

The Independent Annual Report of the Director  
of Public Health - Surrey County Council  
October 2014

AIR  
QUALITY

SEASONAL  
HEALTH

PREVENTION

UNINTENTIONAL  
INJURIES

“Ill health PREVENTION and health promotion are not the sole domain of the NHS, so it is not the only player in addressing health inequalities.

Similarly, public health departments should not be the only part of the NHS responsible for tackling health inequalities. Reducing health inequalities is a responsibility shared between a range of different sectors and services. Local and national decisions made in schools, the workplace, at home and in government as well as across the NHS, all have the potential to help or hinder ill health prevention.”

**(Marmot 2010)**

## Why prevention?

Ill-health prevention must form the foundation of any strategy to improve health and wellbeing. The evidence base for this is substantial, and includes:

- The Global Burden of Disease Survey 2010,
- The US County Health Rankings Model
- The Marmot Review.

The Global Burden of Disease 2010 study is the largest study of its kind ever undertaken, and shows that in the UK, the contribution of unhealthy behaviours to the overall burden of disease is enormous. This represents a key opportunity to improve health and wellbeing by targeting these behaviours through a prevention strategy. According to the survey, the top 5 risk factors are tobacco smoking, raised blood pressure, obesity, physical inactivity, and alcohol; all of which are entirely, or in large part, amenable to prevention. Tobacco smoking alone accounts for 12% of the burden of disease, the single greatest cause of ill health in the UK, and is responsible for 1 in 7 of all deaths in Surrey.

A systematic review (US County Health Rankings) showed the following factors determine health outcomes:

- Socio-economic factors: 40%
- Unhealthy behaviours: 30%
- Clinical care: 20%
- Environmental factors: 10%

The Marmot Review shows us clearly that health inequalities arise from social inequalities, and action on inequalities require a focus on prevention. Prevention here incorporates both the narrow definition of tackling unhealthy behaviours, and the wider definition of action on socio-economic determinants to prevent the onset of ill-health in the future.



My first Annual Public Health Report was published in May of this year and focused on the greatest behavioural risk factors for ill health and early death - smoking, lack of physical activity, poor diet and alcohol misuse. Our prevention theme continues in part two of this year's report which focuses on preventing harm from poor air quality, excess seasonal mortality and unintentional injuries. The evidence for focusing on prevention is substantial and well described in both of my reports - Part 1 and 2. I have chosen these themes as they not only have a significant impact on the health and well being of Surrey residents but are areas where we have not always worked in partnership to deliver improvements. Therefore by focusing our efforts together across the local authority, health, voluntary community and faith sector we can continue to improve health and reduce health inequalities.

I hope you enjoy reading my report and look forward to working in partnership with you on this prevention agenda.

**Helen Atkinson FFPH**  
Director of Public Health  
Surrey County Council

I am very pleased that Part 2 of this year's Annual Public Health Report is taking a focus on the wider prevention agenda and what can be done in partnership to improve health and well being outcomes for the people of Surrey. Prevention is a key priority of the Surrey Health and Wellbeing Board and our focus is on what we can do better together rather than as individual organisations. I look forward to seeing this work further develop across Surrey and the health improvements that it will create for our residents.

**Michael Gosling**  
Cabinet Member for Public Health and Health and Wellbeing Board  
Surrey County Council

# AIR QUALITY

Air pollution has significant health impacts. Short-term exposure can exacerbate conditions such as asthma, increasing hospital admissions and causing premature deaths. Long-term exposure, particularly from microscopic particles, known as fine particulates, increases the risk of cardiovascular morbidity and mortality which decreases life expectancy by an average of six months. There is no evidence for a threshold below which effects would not be expected. Long term prenatal exposure to particulates is associated with poorer outcomes, including low birth weight, intrauterine growth retardation, and an increased risk of chronic diseases in later life. Other air pollutants such as nitrogen dioxide, sulphur dioxide, ozone and volatile organic compounds, also have adverse health effects.

Outdoor air pollution arises primarily from burning fossil fuels. Road traffic is a major contributor to air pollution in Surrey. People who live near busy roads or airports are at particular risk of long term health effects of air pollution. Areas of high deprivation suffer a greater burden from air-pollution-related ill health.

## ESTIMATED DEATHS ATTRIBUTABLE TO AIR POLLUTION IN COMPARISON WITH OTHER COMMON CAUSES OF DEATH



Legend:  
 1 estimated premature deaths (in persons aged 25 years or over) in England attributed to long term exposure to small particulate (PM2.5) air pollution in 2010  
 2 in Great Britain in 2010  
 3 deaths partially or wholly attributable to alcohol in England in 2014  
 4 deaths wholly or partially attributable to smoking in England in 2010

Source: Public health England 'Estimating Local Mortality Burdens associated with Particulate Air Pollution' 2014; Local Alcohol Profiles for England, Health and Social Care Information Centre, Department of Transport

### FACT

It is estimated that 527 deaths during 2010 in Surrey were attributable to long term exposure to small particulate pollution

Air pollution causes (estimated) annual health costs of around £15 billion in the UK.

Surrey has 25 Air Quality Management Areas (AQMAs) in 8 of its 11 Districts and Boroughs. AQMAs are areas where pollutant levels have been exceeded.

## Easy Surrey AirAlert

**Aim** - AirAlert aims to reduce the health effects associated with air pollution by issuing pollution advice.

**Summary** - Air pollution can cause short-term health effects in sensitive individuals. The AirAlert service, currently being piloted, is a service for people with respiratory and other health conditions who may be affected by air pollution.

People who registered for the free service receive an email, text or voicemail message, informing them the day before of expected elevated air pollution in their area. This enables them to make choices about what they do and how they manage their medication, so they can stay in control of their own health.

Health advice in the AirAlert message is approved by UK experts and varies according to a simple air pollution index (low, moderate, high and very high). The index is based on the levels of five pollutants (nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide and particles).

The service is provided by the East Surrey AirAlert consortium, a partnership between Elmbridge, Epsom and Ewell, Mole Valley, Reigate and Banstead and Tandridge District and Surrey County Councils.

For more information on the AirAlert service visit [www.airalert.info/Surrey](http://www.airalert.info/Surrey)

**Impact** - A survey of AirAlert users showed that 88% of survey respondents found AirAlert a useful or very useful service, and two thirds had recommended it to someone else. They found the service helped them manage their symptoms and reduce their exposure to air pollution. They also reported increased confidence to participate in social and recreational activities.



## CASE STUDY

### Action on air quality in Surrey

- Surrey's Transport Plan includes an Air Quality Strategy which aims to improve air quality in Surrey's Air Quality Management Zones.
- Districts and Boroughs monitor air quality, declare Air Quality Management Areas (AQMA), prepare and implement Air Quality Management Action Plans.

### What could we do to improve air quality?

- Prioritise active and sustainable travel strategies, to create a modal shift in transport choices, from private vehicles to walking and cycling.
- Work in partnership to embed air quality, health and transport in local planning Surrey-wide.
- Consider the impact of developments on green space, in particular broad leaved trees and plants.
- Work together to improve the energy efficiency of homes and businesses, and reduce emissions from heating systems.
- Promote the AirAlert scheme and extend it across Surrey.

# UNINTENTIONAL INJURIES

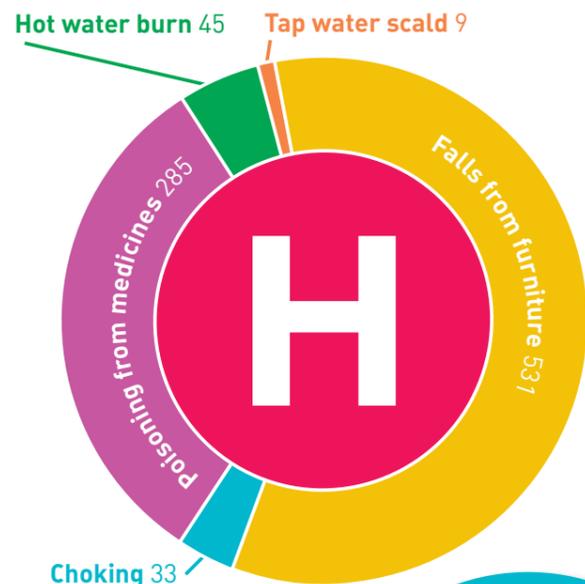
## FACT

It costs £349 to put a person through a falls prevention programme, yet the average cost of hospital treatment per fall is £3,320

Unintentional injuries are defined as predictable and preventable injuries and associated events. It is estimated that unintentional injuries cost the UK £150 billion every year and account for approximately 13% of emergency hospital admissions and 4.5% of all admissions in Surrey. Most unintentional injury admissions are for falls, followed by injuries on the roads. Smoke, fire and flames, drowning and poisoning injuries also result in admissions to hospital but are less common.

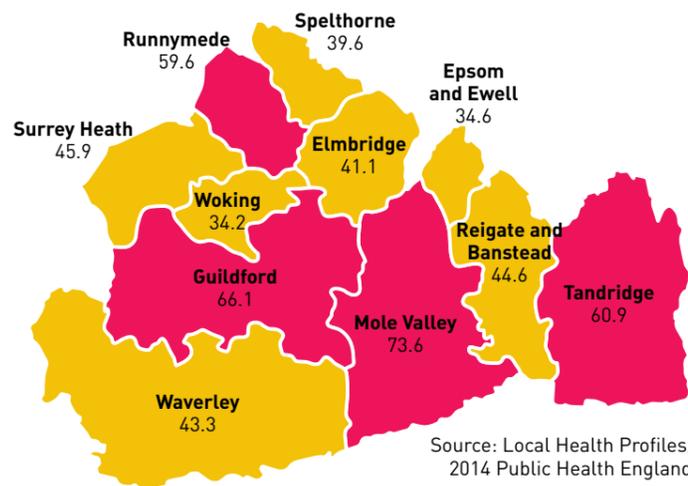
The people that are most likely to be injured are: men, people aged over 65, children under 4 years and people living in disadvantaged areas.

## HOSPITAL ADMISSIONS FOR UNINTENTIONAL INJURIES, FOR THOSE AGED 4 YEARS AND UNDER IN SURREY



It is important to wear a mouth guard during contact sports such as rugby and hockey. Permanent teeth that have been knocked out can be placed back into the socket, ideally within 30 minutes

## ROAD INJURIES AND DEATHS IN SURREY PER 100,000 POPULATION 2010-2012



## FACT

There were 62,654 A&E attendances by Surrey residents due to unintentional and deliberate injury in 2010/11

- Significantly worse than England average
- Not significantly different from England Average

## What is being done in Surrey to prevent unintentional injuries?

- Falls services in Surrey are provided in hospitals and in the community and there is a Surrey-wide falls group which aims to reduce falls in the county.
- Surrey Drive SMART road safety and antisocial driving strategy aims to tackle anti-social driving and reduce unintentional road injuries.
- Surrey Fire and Rescue Service offers a wide range of services to prevent unintentional injuries due to fire. These include: targeted educational work with children and young people; targeted work for adults most at risk from fire injury; and offering support to all residents by providing home assessments and adjustments as appropriate.
- When a child under 5 years of age attends A&E, local health visitors are informed. They subsequently work with families to reduce the risk of injury by providing guidance, raising awareness of risk and promoting the use of safety equipment such as stair gates.

## CASE STUDY

### Safe Drive, Stay Alive - Tackling unintentional injuries on the roads in young people through partnership working

**Aim** - To reduce the number of unintentional injuries on the roads that involve young people

**Summary** - Safe Drive Stay Alive Surrey is a theatre based education production that aims to raise road safety awareness amongst young people and to positively influence their attitudes to driving. Theatre performances are offered free to schools, colleges and army trainees and feature specially commissioned films addressing issues around road traffic collisions. Emergency services personnel and members of the public give live testimonies alongside these films, describing how road traffic incidents have affected their lives.



Young people are a high risk group on the UK's roads; Safe Drive Stay Alive aims to make them aware of their responsibilities as road users and the consequences if these are not taken seriously. Young people are also signposted to guidance on becoming a safer road user including driver tuition, insurance choices, online 'brain training' and the Safe Drive Stay Alive OFF smart phone app.

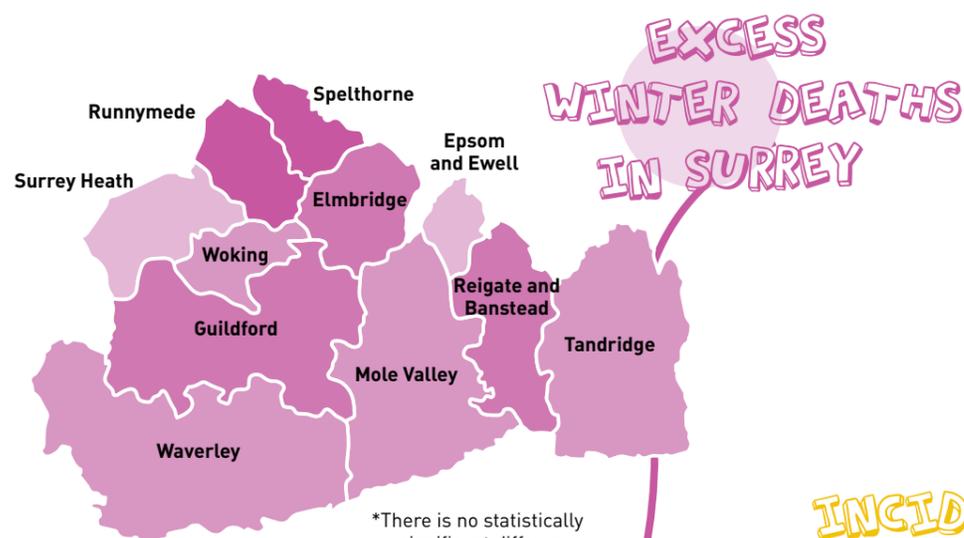
Surrey Fire and Rescue Service leads the Safe Drive Stay Alive partnership in Surrey, working alongside emergency services partners including Surrey Police, South East Coast Ambulance Service and Frimley Park Hospital. Safe Drive Stay Alive is funded by a range of supporters that can be found on <http://www.surreycommunity.info/safedrivesurrey/>

**Impact** - Safe Drive Stay Alive currently has 4,500 Facebook followers. Since April 2005, 92,000 young people have attended 155 performances with 14,900 young people booked to attend this November. Whilst it is difficult to attribute the effect the performance has on any reductions in unintentional injuries on the roads, post course evaluation shows young people are more aware of their responsibilities as a driver, are less likely to use a mobile phone whilst driving and are more likely to wear a seatbelt.



# SEASONAL HEALTH

Seasonal variations in temperature affect health and cause death in high risk groups such as the very old, the very young, the disabled and those living in fuel poverty. 'Excess winter deaths' are observed between December and March, while health conditions associated with hot weather tend to peak between June and September. The main causes of seasonal illness or death are respiratory and cardiovascular diseases such as influenza, asthma, pneumonia and heart attacks. Overexposure to the sun or sunburn are risk factors in the development of skin cancers, which are becoming increasingly more common.

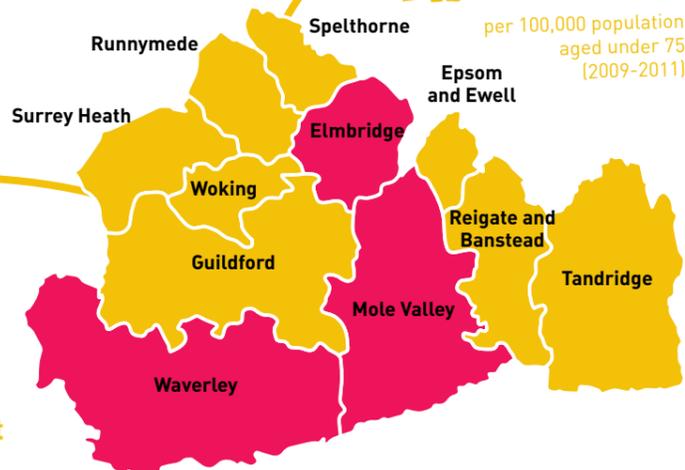


\*There is no statistically significant difference between the EWDI for Surrey district and boroughs, and these results are variable year by year.

\*Quartiles have been determined using the excess winter death index (EWDI) for District and Boroughs in the Prosperous Southern England ONS cluster (43 District and Boroughs)

● Significantly worse than England average  
● Not significantly different from England Average

## INCIDENCE OF MALIGNANT MELANOMA IN SURREY



Source: Local Health Profiles 2014, Public Health England

### FACT

In Surrey, malignant melanoma of the skin is the eighth most common form of cancer. There were 589 recorded cases in Surrey over the period 2009-11 with the highest proportion of these in Waverley (88) and the lowest in Runnymede (26).

The Department of Energy and Climate Change estimate that in 2014, eight per cent of households in the South East, some 277,000 families, live in fuel poverty.

## British Red Cross Support at Home Service

**Aim** - To support vulnerable people after they are discharged from hospital.

**Summary** - The Red Cross Support at Home programme provides short term emotional and practical home support to help people regain their independence following a brief hospital stay. The service is provided by volunteers who assist with tasks such as collecting prescriptions, helping with shopping or simply providing companionship. Volunteers can also help people fill in the Age UK One Stop Surrey form, signposting vulnerable people to additional supporting services such as the Home Improvement Agency or Action Surrey.



*"In the early days after I came out of hospital, the Red Cross was the link between me and the outside world. Michelle came once a week and took me to the shops and to the GP. At the time it was essential and it made that transition from hospital to independent living much easier. Without her help and kindness I wouldn't have been able to recuperate so easily."* **Randolf**

Referrals to the service are accepted from GP's, hospitals, social workers and friends and family. The programme comes under increased pressure during periods of extreme temperature change when Surrey's most vulnerable residents are at increased risk of illness, hospital admission and death.

**Impact** - The service helps vulnerable people settle back into a normal routine, regain their confidence and independence at home and reduces re-admission to hospital.

### FACT

The uptake of seasonal flu vaccination is low in Surrey compared to the Public Health England target (75% of those aged 65 and over). During the winter of 2013/14, 68.9% of over 65s had a flu jab and only 46.8% of those in the other high risk groups had the vaccination.

## CASE STUDY

**Winter:** Surrey Public Health are working with the energy advice service Action Surrey and other partners, to reduce the effects of fuel poverty by insulating the homes of the most vulnerable residents to bring down their fuel bills.

Surrey Public Health works with partners to promote the benefits of the seasonal influenza vaccination, provided by local GPs, to residents most at risk. For example, those aged 65 and over, pregnant women and people with long term conditions such as diabetes, severe asthma, and heart, liver or kidney disease. Frontline health and social care staff are also encouraged to get vaccinated to protect themselves, their families and service users.

### How can we prevent seasonal deaths?

Public Health England produces Heatwave and Cold Weather Plans which aim to reduce ill health from hot and cold weather. These are adapted and implemented locally.

**Summer:** Surrey partners sign up for heat health alerts from the Met Office. Predicted temperatures trigger Heatwave Alert levels. Services implement recommended actions at each level to protect residents' health during hot weather.

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## Further information

To access an electronic copy of the report and further information including details behind some of the fact and figures in this document, a glossary and a list of references, go to: [www.surreyi.gov.uk/annualpublichealthreport](http://www.surreyi.gov.uk/annualpublichealthreport)

### Surrey Joint Strategic Needs Assessment

[www.surreyi.gov.uk/](http://www.surreyi.gov.uk/) search for Winter Deaths and Cancer chapters'

### Public Health England Heatwave and Cold weather plans

[www.gov.uk](http://www.gov.uk) search for Heatwave and Cold Weather plan

### Safe Drive Stay Alive

[www.surreycommunity.info/safedrivesurrey/](http://www.surreycommunity.info/safedrivesurrey/)

### AirAlert Surrey

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

### British Red Cross Support at Home programme

[www.redcross.org.uk](http://www.redcross.org.uk) search for 'Support at Home'

### Health Profiles for England 2014

[www.apho.org.uk](http://www.apho.org.uk) search for Health Profiles

### WHO Global Burden of Disease 2010

[www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)61766-8/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)61766-8/fulltext)

### US County Health Rankings

[www.countyhealthrankings.org/rankings](http://www.countyhealthrankings.org/rankings)

If you have anything to say about health, contact Healthwatch Surrey on 0303 303 0023 or [www.healthwatchsurrey.co.uk](http://www.healthwatchsurrey.co.uk)

