



SACRED HEART CATHOLIC VOLUNTARY ACADEMY

PRACTICAL ADVICE ON ASTHMA, EPILEPSY, DIABETES AND ANAPHYLAXIS

DATE REVIEWED: NOVEMBER 2019

INTRODUCTION

1. The medical conditions in children that most commonly cause concern in schools and settings are asthma, diabetes, epilepsy and severe allergic reaction (anaphylaxis). This document provides some basic information about these conditions but it is beyond its scope to provide more detailed medical advice and it is important that the needs of children are assessed on an individual basis.

ASTHMA

What is Asthma?

2. Asthma is common and appears to be increasingly prevalent in children and young people. One in ten children have asthma in the UK.
3. The most common symptoms of asthma are coughing, wheezing or whistling noise in the chest, tight feelings in the chest or getting short of breath. Younger children may verbalise this by saying that their tummy hurts or that it feels like someone is sitting on their chest. Not everyone will get all these symptoms, and some children may only get symptoms from time to time.
4. However in early years settings staff may not be able to rely on younger children being able to identify or verbalise when their symptoms are getting worse, or what medicines they should take and when. It is therefore imperative that early years staff, who have younger children in their classes, know how to identify when symptoms are getting worse and what to do for children with asthma when this happens. This should be supported by written asthma plans, asthma school cards provided by parents, and regular training and support for staff. Children with significant asthma should have an individual health care plan.

Medicine and Control

5. There are two main types of medicines used to treat asthma, relievers and preventers. Usually a child will only need a reliever during the school day. **Relievers** (blue inhalers) are medicines taken immediately to relieve asthma symptoms and are taken during an asthma attack. They are sometimes taken before exercise. Whilst **Preventers** (brown, red, orange inhalers, sometimes tablets) are usually used out of school hours.
6. **Children with asthma need to have immediate access to their reliever inhalers when they need them.** Inhaler devices usually deliver asthma medicines. A spacer device is used with most inhalers, and the child may need some help to do this. It is good practice to support children with asthma to take charge of and use their inhaler from an early age, and many do.
7. Children who are able to use their inhalers themselves should be allowed to carry them with them. If the child is too young or immature to take personal responsibility for their inhaler, staff should make sure that it is stored in a safe but readily accessible place, and clearly marked with the child's name. Inhalers should always be available during physical education, sports activities and educational visits.
8. For a child with severe asthma, the health care professional may prescribe a spare inhaler to be kept in the school or setting.
9. The signs of an asthma attack include:

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| <ul style="list-style-type: none"><input type="checkbox"/> coughing<input type="checkbox"/> being short of breath<input type="checkbox"/> wheezy breathing<input type="checkbox"/> feeling of tight chest<input type="checkbox"/> being unusually quiet |
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10. When a child has an attack they should be treated according to their individual health care plan or asthma card as previously agreed. An ambulance should be called if:

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| <ul style="list-style-type: none"><input type="checkbox"/> the symptoms do not improve sufficiently in 5-10 minutes<input type="checkbox"/> the child is too breathless to speak<input type="checkbox"/> the child is becoming exhausted<input type="checkbox"/> the child looks blue |
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11. It is important to agree with parents of children with asthma how to recognise when their child's asthma gets worse and what action will be taken. An Asthma School Card (available from Asthma UK) is a useful way to store written information about the child's asthma and should include details about asthma medicines, triggers, individual symptoms and emergency contact numbers for the parent and the child's doctor.

12. A child should have a regular asthma review with their GP or other relevant healthcare professional. Parents should arrange the review and make sure that a copy of their child's management plan is available to the school or setting. Children should have a reliever inhaler with them when they are in school or in a setting.
13. Children with asthma should participate in all aspects of the school or setting 'day' including physical activities. They need to take their reliever inhaler with them on all off-site activities. Physical activity benefits children with asthma in the same way as other children. Swimming is particularly beneficial, although endurance work should be avoided. Some children may need to take their reliever asthma medicines before any physical exertion. Warm-up activities are essential before any sudden activity especially in cold weather. Particular care may be necessary in cold or wet weather.
14. Reluctance to participate in physical activities should be discussed with parents, staff and the child. However children with asthma should not be forced to take part if they feel unwell. Children should be encouraged to recognise when their symptoms inhibit their ability to participate.
15. Children with asthma may not attend on some days due to their condition, and may also at times have some sleep disturbances due to night symptoms. This may affect their concentration. Such issues should be discussed with the child's parents or attendance officers as appropriate.
16. All staff should have training or be provided with information about asthma once a year. This should support them to feel confident about recognising worsening symptoms of asthma, knowing about asthma medicines and their delivery and what to do if a child has an asthma attack.

EPILEPSY

What is Epilepsy?

17. Children with epilepsy have repeated seizures that start in the brain. An epileptic seizure, sometimes called a fit, turn or blackout can happen to anyone at any time. Seizures can happen for many reasons. At least one in 200 children have epilepsy and around 80 per cent of them attend mainstream school. Most children with diagnosed epilepsy never have a seizure during the school day. Epilepsy is a very individual condition.
18. Seizures can take many different forms and a wide range of terms may be used to describe the particular seizure pattern that individual children experience. Parents and health care professionals should provide information to schools, to be incorporated into the individual health care plan, setting out the particular pattern of an individual child's epilepsy. If a child does experience a seizure in a school or setting, details should be recorded and communicated to parents including:

1. any factors which might possibly have acted as a trigger to the seizure - e.g. visual/auditory stimulation, emotion (anxiety, upset)
2. any unusual “feelings” reported by the child prior to the seizure
3. parts of the body demonstrating seizure activity e.g. limbs or facial muscles
4. the timing of the seizure - when it happened and how long it lasted
5. whether the child lost consciousness
6. whether the child was incontinent

This will help parents to give more accurate information on seizures and seizure frequency to the child’s specialist.

19. What the child experiences depends whether all or which part of the brain is affected. Not all seizures involve loss of consciousness. When only a part of the brain is affected, a child will remain conscious with symptoms ranging from the twitching or jerking of a limb to experiencing strange tastes or sensations such as pins and needles. Where consciousness is affected; a child may appear confused, wander around and be unaware of their surroundings. They could also behave in unusual ways such as plucking at clothes, fiddling with objects or making mumbling sounds and chewing movements. They may not respond if spoken to. Afterwards, they may have little or no memory of the seizure.
20. In some cases, such seizures go on to affect all of the brain and the child loses consciousness. Such seizures might start with the child crying out, then the muscles becoming stiff and rigid. The child may fall down. Then there are jerking movements as muscles relax and tighten rhythmically. During a seizure breathing may become difficult and the child’s colour may change to a pale blue or grey colour around the mouth. Some children may bite their tongue or cheek and may wet themselves.
21. After a seizure a child may feel tired, be confused, have a headache and need time to rest or sleep. Recovery times vary. Some children feel better after a few minutes while others may need to sleep for several hours.

Medicine and Control

22. Most children with epilepsy take anti-epileptic medicines to stop or reduce their seizures. Regular medicine should not need to be given during school hours.
23. Triggers such as anxiety, stress, tiredness or being unwell may increase a child’s chance of having a seizure. Flashing or flickering lights and some geometric shapes or patterns can also trigger seizures. This is called photosensitivity. It is very rare. Most children with epilepsy can use computers and watch television without any problem.
24. Children with epilepsy should be included in all activities. Extra care may be needed in some areas such as swimming or working in science laboratories.

Concerns about safety should be discussed with the child and parents as part of the health care plan.

During a seizure it is important to make sure the child is in a safe position, not to restrict a child's movements and to allow the seizure to take its course. In a convulsive seizure putting something soft under the child's head will help to protect it. Nothing should be placed in their mouth. After a convulsive seizure has stopped, the child should be placed in the recovery position and stayed with, until they are fully recovered.

25. An ambulance should be called during a convulsive seizure if:

- it is the child's first seizure
- the child has injured themselves badly
- they have problems breathing after a seizure
- a seizure lasts longer than the period set out in the child's health care plan
- a seizure lasts for five minutes if you do not know how long they usually last for that child
- there are repeated seizures, unless this is usual for the child as set out in the child's health care plan

26. Most seizures last for a few seconds or minutes, and stop of their own accord. Some children who have longer seizures may be prescribed diazepam for rectal administration. This is an effective emergency treatment for prolonged seizures. The epilepsy nurse or a paediatrician should provide guidance as to when to administer it and why.

27. Training in the administration of rectal diazepam is needed and will be available from local health services. Staying with the child afterwards is important as diazepam may cause drowsiness. Where it is considered clinically appropriate, a liquid solution midazolam, given into the mouth or intra-nasally, may be prescribed as an alternative to rectal Diazepam. Instructions for use **must** come from the prescribing doctor.

28. Children and young people requiring rectal diazepam will vary in age, background and ethnicity, and will have differing levels of need, ability and communication skills. If arrangements can be made for two adults, at least one of the same gender as the child, to be present for such treatment, this minimises the potential for accusations of abuse. Two adults can also often ease practical administration of treatment. Staff should protect the dignity of the child as far as possible, even in emergencies

DIABETES

What is Diabetes?

29. Diabetes is a condition where the level of glucose in the blood rises. This is either due to the lack of insulin (Type 1 diabetes) or because there is insufficient insulin for the child's needs or the insulin is not working properly (Type 2 diabetes).
30. About one in 550 school-age children have diabetes. The majority of children have Type 1 diabetes. They normally need to have daily insulin injections, to monitor their blood glucose level and to eat regularly according to their personal dietary plan. Children with Type 2 diabetes are usually treated by diet and exercise alone.
31. Each child may experience different symptoms and this should be discussed when drawing up the health care plan. Greater than usual need to go to the toilet or to drink, tiredness and weight loss may indicate poor diabetic control, and staff will naturally wish to draw any such signs to the parents' attention.

Medicine and Control

32. The diabetes of the majority of children is controlled by injections of insulin each day. Most younger children will be on a twice a day insulin regime of a longer acting insulin and it is unlikely that these will need to be given during school hours, although for those who do it may be necessary for an adult to administer the injection. Older children may be on multiple injections and others may be controlled on an insulin pump. Most children can manage their own injections, but if doses are required at school supervision may be required, and also a suitable, private place to carry it out.
33. Increasingly, older children are taught to count their carbohydrate intake and adjust their insulin accordingly. This means that they have a daily dose of longacting insulin at home, usually at bedtime; and then insulin with breakfast, lunch and the evening meal, and before substantial snacks. The child is taught how much insulin to give with each meal, depending on the amount of carbohydrate eaten. They may or may not need to test blood sugar prior to the meal and to decide how much insulin to give. Diabetic specialists would only implement this type of regime when they were confident that the child was competent. The child is then responsible for the injections and the regime would be set out in the individual health care plan.
34. Children with diabetes need to ensure that their blood glucose levels remain stable and may check their levels by taking a small sample of blood and using a small monitor at regular intervals. They may need to do this during the school lunch break, before PE or more regularly if their insulin needs adjusting. Most older children will be able to do this themselves and will simply need a suitable place to do so. However younger children may need adult supervision to carry out the test and/or interpret test results.
35. When staff agree to administer blood glucose tests or insulin injections, they should be trained by an appropriate health professional.
36. Children with diabetes need to be allowed to eat regularly during the day. This may include eating snacks during class-time or prior to exercise. Schools may need to

make special arrangements for pupils with diabetes if the school has staggered lunchtimes. If a meal or snack is missed, or after strenuous activity, the child may experience a hypoglycaemic episode (a hypo) during which blood glucose level fall too low. Staff in charge of physical education or other physical activity sessions should be aware of the need for children with diabetes to have glucose tablets or a sugary drink to hand.

37. Staff should be aware that the following symptoms, either individually or combined, may be indicators of low blood sugar - a **hypoglycaemic reaction** (hypo) in a child with diabetes:

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| <ol style="list-style-type: none">7. hunger8. sweating9. drowsiness10. pallor11. glazed eyes12. shaking or trembling13. lack of concentration14. irritability15. headache16. mood changes, especially angry or aggressive behaviour |
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38. Each child may experience different symptoms and this should be discussed when drawing up a health care plan.

39. If a child has a hypo, it is very important that the child is not left alone and that a fast acting sugar, such as glucose tablets, a glucose rich gel, or a sugary drink is brought to the child and given immediately. Slower acting starchy food, such as a sandwich or two biscuits and a glass of milk, should be given once the child has recovered, some 10-15 minutes later.

40. An ambulance should be called if:

- the child's recovery takes longer than 10-15minutes
- the child becomes unconscious

41. Some children may experience **hyperglycaemia** (high glucose level) and have a greater than usual need to go to the toilet or to drink. Tiredness and weight loss may indicate poor diabetic control, and staff will naturally wish to draw any such signs to the parents' attention. If the child is unwell, vomiting or has diarrhoea this can lead to dehydration. If the child is giving off a smell of pear drops or acetone this may be a sign of ketosis and dehydration and the child will need urgent medical attention.

ANAPHYLAXIS

What is anaphylaxis?

42. Anaphylaxis is an acute, severe allergic reaction requiring immediate medical attention. It usually occurs within seconds or minutes of exposure to a certain food or substance, but on rare occasions may happen after a few hours.
43. Common triggers include peanuts, tree nuts, sesame, eggs, cow's milk, fish, certain fruits such as kiwifruit, and also penicillin, latex and the venom of stinging insects (such as bees, wasps or hornets).
44. The most severe form of allergic reaction is anaphylactic shock, when the blood pressure falls dramatically and the patient loses consciousness. Fortunately this is rare among young children below teenage years. More commonly among children there may be swelling in the throat, which can restrict the air supply, or severe asthma. Any symptoms affecting the breathing are serious.
45. Less severe symptoms may include tingling or itching in the mouth, hives anywhere on the body, generalised flushing of the skin or abdominal cramps, nausea and vomiting. Even where mild symptoms are present, the child should be watched carefully. They may be heralding the start of a more serious reaction.

Medicine and Control

46. The treatment for a severe allergic reaction is an injection of adrenaline (also known as epinephrine). Pre-loaded injection devices containing one measured dose of adrenaline are available on prescription. The devices are available in two strengths - adult and junior.
47. Should a severe allergic reaction occur, the adrenaline injection should be administered into the muscle of the upper outer thigh. **An ambulance should always be called.**
48. Staff that volunteer to be trained in the use of these devices can be reassured that they are simple to administer. Adrenaline injectors, given in accordance with the manufacturer's instructions, are a well-understood and safe delivery mechanism. It is not possible to give too large a dose using this device. The needle is not seen until after it has been withdrawn from the child's leg. In cases of doubt it is better to give the injection than to hold back.
49. Once staff have agreed to administer medicine to an allergic child in an emergency, a training session will need to be provided by local health services. Staff should have the opportunity to practice with trainer injection devices.
50. Day to day policy measures are needed for food management, awareness of the child's needs in relation to the menu, individual meal requirements and snacks in school. When kitchen staff are employed by a separate organisation, it is important

to ensure that the catering supervisor is fully aware of the child's particular requirements. A 'kitchen code of practice' could be put in place.

51. Parents often ask for the head to exclude from the premises the food to which their child is allergic. This is not always feasible, although appropriate steps to minimise any risks to allergic children should be taken.
52. Children who are at risk of severe allergic reactions are not ill in the usual sense. They are normal children in every respect - except that if they come into contact with a certain food or substance, they may become very unwell. It is important that these children are not stigmatised or made to feel different. It is important, too, to allay parents' fears by reassuring them that prompt and efficient action will be taken in accordance with medical advice and guidance.
53. Anaphylaxis is manageable. With sound precautionary measures and support from the staff, school life may continue as normal for all concerned.

Staff administering medicine

1. **There is no legal or contractual duty on staff to administer medicine or supervise a child taking it.** The only exceptions are set out in the paragraph below. Support staff may have specific duties to provide medical assistance as part of their contract. Of course, swift action needs to be taken by any member of staff to assist any child in an emergency. Employers should ensure that their insurance policies provide appropriate cover.

Staff 'duty of care'

2. Anyone caring for children including teachers, other school staff and day care staff in charge of children have a common law duty of care to act like any reasonably prudent parent. Staff need to make sure that children are healthy and safe. In exceptional circumstances the duty of care could extend to administering medicine and/or taking action in an emergency. This duty also extends to staff leading activities taking place off site, such as visits, outings or field trips.