

Press release: Poisons from cigarettes reach major body organs in seconds

Public Health England (PHE) releases a new TV advert highlighting the dangers of tar in cigarettes, as England's 7 million smokers are urged to make a quit attempt with help from Smokefree this New Year. The latest campaign shows how poisons from tar in cigarettes enter the bloodstream, spreading around the body within seconds and causing damage to major organs.

To help explain the ongoing internal harm being caused, a group of 7 lifelong smokers – including TV presenter and entrepreneur Hilary Devey – declare their intention to quit in January after seeing the results of a lab demonstration. The test results show how their smoking has led to elevated levels of cadmium (a metal used in batteries), cancer-causing nitrosamines and carbon monoxide in their blood. These toxic substances are amongst over 4,000 chemicals released into the body with each cigarette smoked, including more than 70 known cancer-causing compounds.

Elevated levels of these substances were seen in the participants' blood and can lead to an increased risk of major damage to the body.

Exposure to cadmium for a long period of time is associated with an increased risk of damage to the kidneys and bones and may lead to lung cancer. Research has shown that if you regularly smoke 20 or more cigarettes a day, you are twice as likely to develop kidney cancer compared with a non-smoker.

Tobacco-specific nitrosamines (TSNAs) are potent chemical compounds, many of which are carcinogenic (cancer-causing). They can cause DNA damage, cell death and are associated with cancers of the pancreas, mouth, respiratory and digestive tracts.

Carbon monoxide decreases the ability of the blood to carry oxygen and consequently puts a strain on the heart. Carbon monoxide is also associated with an increased risk of blood clots and coronary heart disease.

In the new film that supports the TV advert, Dr Dawn Harper, GP from Gloucester, explains the results of the tests to the smokers and how the quality of their blood would start to improve when they quit – ridding them of harmful poisons which cause major damage to the body. Dr Harper advises the smokers that there are many ways to quit, including free proven support from [NHS Smokefree](#). People can choose what works best for them: face-to-face help, stop smoking aids, a quitting app, email, social media, and SMS support.

Professor John Newton, Director of Health Improvement at Public Health England says:

Smoking is a deadly habit. Each year it kills 79,000 people in England and for every death, another 20 smokers have a smoking-

related disease. That means one person is admitted to hospital every minute of every day due to smoking.

Our new TV ad shows how every cigarette sends a flood of poisonous chemicals through the bloodstream in seconds. People know that tar damages the lungs, but it's less well understood that the poisons also reach the other major organs in the body. We are urging every smoker to take advantage of the free Smokefree support and quit for good this New Year.

Dr Dawn Harper, GP and medical journalist says:

I see the damaging effects of smoking in my surgery almost every day. Tar from cigarettes causes damage to major organs, the bones and increases your risk of a range of cancers and diseases. But, the good news is that no matter how long you've smoked, quitting can reduce your chances of developing cancer, heart and lung disease and other serious smoking related illnesses. Some of the benefits are almost immediate, with improved energy and breathing within a matter of days.

I know how difficult it is to stop but the important thing is to commit to trying again, no matter how many times you might have tried and failed in the past – it's never too late.

Hilary Devey, TV presenter, entrepreneur and lifelong smoker says:

I've smoked at least 20-a-day for over 40 years. Like many, I've been hooked on cigarettes and ignoring the damage – even though I know the harm I'm doing, I've found it extremely difficult to quit for good. Even a stroke 3 years ago only led me to stop temporarily.

Seeing the high levels of poisonous chemicals in my blood from these tests really hit home how dangerous continuing to smoke is – and for that reason, I'm done!

I'm absolutely determined to try again this New Year and I hope other smokers across the country will join me making full use of all the free help available at Smokefree – this time next year we could be celebrating one year smoke-free and feeling the benefits.

Smokefree provides motivation, information and support for smokers who want to stop. Just search 'Smokefree' for free support and advice to help you quit smoking.

Background

1. To find out more about the range of free support and tools available to help people quit smoking, please search 'NHS Smokefree' online.
2. Download all [Smokefree films and images](#).
3. Carbon Monoxide, one of the toxic substances identified at elevated levels in the lab demonstration, is not contained in tar but is one of the most harmful elements in tobacco smoke.
4. [PHE](#) exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and providing specialist public health services. We are an executive agency of the Department of Health, and are a distinct organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner. Follow us on Twitter: [@PHE_uk](#) and Facebook: www.facebook.com/PublicHealthEngland.

freuds

Email

healthharms2018@freuds.com

Telephone

020 3003 6495

Mobile

07793 533774

[Press release: Shingles vaccine programme reduces cases and chronic complications](#)

First evidence of the shingles vaccine programme shows a substantial reduction in cases and long-term complications.

A new study in the [Lancet Journal of Public Health](#) shows a substantial decrease in shingles cases and associated complications in the first 3 years since the introduction of the shingles vaccination programme by Public Health England (PHE).

Despite these very positive results, uptake of the vaccine has declined, with a 13% decline in people aged 70 since the start of the programme and an 8.4% decline in people aged 78 years since 2014.

PHE is urging adults aged 70 and 78 to protect themselves by taking up the offer for vaccination from their GP or booking an appointment if they missed out. Shingles is a painful condition and can be especially debilitating for older people.

The new analysis of the shingles vaccine programme, which was introduced in England in September 2013, estimated that the vaccine was 62% effective against shingles and between 70 to 88% effective against post-herpetic neuralgia (PHN), or long term pain, which is one of the main complications associated with shingles.

The study estimated that GP visits for shingles and PHN reduced by 35% and 50% respectively, in those aged 70 during 2013 to 2016.

An estimated 17,000 GP visits for shingles were avoided amongst the 5.5 million individuals who were given the vaccination in the first 3 years of the programme across England.

Dr Mary Ramsay, Head of Immunisations at PHE, said:

I encourage all those who are 70 and 78 to make an appointment with their GP practice to get the shingles vaccine, as well as those under 80 who previously missed out. It's the best way to avoid this very nasty disease and the long-term complications that can develop from having it.

Our population is aging and the risk from getting shingles and complications is higher as you get older. Immunisation is the best way to protect yourself from this painful, sometimes debilitating condition. Taking up the vaccine is an important part of staying healthy as you age.

Shingles is characterised by a skin rash on one side of the body resulting from reactivation of chicken pox virus that has been lying dormant in the body. It can last on average for 2 to 4 weeks and be significantly debilitating, causing loss of sleep and interference with day-to-day activities. Symptoms can include sharp stabbing pain and burning of the skin in the affected area, feeling unwell, a bad headache and a fever.

Over 50,000 cases of shingles occur in people aged 70 years and over each year in England and Wales, with approximately 50 cases being fatal.

The likelihood of getting shingles increases with age and adults aged 70 and above are more at risk of developing serious complications from it, such as PHN, a severe nerve pain that lasts for several months or more after the rash has gone.

Though many recover from PHN, symptoms can last for years or can become permanent. It is therefore vital for every individual eligible to get their vaccine.

In England, the shingles vaccination programme now targets adults aged 70 and 78 with a catch up programme for those aged 71 to 79.

PHE is encouraging healthcare professionals and the public to be aware of the complications surrounding shingles and to encourage those within the eligible groups to get vaccinated.

Background

1. Those who are eligible for the free shingles vaccine include people in their 70s who were born after 1 September 1942 and people aged 79 years.
2. To get your vaccine, contact your GP or pharmacist for more information. If you are within the eligible group, your doctor will recommend the shingles vaccine during general GP visits or your annual flu appointment. Further details on the [shingles vaccination programme](#) are available on NHS Choices.
3. PHE's [shingles eligibility calculator](#) can help determine whether or not you are eligible for the vaccine.

Public Health England press office

Email

phe-pressoffice@phe.gov.uk

Telephone

020 7654 8400

Out of hours telephone

020 8200 4400

[Press release: MHRA awarded over £980,000 for collaboration with the Bill and Melinda Gates Foundation and the World Health Organisation](#)

We are delighted to announce a new partnership with the Bill & Melinda Gates Foundation and the World Health Organisation that aims to extensively improve

the safety monitoring of medicines in low and middle-income countries (LMIC).

New medicines and vaccines, for diseases such as malaria and HIV, may be introduced for the first time in LMIC's where there are weak or no regulatory systems in place for effective safety monitoring. These new treatments have been developed with urgent public health needs in mind and therefore the need to gather and analyse information quickly on their safety and effectiveness is important. The healthcare and regulatory systems in these settings may often lack the tools, training and capacity to operate a robust safety monitoring system. Whilst great progress has been made with many of LMIC's now involved as members of the World Health Organization Program for International Drug Monitoring, the experience in collecting, assessing and acting on adverse reaction data, and risk management planning is limited.

Without an effective system, public health programs are at risk and patients may be affected, should they suffer from adverse drug reactions (ADRs) which are not promptly identified and treated. This can consequently undermine the program and result in a loss of trust in the product or a vaccine. Ultimately, this may lead to lower uptake and therefore, the disease not being effectively treated.

WHO and the Gates Foundation have launched 'Project Smart Safety Surveillance' (also known as Project 3-S) to help LMIC's identify, assess, and adequately manage the risks associated with new products. MHRA will be joining this initiative to bring regulatory expertise to the project. This will be for a 3-year period where it is intended to run three pilot exercises in different LMIC settings.

Dr Ian Hudson, Chief Executive Officer at MHRA said:

We are delighted to be involved in such an important global initiative. New drugs and vaccines are being brought to the market for the first time in public health programmes in settings where the safety monitoring and regulatory systems need strengthening. The expertise we can bring to the project will help national safety monitoring centres identify risks and benefits early and take appropriate regulatory action to support global health.

Dr Dan Hartman of the Bill and Melinda Gates Foundation said:

The Triple S project is vitally important to the success of public health programmes to combat some of the world's major diseases. When a new medicine or vaccine is being used it is critical that potential risks are identified early and well understood. The involvement of MHRA in this project will ensure scientific and regulatory expertise are developed within the national centres.

[Dr Ian Hudson discusses a new partnership with the Bill & Melinda Gates Foundation and the World Health Organisation](#)

Media enquiries

News centre
MHRA

151 Buckingham Palace Road

Victoria
London
SW1W 9SZ

Email
newscentre@mhra.gov.uk

During office hours:
020 3080 7651 (08:30 – 17:00)

Out of office hours:
07770 446 189 (17:00 – 08:30)

Office hours are Monday to Friday, 8:30am to 5pm. For real-time updates including the latest press releases and news statements, see our Twitter channel at <https://www.twitter.com/mhrapress>

[Press release: Campaign to protect young people from STIs by using condoms](#)

Public Health England had launched 'Protect against STIs', a new campaign that aims to reduce the rates of sexually transmitted infections (STIs) among 16 to 24-year-olds through condom usage. The campaign is the first government sexual health campaign in 8 years.

To coincide with the launch of the campaign, a new YouGov survey of 2,007 young people reveals current attitudes towards condom use and what prevented them from using protection.

Shockingly, the findings revealed that almost half (47%) of sexually active young people said they have had sex with someone new for the first time without using a condom; whilst 1 in 10 sexually active young people said that they had never used a condom.

The new research also revealed that sexual health is a challenging topic for

young adults to discuss, as 56% of men and 43% of women said that it is difficult to talk about STIs with friends. Furthermore, 58% said that if they had an STI they would find it difficult to talk to their sexual partner about it.

In 2016, there were over 141,000 chlamydia and gonorrhoea diagnoses in people aged between 15 and 24 in England and almost 6 in 10 (59%) of all those diagnosed with an STI were among this age group.

'Protect against STIs' aims to raise awareness of the serious consequences of STIs, which can cause infertility, pelvic inflammatory disease (PID – an infection of the female upper genital tract, including the womb, fallopian tubes and ovaries), swollen or painful testicles and even meningitis. Gonorrhoea is a particular concern because it is becoming increasingly resistant to antibiotics, and may become untreatable in the future. The campaign will be highlighting the increased likelihood of contracting an STI if having sex without a condom and that many STIs are symptomless, including 7 in 10 cases of chlamydia.

Despite the rates of STIs remaining consistently high among young people, currently, twice as many young people say that the main reason for using condoms is to avoid pregnancy (58%), rather than to avoid getting an STI (29%).

The campaign aims to help normalise and encourage condom use in young people, as it was revealed that 1 in 3 (32%) young adults said that they have never seen a condom mentioned in sex scenes on TV or in films.

'Protect Against STIs' launches on 15 December 2017 with a nationwide digital advertising campaign targeting young people. The new advertising hears from real people talking about their own personal experiences of having an STI. The identities of the individuals will not be shown but will be animated by emojis. The campaign is being supported by a range of partners, including the Family Planning Association (FPA), Durex and British Association for Sexual Health and HIV (BASHH).

Gwenda Hughes, Head of STI Surveillance at Public Health England comments:

Rates of STIs among young people continue to be too high and it is concerning that many sexually active young people are not using condoms with new partners. Six in 10 chlamydia and gonorrhoea diagnoses are in those under 25 years of age, so we need to remind young people of the importance of using condoms with a new or casual partner to help prevent infection.

Dr Sara Kayat, TV doctor and campaign supporter comments:

Using a condom is the safest way to ensure that you avoid contracting STIs, such as chlamydia or gonorrhoea. Whilst many STIs are symptomless, contracting them can have serious health

consequences if left untreated and even lead to infertility. As I tell patients in my clinic every week, it's just not worth putting yourself at risk by not using a condom.

Tom Haywood, Senior Brand Manager at Durex UK, said:

STI rates remain high amongst young people in England and we want young people to know that sex can be fun and safe, if you wear a condom. There is still a perception for many that condoms reduce pleasure and fun, but condoms should be a key part of positive sexual activity as they help protect against STIs. Through this campaign, Durex wants to help educate young people around condom use and help reduce levels of STIs.

Visit [the campaign website](#) for more information.

Background information

Additional quotes

Dr Elizabeth Carlin, President of the British Association for Sexual Health and HIV (BASHH) comments:

BASHH are delighted to support this important new campaign from Public Health England. It is both timely and crucial given the high rates of sexual infections in young people, many of whom do not have symptoms. Condoms remain essential in the fight against STIs, as well as HIV, and we recommend using them for sex with any new or casual partners. We urge anyone who is concerned about their sexual health, or risks they have taken, to have a check-up and be tested – it is quick and easy to do.

Jesse, aged 24 from London who contracted chlamydia and gonorrhoea in the past comments:

I've had both chlamydia and gonorrhea in the past when I didn't use a condom and it wasn't a nice experience. They caused pain in my groin and discomfort when urinating. The worst of it though was having to tell my previous and current sexual partner that I had contracted the STIs, so they also needed to get checked and treated. I had symptoms, but I know there are so many people who don't, so now when having sex with someone new I will definitely use a condom.

1. [Campaign advertising and images](#) can be downloaded online.

2. Dr Sara Kayat is a GP at Grays Inn Road Medical Practice. Her main areas of expertise are sexual and reproductive health, as well surgical specialties like ENT and orthopaedics. Interviews available upon request.
3. Public Health England
[Public Health England](#) exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health. Twitter: [@PHE_uk](#), Facebook: www.facebook.com/PublicHealthEngland.
4. The Family Planning Association (FPA) is supporting the 'Protect against STIs' campaign by helping to deliver sexual health information and support to key audiences via their Sexwise website.

freuds

Email

laurel.eveleigh@freuds.com

Telephone

07912 515997

[Press release: PHE gets permission for public health science campus and HQ](#)

PHE has been given planning permission to create a world-leading public health science campus at Harlow in Essex.

The landmark decision helps secure PHE's role as a global leader in applying cutting-edge science to protect and improve the public's health for the next generation through the creation of a 'state-of-the-art' centre of national and international scientific expertise.

PHE Harlow, as the site will be known, is expected to employ up to 2,750 people by 2024, with scope for further expansion.

The campus is critical to the future of PHE, ensuring we will be able to use the latest scientific advances to deliver our world-leading science and evidence for issues such as smoking, alcohol, diabetes, dementia, infectious

diseases, environmental hazards and climate change nationally and internationally.

PHE was given the go-ahead to create the campus at a meeting of Harlow District Council's Development Management Committee today (13 December 2017). Approval is for outline planning with more detailed applications to follow for elements including an arrivals area and car parking. It follows government approval of £400 million capital support for the scheme.

The campus will allow PHE to fully embrace the new technologies of whole genome sequencing, public health interventions and 'big data' and transform the delivery of public health science for many years to come.

It means that PHE will relocate from facilities at Porton in Wiltshire, Colindale in north London, as well as its central London headquarters to a single centre of excellence for public health research, health improvement and protection. PHE Harlow will support PHE's teams that cover the whole country and its work around the world.

PHE Harlow will be built at a site previously owned by GlaxoSmithKline at their New Frontiers Science Park on the Pinnacles Industrial Estate in Harlow.

As well as providing a significant permanent economic and employment boost to the local economy, the campus will see thousands of construction-related jobs being created.

The next step in 2018 will be the preparation of the site for the construction. Building work is expected to start in 2019 with phased occupation starting in 2021.

Richard Gleave, PHE Deputy Chief Executive, said:

This landmark decision is one of the most important not just for PHE but also for the nation's health. It allows us to build on the incredible work we already do to deliver some of the best public health science in the world.

PHE Harlow will be a world-leading national and international resource and this approval could not come at a better time. Every year we face new challenges both at home and abroad and the public should rest assured that this decision will see us even better prepared to tackle these head on.

The site is within the 'London Cambridge corridor' – one of the leading life sciences research zones in Europe – and provides opportunities for PHE to collaborate with commercial, academic and public sector partners.

Steve Brine MP, Minister for Public Health, said:

We're now one step closer to achieving our vision of a campus that sets the world-standard for public health science. This is a significant step not only for PHE but for public health nationally and internationally.

Councillor Jon Clempner, Leader of Harlow Council, said:

This decision signals a key moment in building Harlow's tomorrow. PHE's move is part of the regeneration of Harlow – making it a better place to live, work and visit. This development and investment in our town, and the investment which will follow, will play a major part in Harlow's bright future.

New jobs and opportunities for local people and local businesses will be created and Harlow will be placed on the world map. Together, we are committed to ensuring that local people and local businesses take the opportunities the public health science campus will bring to Harlow.

View the [full application](#) online.

Background

1. PHE submitted an outline business case to government in July 2014. An interim decision was taken in September 2015 to move the majority of PHE functions from Porton to Harlow. In November 2015, the government supported a further proposal to move PHE science facilities at Colindale to Harlow to create a single integrated campus. It has committed £400 million capital investment for the project.
2. It is hoped the public health science campus will be fully operational by 2024, with the first building work expected to start in 2019 and a phased occupation from 2021.
3. The planning application, consisting of 3,000 pages and nearly 300 drawings and images, was submitted in August following extensive consultation with stakeholders and the local community.
4. The application also includes a travel and visitor plan which outlines car parking provision and sets out sustainable travel and transport plans for the site. These include shuttle buses to and from Harlow Town railway station as well as car-share and cycle-to-work schemes.
5. PHE is committed to being a good neighbour. The planning application outlines PHE's longer term commitments to Harlow, through investment in

highways and public transport, early years childcare and contribution to Harlow's important history of public art and sculpture.

6. Planning approval has been given subject to a Section 106 agreement being signed by PHE and Harlow District Council. This agreement is expected to be signed in the next few weeks.
7. Whole genome sequencing is the mapping out of a person's unique DNA and enables more accurate, sophisticated and cost-effective genetic testing.
8. [Public Health England](#) exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and providing specialist public health services. We are an executive agency of the Department of Health, and are a distinct organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner. Follow us on Twitter: [@PHE_uk](#) and Facebook: www.facebook.com/PublicHealthEngland.

Matthew Cooper

Email

Matthew.Cooper@phe.gov.uk

Direct line

0207 654 8069