

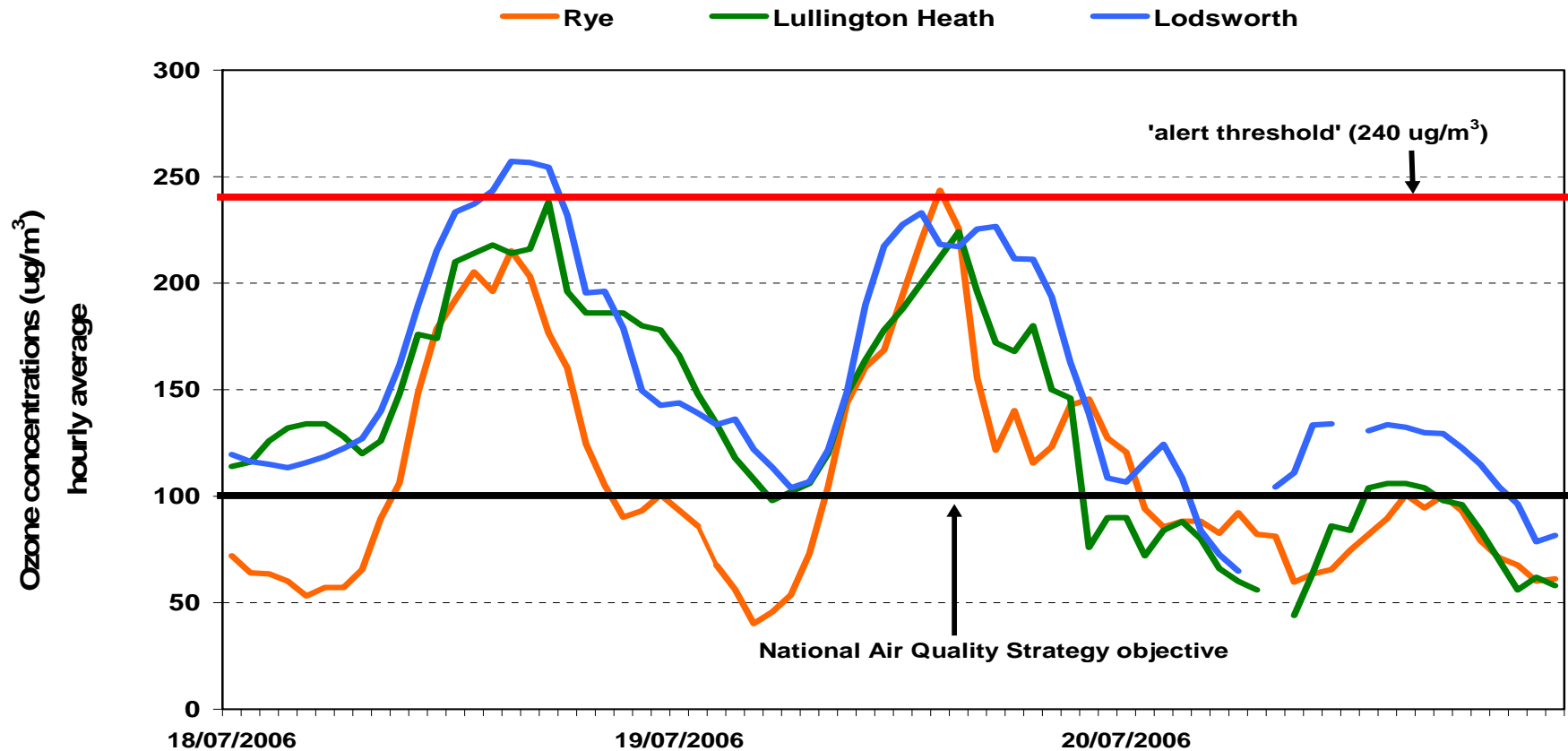
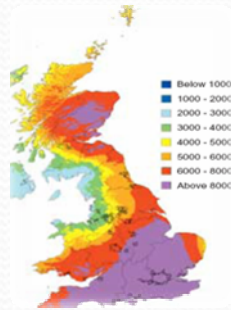


- pollution alerts for vulnerable people with respiratory conditions.

**airAlert** – why did we start up the service?

# Why airAlert?

Some of the highest summer ozone concentrations are seen in South England.



## Why airAlert works.

airAlert delivers air pollution forecasts to vulnerable people:

Most forecasts require the client to search for information:

- tv, radio, newspapers, email, web, tel. call-in services

airAlert sends out information that is:

- Proactive (in delivery when episodes occur)
- Targeted to sensitive populations
- Connected to the health provider services
- Relevant advice (type of health condition)

# airAlert – what is it?

## What is airAlert?

- **airAlert** is a service which provides **FREE** air pollution alerts to vulnerable people in Sussex, Hertfordshire and Bedfordshire.
- **airAlert** sends out alerts when pollution levels are predicted to exceed UK health banding levels.
- **airAlert** uses SMS/text, voice messaging and email to deliver the alerts, the day before the likely incident.
- **airAlert** is a Sussex-air lead partnership service with King's College London and the University of Brighton.

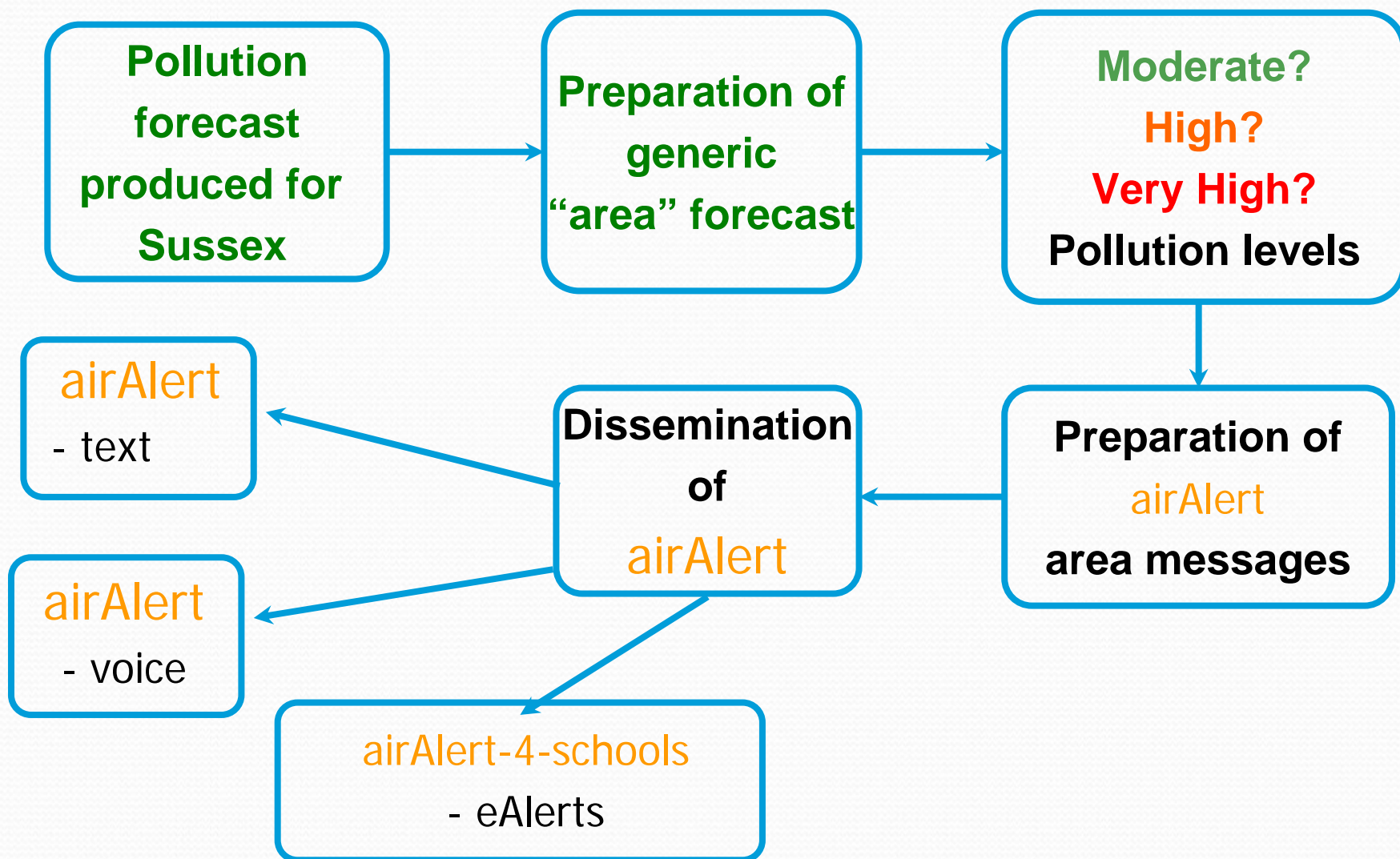


airAlert is a service that sends free messages direct to vulnerable people informing them about air pollution levels in their area.  
Please choose your county from the links below...



airAlert is provided by the Sussex Air Quality Partnership (Sussex air) and CRG, King's College London.

# airAlert system.

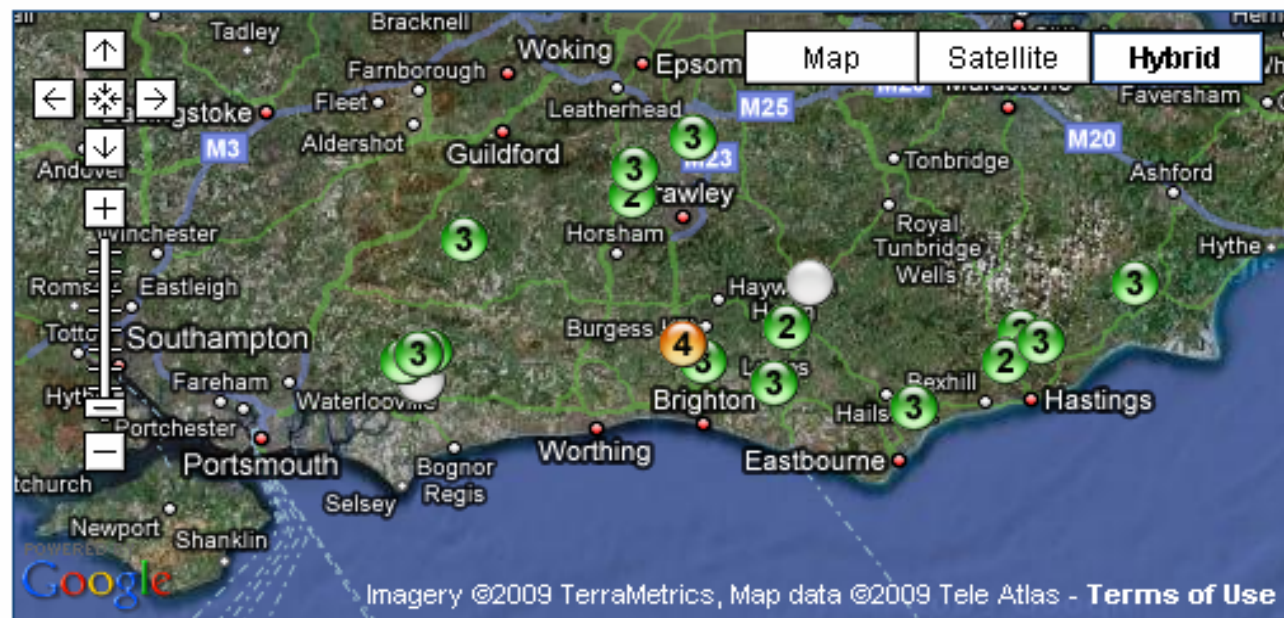




Welcome to the Sussex-air website



You are on this page >> [Home](#)



Select a monitoring site to view:



This map displays the latest peak air pollution index values recorded on *Sunday 17 May 2009*.

### About the Sussex Air Quality Partnership

The Sussex Air Quality Partnership promotes

### Air Quality Near Me

This section is designed to give public access to air quality monitoring data gathered within

### airAlert Service

airAlert is a service, provided by the Sussex Air Quality Partnership (SAQP), that sends

### Current airAlert



No airAlerts are currently active for Sussex

### Air Quality for Kids

Kids can help make the air cleaner as well as help the environment and fight climate change. [Read more...](#)

### Latest News

[Sussex-air and airAlert on Bri...](#)

[Hilary Benn visits airAlert at...](#)



# airAlert - messages and support material



Example message:

airAlert: Probable Moderate Ozone, for non roadside, areas, until noon Mon 17<sup>th</sup> Jul. For more information see airAlert info-card.

Support information:

People can register on-line or via post (leaflet) for **FREE**.

Once registered they receive instant acknowledgement followed by the info leaflet and airAlert card.

**About airAlert**

How does airAlert work?



- airAlerts are only sent out whenever air pollution levels are forecasted to be above the "Low" (normal) air quality level.
- airAlert will tell you what the level of pollution is predicted to be, either "moderate", "High" or "Very High".
- If air pollution levels increase or remain above Low, we will continue to alert you each day. However once the airAlerts stop, it means that pollution levels are forecast to be "Low" again.
- airAlert informs you where pollution levels are likely to be higher within your district/city/area.
- We send the alerts out between 3-5pm, on weekdays, however you can change delivery times and other options by logging into [www.airalert.info](http://www.airalert.info)

**airAlert advice**

What the message means:

- Moderate**  
Sensitive people may notice mild effects but these are unlikely to need action.
- High**  
Sensitive people may notice significant effects and may need to take action.
- Very High**  
Effects on sensitive people, described for HIGH pollution, may worsen.

For more information visit the website:  
[www.airalert.info](http://www.airalert.info)

**General advice**

- The effects of air pollution on sensitive people can be reduced by spending less time outdoors.
- "Reliever" inhalers or medicines should lessen effects.
- For specialist advice on the effects of pollution on your specific condition please contact your health professional.

**What does airAlert provide?**

What should you do?

- Moderate**
  - You are unlikely to need to take any action but be aware of symptoms.
  - Take reliever medication with you as a precaution.
  - Talk to your doctor if you have any concerns.
- High**
  - Keep reliever medication with you as a precaution.
  - You may need to increase the dose of reliever medication. **NEVER EXCEED THE STATED DOSE.**
  - Consider reducing exposure by spending less time outdoors.
  - Try to avoid strenuous outdoor activity.
  - Talk to your doctor if you have any concerns.
- Very High**
  - Keep reliever medication with you.
  - Increase dose of reliever medication if you are affected. **NEVER EXCEED THE STATED DOSE.**
  - Avoid long periods outdoors.
  - Avoid strenuous outdoor activity.
  - Talk to your doctor if you have any concerns.

*"airAlert definitely helped me understand the link between air pollution & my health."*

*"airAlert helped me understand, it gave me a reason to know why I was wheezy...."*

*"airAlert has made me feel much more in control. That somebody actually rings me up... it's given me more confidence".*

## airAlert-4-schools and media

- Junior and secondary schools, via e-alerts to schools to inform schools and parents.
- Helps develop link with eco-schools and healthy schools programs.
- Radio alerts on Southern FM, Bright FM and info link to BBC Radio Sussex.



Sussex Air Quality Partnership  
[www.sussex-air.net](http://www.sussex-air.net)



# LACoRS & DEFRA – see the benefit

“Alerts allow people with medical conditions that are affected by poor air quality to change their behaviour and reduce the impact of pollution on their health.

...People are empowered by the ability to manage their conditions more effectively”

Rt Hon Hilary Benn MP: Secretary of State for Environment (DEFRA), visited EPuk in Sussex (2008) and King`s College London (2009), showed great interest in the **airAlert** service as a partnership service delivering health benefits.



Ref: LACoRS Climate Change Toolkit (2008)



# Who else is interested?

## WHO/ECEH

## Want to evaluate the effectiveness of the "Pollution Alert Systems"

(ECEH -European Centre for Environment and Health, Bonn, DE)

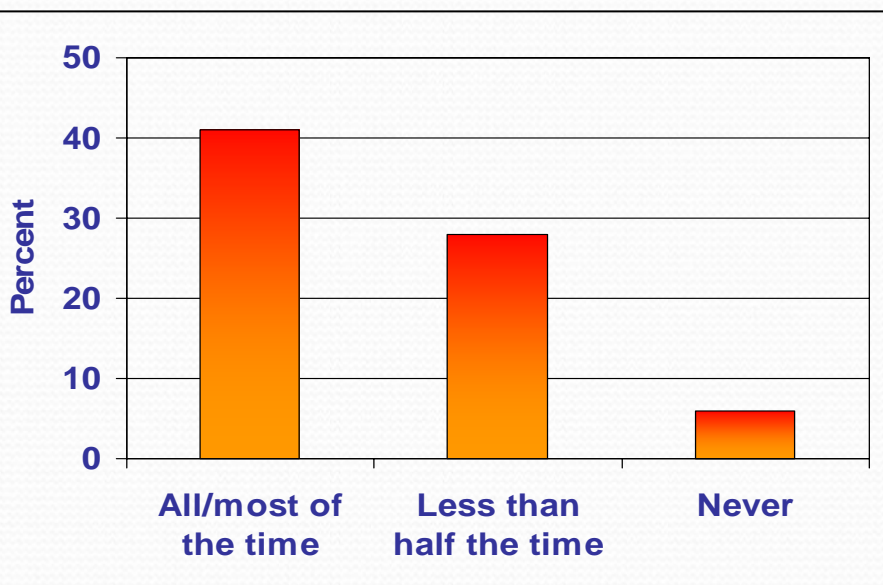


The screenshot shows the WHO Regional Office for Europe website. At the top left is the WHO logo and the text "World Health Organization Regional Office for Europe". On the right, there are buttons for "Country information" and "Home". Below the header, there is a breadcrumb trail: "Programmes and projects > Environment and health". The main heading is "Environment and health". On the left, there is a navigation menu with the following items: Home, Themes, European environment and health process: Fifth Ministerial Conference, 2010, Media corner, Publications, Evidence and data, Events, Join our mailing list, and Contact us. The main content area features the heading "Healthy environments for healthy people" above a grid of six small images. Below the images, there is a paragraph: "This site provides links to activities, reports, news and events, as well as WHO/Europe's contacts and partners that work on health and environment." This is followed by another paragraph: "Preventing disease and injury is at the heart of public health and health systems. Human health can only be protected from risks from a hazardous or contaminated environment through collaboration between different sectors. WHO/Europe's environment and health agenda brings many players together to tackle the central issues with Member States." Below this text are two links: "What is environmental health?" (with subtext "The WHO/Europe approach") and "Advocacy materials" (with subtext "Brochures, leaflets, posters, electronic materials, videos"). At the bottom of the content area, there is a "SHARE" button with social media icons. The footer of the page reads "© 2009 World Health Organization".

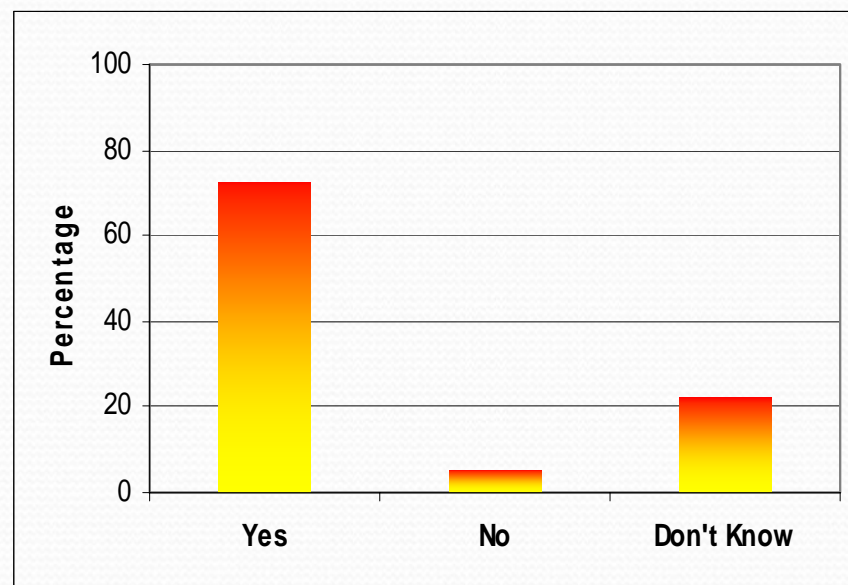
# airAlert – research and developments

# Measuring success - 2006 & 2007 research

Did symptoms coincide with airAlert?



Did airAlert help you manage your symptoms?



## airAlert - Health Behaviour Modification

### 67% of people modified their behaviour

- 50% ensured they carried their inhaler
- 44% took a preventative dose of medication
- 39% took medication to relieve symptoms
- 27% took less strenuous exercise
- 25% avoided areas specified in the alerts

# airAlert – Herts and Bedfordshire challenges & benefits

- Cultural and language.
  - gathering ethnicity data
  - working with language and cultural differences.
- Closer working with the PCT.
- Research is fed back to airAlert members forum, to help pool research for all.



If you need this leaflet in large print, on tape or in:  
বাংলা গুজরাती  
ਪੰਜਾਬੀ اُردُو  
☎ 01582 54 65 14

### Registration

To register for the airAlert service please fill in the form below and send it to the address shown or online at [www.airalert.info](http://www.airalert.info)

Title: Mr, Mrs, Miss, Ms, Dr, or other \_\_\_\_\_

Forename/initials: \_\_\_\_\_

Surname: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Is the service for you or are you a carer for someone else? \_\_\_\_\_

Please state: \_\_\_\_\_

Do you need the alerts for Asthma, COPD or other: \_\_\_\_\_

Please state: \_\_\_\_\_

What area in Herts & Beds do you want information for: \_\_\_\_\_

Location: \_\_\_\_\_

Postcode: \_\_\_\_\_

To help us monitor the quality of our services and ensure fair access, we would be grateful if you could answer the following questions about yourself. No personal details will be passed on to a third party.

Age: 1-5  6-10  11-16  17-25  26-35

36-45  46-55  56-65  66-70  71+

Please tick: White  Mixed  Asian or Asian British

Black or Black British  Chinese

Complete ONE of the following: telephone number or email address to receive airAlerts:

Telephone number (home OR mobile). Please ensure the number given is not through a switchboard.

OR email: \_\_\_\_\_

Please send the completed form to:

FREEPOST ANG 5484, airAlert, Luton Borough Council,

Environmental & Consumer Services, Luton LU1 2YJ

We are continuously evaluating this service and would like to contact you to ask your views on airAlert and the ways in which it might be improved.

If you prefer we did not contact you, please tick the box



Sussex Air Quality Partnership  
[www.sussex-air.net](http://www.sussex-air.net)

airAlert  
[www.airalert.info](http://www.airalert.info)





## airAlert – a model for LA's and AQ networks

- **airAlert** was established as a template service which local authorities /air quality networks can adopt and develop.
- **airAlert** enables local authorities to utilise their air quality data, linking in forecasts to deliver alerts to vulnerable people.
- Any LA with a local or wider AQ network can establish a service, either using existing or new forecast service.

## airAlert - expansion

- airAlert has interest from several local authorities/networks.
- All we do is assist/facilitate the take up of this type of service.



**airAlert** – health and resource benefits  
(proving the service)

## airAlert – proving the service to the health community:

PCT's /GP's need proof of the effectiveness of services like airAlert to support and sustain them.

- Proof that an intervention service like this does not:
  - Cause more GP or A&E visits;
  - Increase medication usage;
  - Increase stress of people utilising the service.
- Proof that these services provide positive:
  - Resource (savings) and patient health benefits;
  - Quality of life improvements.

## Key respiratory groups that **airAlert** can help target:

### Asthma:

- 1 in 12 adults suffer from asthma: (Asthma UK)
- Sussex = 127,000
- Cost of 1x admission (\*£1166/day) 1-day stay

### COPD (Chronic Obstructive Pulmonary Disease):

- Registered patients with Sussex = 50,000
- Cost of 1x admission (\*£2500/day) + 3 day stay (\*\*£350)  
= £3550/admission (2008/09)

*(Ref: \* DoH, \*\*NHS 2007-08 Admitted Patient Care Mandatory Tariff )*

# Chronic Obstructive Pulmonary Disease (COPD)

- Predicted to be the third biggest cause of mortality by 2020, presently the 5th claiming more lives than some cancers.
- In England up to 3 million people have COPD, only 0.75 million diagnosed
- One in eight hospital admissions are for COPD (£2500)  
= 1000 admissions and 25,000 GP consultations/year in a typical PCT  
= second most common cause of emergency admissions
- Costs to NHS about £1.5bn a year including drug costs

# COPD costs and savings (Sussex)

## COPD admissions and costs by Sussex PCT's 01/02 (now re-organised into 4 PCT's)

Sussex PCO	Total admissions	Bed- days	Bed-days admission	Cost admission (£)	Cost per admission (£)
Totals	5,767	55,021		£ 15million	
Average	577	5,502	11		£2,936.60

Ref: COPD medical admissions in the UK 2000/01–2001/02

## COPD costs and savings to PCT's/NHS.

If we prove we can prevent 4x COPD or 12 asthma admissions (1 year) from being admitted to hospital (excludes GP refer costs)

= covers the cost of running the airAlert service for 1000-1500 targeted patients.

Ref: COPD medical admissions in the UK 2000/01–2001/02



# airAlert – new research proposal

## airAlert – needs PCT/GP support :

airAlert (Sussex) at present is not targeted at specific health conditions to be effective:

- More targeted approached needs PCT/GP involvement.
  - Select vulnerable patient groups.
  - Targeted health advice information.
  - Marketing/promotion
  - Research support
  - Resource support



**What airAlerts mean when air pollution is:**

**Moderate (4-6)**

Sensitive people may notice mild effects but these are unlikely to need action.

**High (7-9)**

Sensitive people may notice significant effects and may need to take action.

**Very High (10)**

Effects on sensitive people, described for HIGH pollution, may worsen.

**Advice:** The effects of air pollution on sensitive people can be reduced by spending less time outdoors. 'Reliever' inhalers should lessen effects on asthma sufferers.

For specialist advice on the effects of pollution on your specific condition please contact your health professional.

# Research proposal (2010- 2012).

## Joint airAlert research pilot :

- Study the effectiveness of airAlert to deliver specific information to patients and GP/respiratory specialists.
  - Summer service (pollution)
  - Winter service (pollution and COPD)

### Partners:

- Sussex-air, DoH, DEFRA, Met Office, University of Brighton, Sussex PCT, Royal Alexandra Children's Hospital, King's College London (ERG), Sussex HPA.

## Research proposal (2010- 2012).

- Work with GP's & Children's Hospital to recruit specific patients.
- Research histories and monitor response to intervention.
  - GP visits
  - Admissions
- Monitor effectiveness in conjunction with other interventions, such as community nurses or other tele-health services.
- Monitor exposure, work with young adults with asthma and track them with GPRS.

**airAlert** – finally ...what a **heat-wave!**

# airAlert HEAT



- PCTs are required to provide information to vulnerable people in the event of a heat-wave under the Heat-wave plan for England (2009).
- airAlert can potentially integrate heat alerts and target selected vulnerable groups, pre-selected by the PCT and/or GP's.
- These tend to overlap with summer pollution episodes & patient groups!

Thanks for listening.

**airAlert** info and registration @  
[www.airalert.info](http://www.airalert.info) or [www.sussex-air.net](http://www.sussex-air.net)

Nigel Jenkins – Sussex-air  
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01273 484331