

## Guidance about Anaphylaxis for Carers of Pre-School Children attending Early-Years Settings

The purpose of this factsheet is to provide information for managers and staff in pre-school groups and nurseries in order to help them care for children at risk of severe allergic reactions (anaphylaxis). The information provided will also be useful for the children's parents. Throughout the text you will see brief medical references given in brackets. Full references are provided at the end.

### What is Anaphylaxis?

Anaphylaxis is the term for a severe, rapidly-occurring allergic reaction. Allergic reactions occur when an individual's immune system responds inappropriately to the presence of a food or substance that it wrongly perceives as a threat.

Severe allergic reactions among young children are uncommon, but when they do occur they must be treated rapidly. Common causes among children include peanuts, fish, milk and egg.

Less commonly, a child may be at risk of allergy to tree nuts (e.g. almonds, walnuts, cashew nuts, Brazil nuts), sesame, shellfish and other foods. In recent years, kiwifruit has begun to present a significant problem in young children (Lucas et al 2004). Non-food causes include wasp or bee stings, natural latex (rubber), penicillin or any other drug or injection.

Anaphylaxis is serious but most certainly manageable. In our experience, the key to caring for children at risk is to have accurate, comprehensive information.

### First Steps

Good communication is essential. All parents should be asked for information about their child's allergies before the child starts pre-school. Then a written management plan (also called a care plan) can be drawn up for that individual child, in consultation with the parents and the child's doctor or allergy specialist. Research has shown that children whose allergies are managed with the help of a management plan are less likely to have severe reactions (Ewan and Clark 2005).



## Symptoms of Anaphylaxis

Early recognition of symptoms and early treatment are vital. Symptoms may include:

- Itching in the mouth
- Swelling of the face, throat or tongue
- Asthma
- Difficulty in talking or swallowing
- Hives anywhere on the body
- Generalised flushing of the skin
- Abdominal cramps and nausea
- Floppiness (drop in blood pressure)
- Collapse and unconsciousness.



No child would necessarily experience all of the symptoms listed above, although more than one may well be present. The child's GP or allergy specialist will advise.

If the child has asthma as well as allergies, this should be noted and the asthma should be kept well controlled with the aid of prescribed preventer medication. The presence of asthma – particularly if it is not well managed – is likely to raise the risk of an allergic reaction being severe (Uguz et al 2005).

## Treating Anaphylaxis

A child at risk of anaphylaxis will often be prescribed injectable adrenaline (also known as epinephrine) and the child's parents may request that members of staff are trained to administer it in an emergency.

Pre-loaded injections (such as EpiPen, Anapen or Jext) are designed to be easy to administer. Regular training is needed to ensure correct technique. Oral antihistamines may also be prescribed and these can be used to treat milder reactions.

It is the parents' responsibility to ensure that medication is within its use-by date and they are advised to check dates regularly.

## Training Staff

All staff should be trained in allergen avoidance, early recognition of symptoms and crisis management. Specific staff members should be trained to administer emergency medication.

During training, each allergic child's individual needs must be discussed. If a child joins the school later in the year it would be wise to do refresher training and discuss this child's allergies.

Training could be arranged through the community nurse or school nursing teams. Many paediatric allergy clinics will also offer training for early-years settings staff.

## Taking precautions to reduce the risk of an allergic reaction

A commitment to reading food labels and maintaining vigilance is essential. Regular cleaning of surfaces and hand washing are also important to reduce the risk from allergens (e.g. peanut or milk) to allergic children

## Following an Allergy Management Plan for each child

The management plan should be held on the premises and a further copy kept with the child's medication. The content will depend on the discussions with the child's parents and a healthcare professional, but it should certainly include:

1. **The child's details** – Name, address and date of birth.
2. **Contact details** – Telephone and mobile numbers of a parent or guardian and another emergency contact should be parents be out of reach.
3. **Contact details of family GP**
4. **The child's allergies** – A list of the specific allergies and what to avoid.
5. **A list of possible symptoms**
6. **Prescribed medication**

7. **Details of emergency procedure** – Including an assessment of symptoms, when and how to administer medication, contact numbers and the ambulance procedure.
8. **Who can help?** – A list of staff members who have been trained including the date of their last training.
9. **Consent and agreement** – A parent or guardian must give written consent for staff to take responsibility for administering medication. The pre-school's insurance company should be notified about allergic children.

## Frequently Asked Questions

### Can Milk Allergy be serious?

Most children with milk allergy experience mild symptoms, but a few have severe reactions. Special care and vigilance are needed in such cases. Even a splash of milk or yogurt may cause a skin reaction in a child with severe milk allergy. Spillages need to be wiped thoroughly and hands washed.

If the child has a milk substitute (e.g. soya) there needs to be a robust system for ensuring that the child is not given the wrong drink by mistake.

### Are Children with Egg Allergy safe with egg boxes or egg shells for growing cress?

Egg allergy can be severe. In such cases, it is best to play safe and assume the child could have an allergic reaction to skin contact with traces of egg.

### Can face paints be used on allergic children?

It's probably best not to use face paints on allergic children. Some children with allergies may be allergic to the ingredients. They may not necessarily cause a severe reaction, but could cause an unpleasant rash.

### Is play dough safe for children with allergies?

Commercially produced play dough could contain allergens. Find out the ingredients from the manufacturer.

You can make your own play dough using flour, salt, water, bottled vegetable oil and food colouring. Ensure that you don't have a child who reacts to any of these ingredients.

Bottled vegetable oil bought in a supermarket is likely to pose a negligible risk for children with a nut allergy, but you should consult with the parent or guardian of the allergic child.

### What other activities should be considered?

**Outings:** Carry out a risk assessment of the venue beforehand. For example, if the children visit a petting zoo or farm, be aware that some allergic children react to fur or feathers.

**Celebrations:** Every effort should be made to include the allergic child. Safe treats could be supplied by the parents of the child with allergy and kept in a clearly-marked container.

**Arts and crafts:** If any child has latex allergy, check art equipment (e.g. paints, rubbers, ties on protective aprons, etc.) for latex content. Avoid putting together collages that use nuts or seeds if any child is allergic to these. Inspect all modelling materials thoroughly (e.g. nutty cereal boxes).

**Animals and birds:** Bird feeders and pet food need careful scrutiny. If they contain nuts it might be difficult to control the spread of nut protein from hands to play surfaces.

### References

Ewan P., Clark A. (2005). Efficacy of a management plan based on severity assessment in longitudinal and case controlled studies of 747 children with nut allergy: a proposal for good practice. *Clinical and Experimental Allergy* **35**; pp751-6.

Lucas J.S.A., Grimshaw K.E.C., Collins K., Warner J.O., Hourihane J.O'B. (2004). Kiwifruit is a significant allergen and is associated with different patterns of reactions in children and adults. *Clinical and Experimental Allergy*. **34**(7): pp1115-1121.

Uguz A., Lack G., Pumphrey R. *et al* (2005). Allergic reactions in the community: a questionnaire survey of members of the Anaphylaxis Campaign. *Clinical and Experimental Allergy* **35**; (6): pp746-750

## Reviewers

The content of this fact sheet has been peer-reviewed by Prof John Warner, Professor of Paediatrics and Head of Department, Imperial College; and Sue Clarke, Nurse Adviser to the Anaphylaxis Campaign.

## Disclosures

Professor Warner sits on the scientific advisory boards for Danone, Airsonette, Allergy Therapeutics, Novartis and Mead Johnson; is a paid lecturer for all of the above and Merck, and Astra-Zeneca; has received research grants from Danone, Airsonette, Allergy Therapeutics and Lincoln Medical; is medical advisor to the Anaphylaxis Campaign; was until recently a member of the ACNFP (FSA); RCPCH council and trustee; and is President of the Academic Paediatric Association. In the past (1996-2008) he was the principle investigator, chair of an advisory board and paid lecturer for UCB pharma on research into the use of cetirizine and levo-cetirizine in infants with eczema. He has also received grants from the FSA to study the early life origins of egg allergy. Prof Warner was co-author of some of the research referenced above.

**Disclaimer** – The information provided in this Factsheet is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

## About the Anaphylaxis Campaign: *Supporting people with severe allergies*

The Anaphylaxis Campaign is the only UK wide charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website [www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk) and follow us on Twitter [@Anaphylaxiscoms](https://twitter.com/Anaphylaxiscoms).

To offer further help to people caring for children at risk of anaphylaxis, we have developed our AllergyWise online training programmes. Visit our website [www.anaphylaxis.org.uk](http://www.anaphylaxis.org.uk) and click on AllergyWise for more information. Members of the Anaphylaxis Campaign can access AllergyWise at a discounted rate.