

4<sup>th</sup> – 10<sup>th</sup> May 2020  
Boroughmuir High  
School

# ANAPHYLAXIS AWARENESS WEEK

# WHY IS IT IMPORTANT TO LEARN ABOUT THIS?

- ❖ **Anaphylaxis Awareness Week** is an event organized by the **Anaphylaxis Campaign**, a charity that is working to support people who are at risk of severe allergies.
- ❖ Anaphylaxis is a life-threatening condition and with the number of people living with allergies in the UK **rising by 5%** each year, more people than ever are at risk of suffering an anaphylactic reaction. Yet despite hospital admissions with anaphylaxis rising year on year (with a shocking **615% increase** in the 20 years to 2012), few allergists are trained in the UK, statistics are outdated and research is **severely underfunded**.
- ❖ An estimated **20 deaths** occur every year in the UK as a result of anaphylaxis - it is crucial that we learn more about it, its causes and how to treat it.
- ❖ Anaphylaxis Awareness Week offers us the valuable opportunity to **improve awareness, fundraise for allergy research** and learn more about how we can **improve allergy safety** within our school community.



# WHAT IS ANAPHYLAXIS?

- ❖ **Anaphylaxis**, also known as anaphylactic shock, is a **serious and potentially life-threatening allergic reaction**.
- ❖ These reactions can occur **suddenly**, or as **delayed reactions** up to 2-3 hours after initial exposure to an allergen.
- ❖ Allergic reactions occur as a result of the body's immune system **overreacting** to something harmless. Allergic reactions vary in severity, but the most severe are labelled as **anaphylactic reactions**.
- ❖ People can have an anaphylactic reaction to anything – while **allergens in food** are the most common cause, others include **medicines**, **insect stings** or bites and **other allergens** (like dust).
- ❖ Anaphylaxis can also be triggered by exercise (this is known as **exercise-induced anaphylaxis**) and certain medical conditions.

# THE SCIENCE BEHIND ALLERGIC REACTIONS

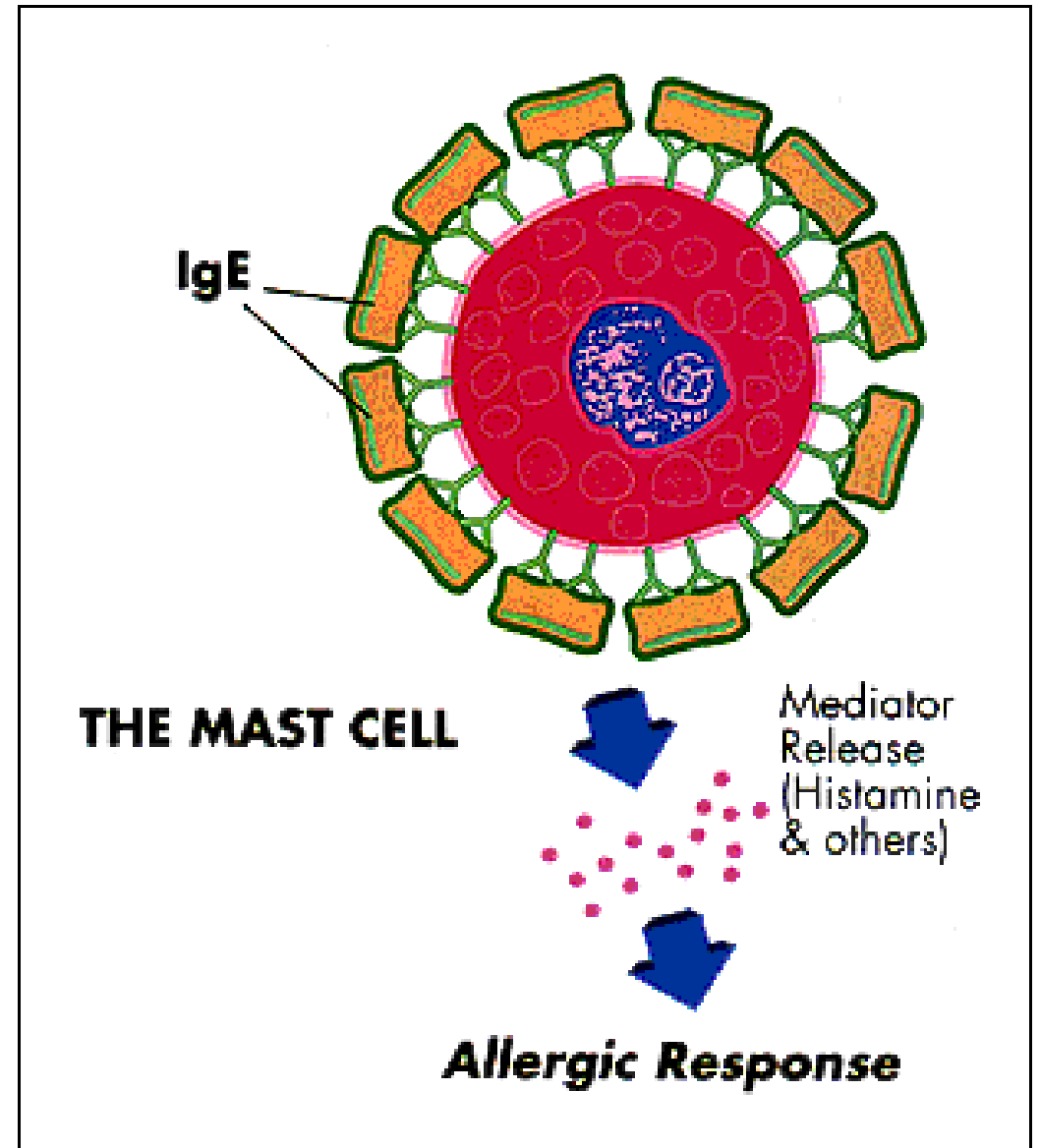


- ❖ Our immune system works to protect our body from infections, viruses and diseases.
- ❖ **Allergens** are harmless substances which trigger allergic reactions - they can be *any* substances, including food, pollen, dust, grass and medications.
- ❖ **Allergies** are abnormal reactions of the immune system to allergens. There are now 1 in 4 people living with allergies in the UK.
- ❖ Allergic reactions range from mild to severe, depending on the person and their allergies.
- ❖ A severe reaction is called anaphylaxis and it can progress rapidly, so **emergency treatment** is required.
- ❖ Some people confuse food allergies and intolerances – these are not the same thing. Intolerances do not involve the immune system.
- ❖ We are currently experiencing a global 'second wave' of allergic diseases, meaning that there has been an augmentation in the number of people living with these – scientists do not yet know why this is the case.



❖ When the body comes into contact with an allergen which it reacts to, it produces **antibodies** called **Immunoglobulin E (IgE)**, which trigger the release of chemicals such as **histamines**. These create symptoms and may result in an allergic reaction, which can progress into anaphylaxis.

❖ The first exposure to an allergen may not trigger a reaction, but the body can become **sensitized** meaning that in the future, even minor exposures can result in a serious reaction.



# SIGNS OF ANAPHYLAXIS



- ❖ itchy skin or a raised, red skin rash (hives)
- ❖ swollen eyes, lips, hands and feet
- ❖ feeling lightheaded or faint
- ❖ swelling of the mouth, throat or tongue, which can cause breathing and swallowing difficulties
- ❖ wheezing
- ❖ a fast heart rate
- ❖ confusion and anxiety
- ❖ abdominal pain, nausea and vomiting
- ❖ collapse and unconsciousness

Source: <https://www.nhsinform.scot/illnesses-and-conditions/immune-system/anaphylaxis>

## Anaphylactic Shock

### Common Symptoms



hives



itching



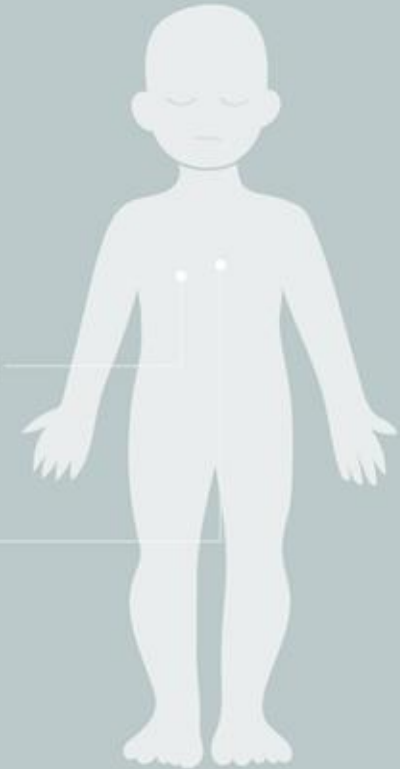
wheezing or  
shortness of breath



low blood  
pressure



pale skin color



# THINK A, B, C!

The symptoms of anaphylaxis usually occur alongside symptoms of more mild allergic reactions, like an itchy mouth or a skin rash, but this is not always the case. Just as every person is unique, so is every anaphylactic reaction.

Image source: <https://www.sparepensinschools.uk/for-schools/>



## AIRWAY:

- Persistent cough
- Vocal changes (hoarse voice)
- Difficulty in swallowing
- Swollen tongue



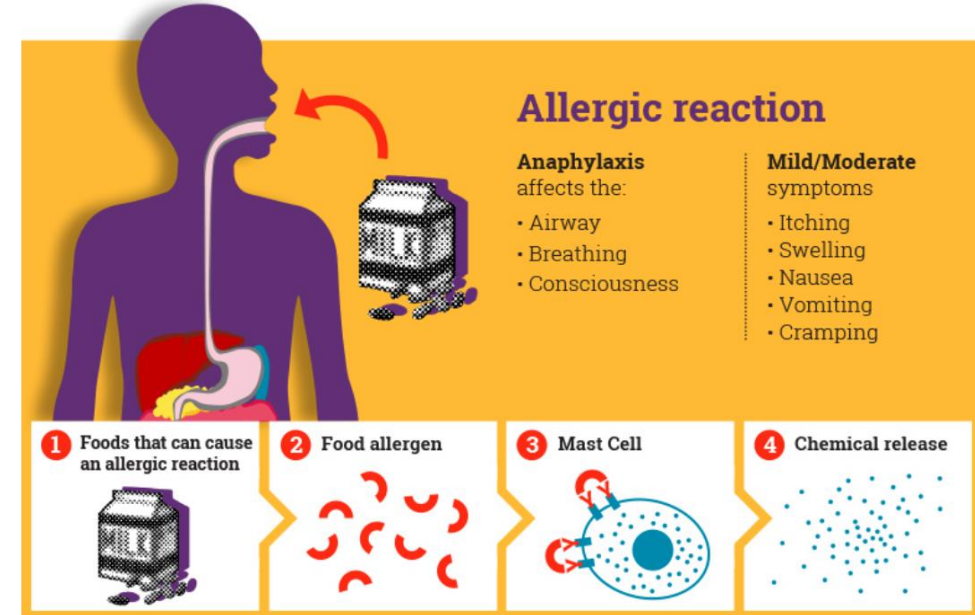
## BREATHING:

- Difficult or noisy breathing
- Wheezing (like an asthma attack)



## CONSCIOUSNESS:

- Feeling lightheaded or faint.
- Clammy skin
- Confusion
- Unresponsive/unconscious (due to a drop in blood pressure)



# THE 14 MAJOR FOOD ALLERGENS

Try looking at the ingredients list of some products in your household. You might be surprised by how many contain hidden allergens. For people living with allergies and anaphylaxis, checking ingredients is a life-preserving part of everyday life. Most manufacturers put 'may-contain' labels on their products too, which creates uncertainty and anxiety about whether products are safe to eat.



NUTS



CELERY



MUSTARD



SESAME



SO<sub>2</sub> - SULFITES



CRUSTACEANS



LUPIN



GLUTEN



MOLLUSCS



EGG



FISH



PEANUT



SOY



DAIRY



# TREATMENT



- ❖ The main treatment for an anaphylactic reaction is **adrenaline** (known internationally as epinephrine) via an **auto-injector**. It should be given at the **first signs** of anaphylaxis (if in doubt, always give adrenaline!).
- ❖ It is common for people to feel extremely anxious when they use one for the first time, especially in such an overwhelming situation, but it is the safest treatment for anaphylaxis.
- ❖ Adrenaline counteracts the fall of blood pressure in anaphylactic reactions. It **stimulates the heart**, facilitates breathing by **opening up the airways**, **stops swelling** and **raises blood pressure**.
- ❖ There are three brands of adrenaline pens that are commonly prescribed in the UK, which you may recognise. It is important that people who are at risk of anaphylaxis **always carry two** adrenaline injectors in the case of one failing but also because occasionally, one injection is insufficient.





# DIFFERENT TYPES OF ADRENALINE INJECTORS

From left to right: EpiPen, Emerade, Jext.

Auto-injectors usually come in different dosage sizes, depending on the weight of the person.

# HOW TO ADMINISTER AN AUTO-INJECTOR



All adrenaline injectors are slightly different in terms of how they are administered. Someone who carries an auto-injector will have been taught how to use them but if you are interested, you can read about them on their websites and watch these demonstration guides, which will hopefully clarify any questions that you may have about they work:

- ❖ EpiPen – <http://www.epipen.co.uk>
- ☆ <http://www.epipen.co.uk/patients/demonstrationvideo/>
- ❖ Emerade – <https://www.emerade-bausch.co.uk>
- ☆ <https://www.emerade-bausch.co.uk/patient/how-to-use-emerade>
- ❖ Jext – <https://jext.co.uk>
- ☆ <https://teens.jext.co.uk/about-jext/how-to-use/>



# FIRST AID



To find out how to treat a severe allergic reaction, you can also watch this informative video from St John Ambulance:

<https://youtu.be/QrueP382UjY>

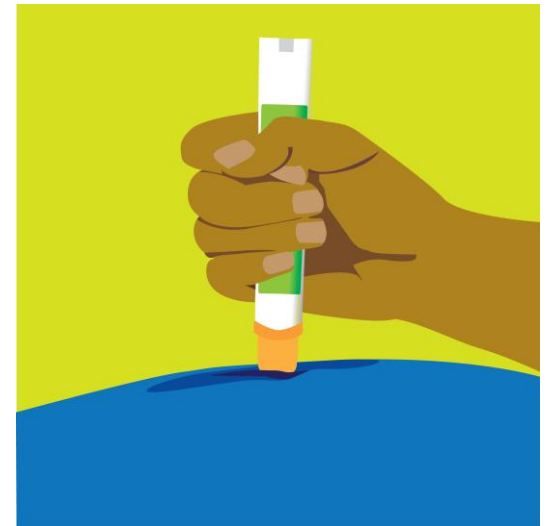
Knowing these valuable skills means that you could save someone's life.

Remember: anaphylaxis is a **medical emergency** and if not treated quickly, it can become very serious. Always **call 999** for an ambulance and state anaphylaxis. Even if someone has responded well to the adrenaline injection, there is a possibility that their condition may still deteriorate so it is crucial that they receive medical attention.



# MANAGING ALLERGIES IN SCHOOL

- ❖ Allergies are the **most common chronic disorder** in children and young people and a huge **40%** of children in the UK have been diagnosed with an allergy.
- ❖ The **Human Medicines (Amendment) Regulations Act 2017** allows schools to purchase and hold a supply of auto-injectors without a prescription for the safety of students. However, it is more common for schools to ask students to bring in their own adrenaline pen to be stored by the school nurse. The nurse may also ask for an **Action Plan** for each pupil with allergies (i.e. which steps should be taken in the event of an allergic reaction).
- ❖ There are several things that you can do to make life at school easier for pupils with allergies. Ensuring that you **talk to peers and educate yourself** so that you know what to do in the event of someone having an anaphylactic reaction will help pupils with allergies have the confidence to be vocal about their allergy.
- ❖ Most importantly, **be respectful** towards those with allergies. Allergies and anaphylaxis are **not a lifestyle choice** and should never be taken lightly, but **nor should they define someone**. Be mindful of the fact that activities like eating out may be more challenging for young people with allergies and talk to your friends to see what you can do to accommodate their needs.



# GETTING INVOLVED



There are lots of activities that you can take part in to help raise vital funds and awareness for the work of the Anaphylaxis Campaign, such as:

1. Taking part in the **Great Virtual Free-From Bake-Off** – bake, donate and nominate (tag @theallergyact and @anaphylaxis\_campaign with #GVBakeOff on social media)
2. Completing a **sponsored marathon** over the month of May (you can run, walk, jog, cycle or even skip your way to 26 miles!)
3. To fundraise, you can set up your own **Just Giving page** or you can find out how to donate [here](#).
4. If you'd like to better understand what its like to live with severe allergies and anaphylaxis, you could try out some **allergen-free recipes** or cook without the top fourteen allergens for a day.
5. Share the work of the Anaphylaxis Campaign ( @anaphylaxis\_campaign) on social media to raise awareness, using **#AnaphylaxisAwareness**

For more ideas and to learn what the Anaphylaxis Campaign are doing this week, you can visit [this page](#).



# RESOURCES



- ❖ Anaphylaxis Campaign website - <https://www.anaphylaxis.org.uk/what-is-anaphylaxis/>
- ❖ The Allergy UK website - <https://www.allergyuk.org>
- ❖ May-Contain Allergy Blog – Dan is the new youth ambassador for the Anaphylaxis Campaign and publishes posts and podcasts explaining what it's like to be a young adult with food allergies - [https://www.may-contain.com/@\\_maycontain](https://www.may-contain.com/@_maycontain)
- ❖ Have you ever seen allergies portrayed in a light-hearted and comical way in the media? This article by Nicole Ciuppa, a dietician and food allergy advocate, explores the dangers of media misrepresentation about allergies and anaphylaxis - <https://www.may-contain.com/new-blog/2018/2/19/have-you-eaten-nuts-1-ke4ze-5l58c-ct4f4-zythy>
- ❖ Nicole also has a YouTube channel where she advocates for food allergies - <https://www.youtube.com/channel/UCnesfYD38a7s36eZJbG-mEw/featured>
- ❖ The Natasha Allergy Research Foundation is working to create a world that is safer for all people with allergies. Natasha's Law will come into effect in October 2021 and will create greater transparency about the ingredients of pre-packaged food. You can join [#NatashasArmy](#) by following this link - <https://www.narf.org.uk>
- ❖ Visit the NHS website for medical information about anaphylaxis - <https://www.nhs.uk/conditions/anaphylaxis/>
- ❖ The Itch Podcast, co-hosted by Payel Gupta MD and Kortney Kwong Hing, an allergy blogger, is aimed at anyone who is interested in learning more about allergies, asthma and immunology - <https://www.itchpodcast.com>



# FOR TEACHERS

- ❖ The Anaphylaxis Campaign runs a free online e-learning course called AllergyWise, which is aimed at improving and updating knowledge about the everyday management of severe allergies in schools. It contains information about safeguarding pupils with allergies. You can find out more by clicking this link (select AllergyWise for Schools) – <https://www.allergywise.org.uk>
- ❖ There is also a free schools awareness resource pack which is available for download from the Anaphylaxis Campaign's website - <https://www.anaphylaxis.org.uk/product/ks3-5-schools-allergy-awareness-resource-pack/>
- ❖ Spare Pens in Schools provide information about reducing the risk of and treating reactions in school. Their website may also clarify school policies and staff training - <https://www.sparepensinschools.uk/for-schools/>
- ❖ I am more than happy to answer any questions you might have about allergy safety and anaphylaxis – contact Grace Wilkinson via [180722017@ea.edin.sch.uk](mailto:180722017@ea.edin.sch.uk)
- ❖ Thank you so much for taking the time to read this presentation.