice.
- Only children catch head lice.
### Fact or Myth

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pets cannot pass on head lice.</td>
</tr>
<tr>
<td></td>
<td>Washing with ordinary shampoo will prevent head lice.</td>
</tr>
<tr>
<td></td>
<td>Regular washing with an insecticide shampoo will prevent head lice.</td>
</tr>
<tr>
<td></td>
<td>Head lice products are harmful to humans.</td>
</tr>
<tr>
<td></td>
<td>Infected pupils can continue to attend school.</td>
</tr>
</tbody>
</table>

[Reference: this activity is based on information provided in a leaflet, *Information on head lice for parents and carers* (Greater Glasgow Health Board, August 2000) and from *Head Lice Explained* by Community Hygiene Concern, 1998]

### Activity 2: Brainstorm: Suggestions for inclusion in a school policy

Schools are recommended to have a written policy on the management of the head louse problem. What might be included in a policy? Using the headings below, brainstorm your ideas. You can then compare your ideas with the suggestions which follow. This could be a group activity if you are able to have a discussion with fellow-students. A commentary is provided at the end of the unit.

**Headings**

- Involving parents
- Using external agencies
- Ensuring confidentiality
- Immediate action by the school

**What would you do? Situation 1**

It is 08.45 and you are in the school playground on the way into school. The parent of a child in your class approaches you and asks to speak to you privately. The parent explains tearfully that her child has head lice and has been kept at home, looked after by a relative. She is obviously extremely embarrassed about what has happened and the word ‘shame’ is used. There has been a telephone call from the parent of another child who, somehow, has heard of the ‘outbreak’. This parent has apparently demanded that the infected child be excluded from school and said that the school should be informing all parents of the risk of infection.
How might the school handle these connected incidents? How might you support the child on return to your class (consider bullying etc.)? A commentary is provided at the end of the unit.

Want to know more?
The following are considered useful background reading and references for students involved in initial teacher education. They are not intended as recommendations for classroom use.

**Further reading and other sources of support**

- [http://www.kidshealth.org](http://www.kidshealth.org)
  An information leaflet on symptoms

- [http://www.phls.co.uk](http://www.phls.co.uk)
  A fact sheet for schools

- [http://www.nits.net](http://www.nits.net)
  Community Hygiene Concern site

  A health information site covering a range of issues


Community Hygiene Concern
160 Inderwick Road
London. N8 9JT

Bugbustar hot line: 0181 341 7167
Answers

Activity 1: **Head lice - fact or myth?**

_Statements about Head Lice_

- **M** Nits and head lice are the same thing.
  Head lice are tiny insects which suck blood from the scalp. Nits are the shiny covers left after the eggs laid by head lice have hatched. The eggs take seven to ten days to hatch. Lice live for two to three weeks after hatching. Hatchlings remain on the head where they hatch for a minimum of five days.

- **M** Head lice just appear.
  Head lice are caught from close head to head contact with an infected person. Adult lice can move quickly between heads six days after hatching. Young children are particularly vulnerable because head to head contact is more common in this age group. Momentary, close contact is enough.

- **M** Only people with clean hair get head lice.
  It is commonly thought that lice prefer clean hair. However, according to one authority (Community Hygiene Concern, 1998) this has not been established. They say: ‘The association in the public mind between lice, dirt and poverty dates back centuries... In their anxiety to redress the balance, health educators have replaced one misconception with another.’

- **M** Having the hair cut short will prevent the spread of head lice.
  Head lice will only move to where they can detect the warmth they need to survive. Whether hair is long or short, they will spread if heads are touching or are very close.

- **M** Only children catch head lice.
  Anyone can get head lice, whatever their age, hair colour or hair style.

- **F** Pets cannot pass on head lice.
  Pets do not get human head lice.

- **M** Washing with ordinary shampoo will prevent head lice.
  Regular washing of hair will not prevent head lice. No prevention is known, but early detection is the best cure. An infected individual may experience a rash at the back of the neck, caused by the irritation of louse droppings. Itching is caused by lice biting the scalp to feed on blood. There may be other causes for scalp irritations. Head lice and their eggs are well camouflaged on hair and careful inspection using a detector comb is required to confirm infection.

- **M** Regular washing with an insecticide shampoo will prevent head lice.
  Insecticide shampoo does not prevent infection with head lice and is not recommended for regular use.
Head lice products are harmful to humans. There is no evidence that head lice treatments recommended by GPs and pharmacists are unsafe. However, lice may be resistant to the insecticide in a particular chemical treatment, requiring treatment with a product containing an active ingredient from a different pesticide group. A pharmacist’s advice is essential. Alternative, non-chemical, treatments are available, including use of oils and herbal extracts and special combing (Bug Busting) techniques.

Infected pupils can continue to attend school.

An infected pupil should not be excluded from school. Such action could be unnecessarily upsetting for the child. Arguably the risk of infection with lice is less than the risk of catching measles or chickenpox from other children. It is vital that reports of infection are kept confidential.

Activity 2: Suggestions for inclusion in a school policy

- Involving parents
  - Agreed procedure for contacting parents
  - Guidance on preventing spread of alarm among parents, teachers and children (Letters sent to all parents in a class or school on the basis of one child’s infection are misguided and can lead to panic.)
  - Ways of communicating with parents (e.g. seminars, leaflet)

- Using external agencies
  - Refer to guidelines issued by the local health board and council education department.
  - Collaboration with school nurse
  - Suggested sources of information, e.g. GP practice nurse or pharmacist

- Ensuring confidentiality
  - Ways of observing confidentiality
  - Reference to guidelines on working with children

- Immediate action by the school
  - Procedures for enabling child to remain in school, e.g. once treatment has been started child should not be excluded
  - Ways of ensuring child is not targeted or identified by others

Commentary

What would you do: Situation 1

You have a duty to keep within school and council policy. However, you should recognise the sensitivity of the situation and work towards avoiding confrontation with either parent.
• At the time, reassure the parent of the infected child that this is something that can happen to anyone. One means of reassurance is to provide a leaflet explaining the condition and how the parent can help. You could also recommend other sources of help, e.g. the school nurse, GP practice nurse, pharmacist or local health promotion department.

• Explain school and council policies clearly - once the child has started treatment he/she can return to school.

• While the head teacher is likely to take action, you have a responsibility to support the child. Consider ways of involving the child in classroom activities to boost self-esteem.