





# Getting to grips with asthma: avoidance and management of winter triggers

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## Surrey Heartlands CYP Asthma Team 'Beating Asthma Together'

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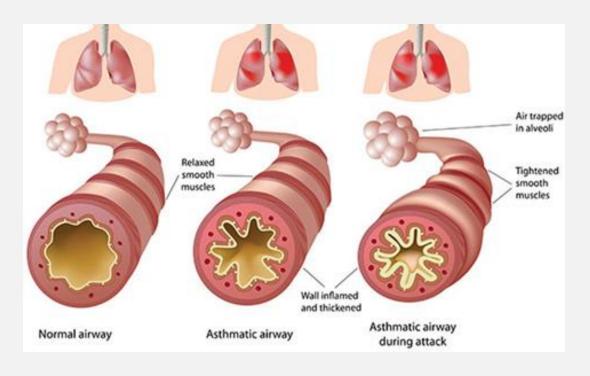


- Seasonal triggers
- **A2- Tanya Reddick**
- Smoking and asthma
- One you- Shannon Law
- Christmas Quiz





### **Asthma triggers**



An asthma trigger is anything that can set off your asthma symptoms. Triggers can make your airways more inflamed and can cause asthma attacks. A few things happen when you encounter a trigger:

- Muscles around the airways tighten.
- The lining of the airways become swollen and inflamed.
- Sticky mucus can build up in the airways.
- This is what causes your asthma symptoms, such as coughing, breathlessness, chest tightness, or wheezing.

**Asthma UK (2024)** 





### **Common Triggers**

Common cold virus



kelay

Weather- Thunderstorms can worsen symptoms

House dust mites





Hay fever/Pollen

Animal fur, feathers





Air Pollution- Smog traps pollens and exhaust fumes worsening symptoms

Smoke, fumes, chemicals







Hormones/Puberty- have almost as much impact on the airways as <u>allergies</u> and <u>hay fever</u>

Exercise







## Christmas Triggers

- If one of your triggers is dust, pollen or mould you may need to consider your Christmas tree.
- Real Christmas trees and plants such as mistletoe can bring mould spores and pollen into the house.
- Consider shaking, rinsing and drying your tree before you bring it inside.
- Keep your tree in the coolest part of the house as mould spores are less likely to multiply.
- If using an artificial tree, try vacuuming it or wiping with a damp cloth
- Try and use airtight plastic bags or boxes when packing the tree away to reduce dust the following year.





## Respiratory Infections



- Increased socialising with others can increase spread of respiratory infections.
- Encourage flu vaccination for children, encourage those over 65 who may look after children regularly to have their flu vaccine too. Stop the spread!
- Ensure ventilation in social gatherings, wash hands, avoid contact with those who are ill.



### **Respiratory Infections ctd**

- Ensure compliance of preventer medication, discuss asthma action plan, do they know what to do if symptoms get worse, when to seek help, go over red flags and when to go to hospital. Make sure they don't automatically start a weaning plan at home
- Do they have enough supply of medication over the Christmas period?
- If over 12 years, consider switching to MART/AIR for those who regularly exacerbate or have poor compliance
- Do they know what services are available out of hours?









Fumes from bonfires and fireworks this week could harm young airways, experts warn ( Image: Getty Images)

NEWS	POLITICS	FOOTBALL	CELEBS	TV	STRICTLY	SHOPPING	ROYALS

## Chemicals found in fireworks could trigger fatal asthma attacks this Bonfire Night, experts warn

A charity has warned smoke from bonfires and cold air could trigger life-threatening asthma attacks amid an increase in hospital admissions of people struggling to breathe

By Martin Bagot, Health and Science Editor 15:33, 4 Nov 2024











Children with asthma could be at risk from toxic fumes combined with cold air this Bonfire Night.

That is the warning from the charity Asthma + Lung UK which says smoke and chemicals from bonfires and fireworks can irritate young airways. Fireworks are made using a mix of chemicals and one of their main components is gunpowder. When they are set off they release smoke and different gases.



Properly using inhalers is vital, experts say ( Image: Getty Images/Science Photo Library RF)

This is not how experts would recommend the use of a pMDI!!

Always use a spacer



#### OPEN FIRES

These can emit smoke and fumes which are very damaging to your lungs.

- Avoid being in a room with an open fire
- Burn smokeless fuel and ensure your chimney has been deaned to allow fumes to flow through easily
- If possible have a stove or gas fire fitted insted of an open fire



#### SCENTED CANDLES

Scented candles, often gifted at Christmas, can emit perfumes and chemicals that can worsen your symptoms.

- Use non-scented candles or LED candles instead
- Re-gift scented candles if they trigger your asthma





#### **CERTAIN FOODS**

Know your allergies - get an allergy test and do not eat foods you are allergic to.

 Let family and friends know about your food allergies in advance if you are going to their house so they can prepare an alternative meal for you



#### **ALCOHOL**

Alcohol contains histamines and sulphites which trigger asthma in many people.

- Avoid drinking certain alcohol if it triggers your asthma
- Bring your own drink when attending parties so you know exactly what is in it



#### **STRESS**

Christmas shouldn't be a time for stressing.

- If you are unable to get your stress under control, talk to a trusted family member, friend or a professional
- Some people find great stress release in meditation and yoga





### **Exercise and cold air**

- Cold air can cause narrowing and irritation of the airways, can cause increased mucous production, wheezing and coughing
- Cold temperatures can weaken the immune system increasing susceptibility to flu and viruses.





### **Exercise and cold air**

- Ensure compliance of preventer medication, Optimise dose if needed.
- Ensure the CYP always has a reliever inhaler, including a spacer if using a pMDI.
- Warm the air you are breathing- breathe in through your nose, wrapping a scarf around your nose and mouth, wearing a mask
- Check the weather before you go out, time exercise for milder times, change exercise routines for indoor activities on very cold days.
- Exercise is important for physical and mental health, encourage children and families to take part in exercise.







## Association between domestic mould and asthma in children.

- Numerous studies have highlighted the relationship between living in a damp and mouldy home and its effects on respiratory health.
- https://www.sciencedirect.com/science/article/abs/pii/S0360132324000684
  This is a systematic review and meta-analysis of the literature in the past 33 years looking at the effects of residential damp indicators on asthma, rhinitis and eczema among children. The review looked at 1579 documents from 5 database platforms.
- The hypothesis was that indoor damp exposures in residences have consistent and significant risks of asthma, rhinitis and eczema in childhood. The literature confirmed this hypothesis.
- In 2009 an early WHO report stated that damp-related exposures could increase approx. 30%-50% odds of asthma related outcomes in children.





## Damp and Mould Tanya Reddick A2

## Reducing moisture in your home

to help prevent condensation, damp and mould



#### ALLOW GOOD VENTILATION

Keep windows open when you can. This helps to remove moisture.



#### COOKING

Cover pans while cooking, use an extractor fan and close internal doors to reduce steam and moisture.



#### DRYING CLOTHES

Avoid drying clothes on radiators. Reduce moisture by using a drying rack in a cool room and dry clothes outside when possible.



#### **BATHROOM MOISTURE**

Turn cold water on first, then add hot water, use an extractor fan and wipe down tiles after showering and bathing. This all helps to reduce moisture.



#### LOWER HEATING

During the day in colder months, set a low level of heat in all rooms, where possible, instead of short bursts, to reduce condensation.



#### WIPE DOWN SURFACES

Wiping areas where condensation forms, stops damp and mould growth.









### How does smoking trigger asthma?

- Smoking triggers mucus production in the lungs, which leads to coughing.
- The chemicals in tobacco smoke damage lung tissue.
- Particles in tobacco smoke irritate and settle in the lining of the airways, causing them to swell and become narrow. This leads to wheeziness and chest tightness.



- •Tobacco smoke damages tiny hair-like structures in the airways called cilia, which sweep dust and mucus out of the airways. This means dust and mucus accumulate in airways, aggravating your asthma.
- •Lung damage caused by smoking makes your asthma less responsive to medication.





## How does vaping trigger asthma symptoms?

- E-cigarettes contain propylene glycol and vegetable glycerine which been linked to increased cough, mucus secretions, chest tightness, and reduced lung function, all of which can make asthma worse.
- Vaping can irritate the lung's airways, making asthma attacks more likely.
- Research has linked some flavoured additives in e-cigarettes to causing cell damage in the airways, which worsens asthma.
- Vaping may help pneumonia-causing bacteria to stick to cells that line the airways, causing further damage to the lungs. People with asthma might be vulnerable to this.
- Vaping might impair the lung's ability to fight infection, increasing the risk of more severe asthma attacks.







### What are the effects of second-hand smoke?



- Children who live with a smoker are more likely to develop asthma and have more frequent and severe attacks
- Children's lungs have not finished growing and so they have less developed airways, lungs and immune systems
- Exposure to second hand smoke causes lungs to be more irritated, therefore they produce more mucous and are more susceptible to lung infections.
- Children born to mothers who smoked when pregnant have poor or delayed lung function and a higher risk of developing asthma



## **SMOKING CESSATION**

Offering & eligibility, for those aged 12+

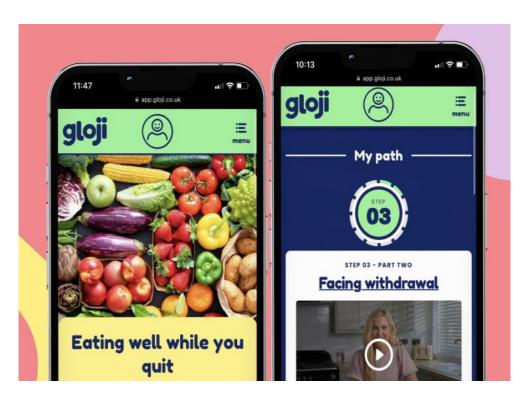
## **GLOJI SMOKE FREE**





#### **Personal support**

- 1-to-1 appointments in person or by phone with a fully trained stop smoking mentor.
- Access to free NRT like e-cigarettes, nicotine patches, lozenges and gum.
- Prescription requests for **Zyban**, where appropriate.
- Regular sessions to keep track of progress and boost motivation levels.
- Understanding support from mentors who know how hard quitting can be.



#### **Digital support**

- 12 weeks of interactive stop smoking videos.
- Online articles, tips and guides to crush the habit
- **Unlimited access to our online gym** to support a smoke free journey.
- Bonus digital extras like a recipe book and quit journal.

## **ELIGIBILITY**

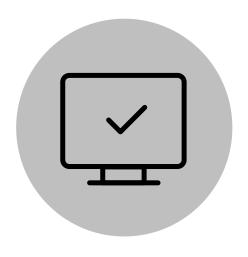
- Aged 12+.
- Using or smoking tobacco.
- Live, work or be registered with a GP in Surrey.

3 simple methods



#### 1. Your clinical operating system

You can easily refer through your clinical operating system e.g. Systm One or EMIS Web. The referral goes straight to our secure tt1.oneyousurrey@nhs.net inbox and our team will contact your patient and triage within 72 hours.

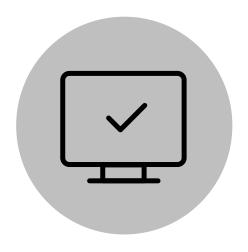






2. Submit a referral

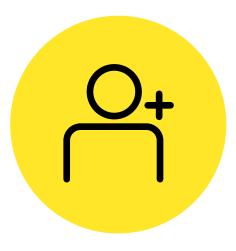
You can submit a referral on behalf of your patient by clicking the 'Get started' button on our website and our team will contact them directly and triage.







2. Submit a referral



3. Self-referral

All patients can self-refer by clicking the <u>Get started</u> button at the top of our website. It's quick and simple, and we'll guide them step-by-step to find the perfect programme.

## **WORKING TOGETHER**

Let's help every Surrey resident become a healthier you.

## MARKETING MATERIALS

- SMS, email, letter templates: please collaborate with us. Let's book a meeting to discuss the best way to reach your patients.
- We're happy to produce materials in specific languages, easy-read or other formats as your patients require.



#### **OUR PARTNER**

# GO SMOKE FREE WITH

Join our 12-week stop smoking programme and get personal support from a qualified mentor plus free quit aids and more.



## **ONLINE SUPPORT**

- How to refer
- Eligibility
- Online training & webinars

www.oneyousurrey.org.uk/profess ionals/





#### **ONE YOU** SURREY



Home

Programmes +

Professionals

Advice

Contact us

Sign in



#### **HOW TO REFER**



1. YOUR CLINICAL OPERATING SYSTEM

Refer through your clinical operating system, eg EMIS/SYSTEM ONE. The referral goes straight to our secure NHS.net inbox and we will contact your patient within 72 hours and triage.



2. SUBMIT A REFERRAL

Head to Get started and submit a referral on behalf of your patient by answering a few quick questions and our team will contact your patient and triage appropriately.



3. SELF-REFERRAL

All patients can self-refer through the Get started button on our website. They will answer a few quick questions and based on their responses we will contact them and triage onto the programme that's right for them.

## THANK YOU



01737 652168



<u>hello@oneyousurrey.org.uk</u> – All general enquiries

<u>tt1.oneyousurrey@nhs.net</u> – Referrals only



https://oneyousurrey.org.uk/



## **Trigger Avoidance**

#### Guidance on trigger avoidance

- Some asthma triggers (for example, first or second-hand cigarette smoke) are avoidable, whereas others (for example, pollen and mould spores) can be difficult to avoid.
- Poor air quality is strongly implicated in poor asthma control.
- Many people with asthma are sensitised to the house dust mite but the benefit of reduction measures is inconclusive.
- Research into the avoidance of cat and dog dander as an asthma management measure is inconclusive. But where pets are known to trigger asthma symptoms, avoidance is recommended.



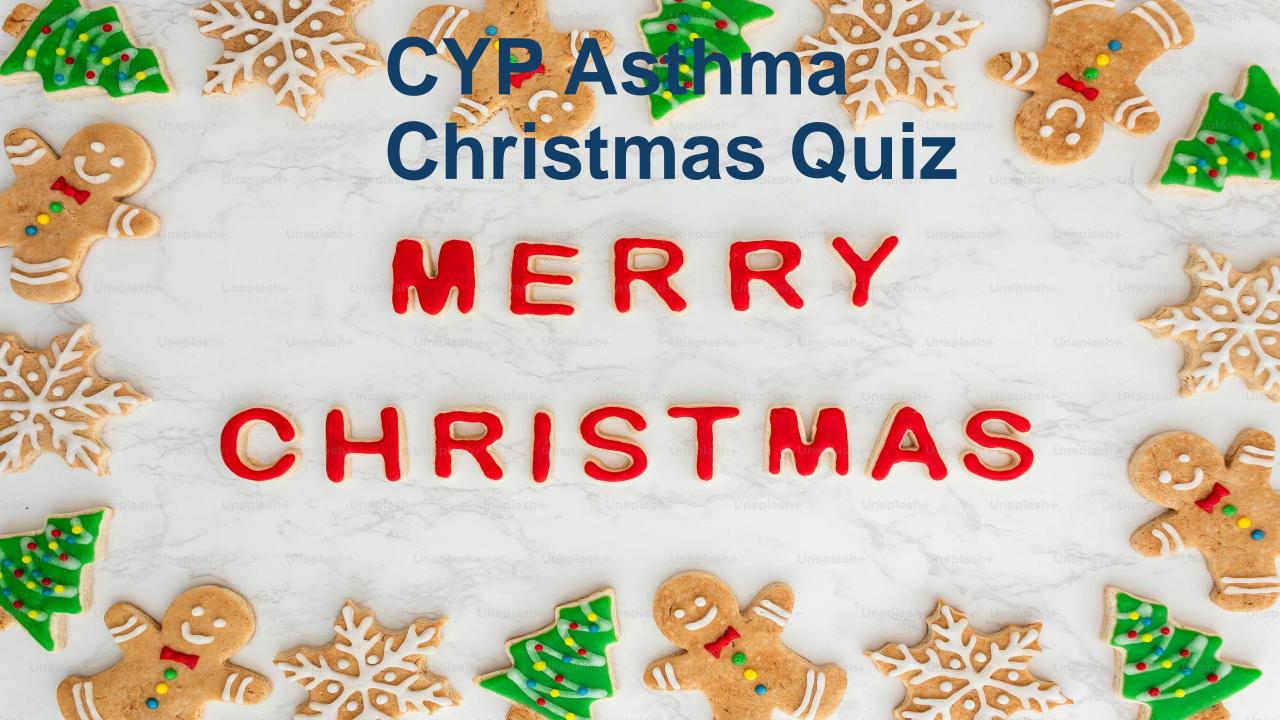




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- https://www.asthmaandlung.org.uk/conditions/asthma/asthma-triggers
- Indices of Deprivation 2019 for areas in Surrey | Surrey-i (surreyi.gov.uk)
- Chapter 4: Dwelling condition GOV.UK (www.gov.uk)
- Too many people, especially children, will be living in poverty in Surrey this winter. Community Foundation for Surrey (cfsurrey.org.uk)





## Feedback

https://forms.office.com/e/qn4T97dZrs



















