News story: CEN updates affecting chemical measurements January 2018

Fertilisers

EN16962:2018 – Fertilizers – Extraction of water soluble micro-nutrients in fertilizers and removal of organic compounds from fertilizer extracts

Regulation (EC) No 2003/2003 relates to fertilisers placed on the EU market and designated as an 'EC fertiliser'. The Regulation states that the content of one or more of the micro-nutrients boron, cobalt, copper, iron, manganese, molybdenum, or zinc present in specified types of fertilisers shall be declared where certain conditions are fulfilled. The sampling and analysis methods shall, wherever possible, be taken from European Standards.

EN 16962 describes a method for extracting water soluble forms of boron, cobalt, copper, iron, manganese, molybdenum and zinc from mineral fertilisers containing one or more micro-nutrients. The standard also describes a procedure for removing organic compounds from the aqueous extract.

The extracts are analysed for the micro-nutrients using the analytical method described in EN16963 – Fertilizers – Determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc using ICP-AES or EN 16965 – Fertilizers – Determination of cobalt, copper, iron, manganese and zinc using flame atomic absorption spectrometry (FAAS).

EN 16964:2018 – Fertilizers – Extraction of total micro-nutrients in fertilizers using aqua regia

EN 16964 describes a method for the total extraction of boron, cobalt, copper, iron, manganese, molybdenum and zinc into aqua regia (a mixture of nitric and hydrochloric acid in a molar ratio 1:3) from mineral fertilisers containing one or more micro-nutrients.

The extracts are analysed for the micro-nutrients using the analytical method described in EN16963 – Fertilizers – Determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc using ICP-AES or EN 16965 – Fertilizers – Determination of cobalt, copper, iron, manganese and zinc using flame atomic absorption spectrometry (FAAS).

This sampling method can also be used to extract contaminants such as cadmium, chromium, nickel, lead, arsenic and mercury that may be present in mineral fertilisers and could pose a risk to health and the environment.

The extracts are analysed for contaminants using the analytical methods described in EN16319 – Fertilizers and liming materials. Determination of cadmium, chromium, lead and nickel by inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution, EN16317 – Fertilizers and liming materials. Determination of arsenic by inductively

coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution and EN16320 – Fertilizers and liming materials. Determination of mercury by vapour generation (VG) after aqua regia dissolution.

EN 16963:2018 – Fertilizers – Determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc using ICP-AES

EN 16963 describes an analytical method for the determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc in aqueous or acid extracts of fertilisers using inductively coupled plasma-atomic emission spectrometry (ICP-AES).

Where only traces of organic matter are present in the extract, it is considered unnecessary in most cases to apply the procedure for removing organic compounds.

EN 16965:2018 – Fertilizers – Determination of cobalt, copper, iron, manganese and zinc using flame atomic absorption spectrometry (FAAS)

EN 16965 describes an analytical method for the determination of boron, cobalt, copper, iron, manganese, molybdenum and zinc in aqueous or acid extracts using flame atomic absorption spectrometry (FAAS).

Where only traces of organic matter are present in the extract, it is considered not necessary in most cases to apply the procedure for removing organic compounds.

EN 16962, 16964, 16963 and 16965 have been developed in accordance with European Commission Mandate M/335 to prepare standards for methods of analysis in the field of animal nutrition part II, implementing the framework of Regulation (EC) No 2003/2003 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

Animal feed

EN 17053:2018 – Animal feeding stuffs: Methods of sampling and analysis – Determination of trace elements, heavy metals and other elements in feed by ICP-MS (multi-method).

The elemental composition of animal feed additives and pre-mixtures is required to be known for the purposes of authorisation of certain feed additive compounds under EU legislation.

Trace elements are elements such as iron, copper, zinc, manganese, cobalt and selenium, present in small amounts and important for maintaining the metabolism of biological systems. The term heavy metal generally refers to any metallic element that has a relatively high density and toxicity at low concentrations and includes arsenic, cadmium, mercury, lead, thallium and uranium.

EN 17053 describes the extraction of arsenic, cadmium, cobalt, copper, iron,

mercury, manganese, molybdenum, selenium, thallium, uranium and zinc from animal feeds using pressure digestion with nitric acid and determination by inductively coupled plasma mass spectrometry (ICP-MS).

For the extraction of lead from animal feeds containing phyllosilicates (e.g. kaolinite clay) it is specified that wet digestion with nitric acid is used instead of pressure digestion and determined by ICP-MS.

EN 17053 has been developed in accordance with European Commission Mandate M/522 to prepare standards for methods of analysis in the field of animal nutrition, implementing the framework of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

Food

EN 12014-2:2017 – Foodstuffs – Determination of nitrate and/or nitrite content – Part 2: HPLC/IC method for the determination of nitrate content of vegetables and vegetable products

EN 12014-2:2017 supersedes EN 12014-2:1997 and describes an updated analytical method where nitrate is extracted from vegetables and vegetable products into water and determined either by reverse-phase high performance liquid chromatography (HPLC) with a ultra-violet (UV) detector or by ion-exchange liquid chromatography (IC) with a conductivity detector or UV detector.

The existing HPLC/IC procedures have been improved and revalidated to obtain new precision data. The method is now considered applicable to vegetables and vegetable products having a nitrate content of 25 mg/kg or greater.

This method is also considered as suitable for also determining the nitrite content in vegetables and vegetable products but has not been validated.

EN 12014-2 is a standard for the determination of food contaminants implementing the framework of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

Further information on food legislation can be found on the document collection: Food and Feed Law. legislation review

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Press release: Drivers lose almost a million licences in the last year

Every driver in Britain needs to have a driving licence as proof of their

entitlement to drive – but they don't necessarily need to carry their licence with them.

Last year the majority of duplicate licences were issued through DVLA's online service. While the DVLA recovers its cost from the fee drivers pay, DVLA is advising drivers to keep their licence safe to avoid having to pay for replacements.

Dudley Ashford, Drivers Service Manager at DVLA, said:

> While you don't legally have to carry your licence with you when driving, you need to have a licence in case you need to prove you can drive. So we'd recommend keeping your licence safe and secure at all times – perhaps storing it in one safe place along with other important documents.
>
> Hopefully you won't have to replace your licence but if you are going to carry it around with you and you then lose it, it's always quicker to apply for a new one online.

The latest figures show that on average across Great Britain, 8 out of 10 people carry their driving licence with them. However, the figures also show that your age and where you live could decide where you keep your driving licence.

- Drivers in Scotland are almost twice as likely to keep their licence in their car to the rest of Britain.

- Welsh drivers are most likely to keep their driving licence at home.

- Younger drivers across Great Britain are far more likely to choose to carry their licence with them (87%). The older a driver gets the more likely they are to keep their licence at home.

The figures also revealed that:

- 82% of 16 to 24 years olds surveyed use DVLA's online services to apply for, renew or update their driving licences
- younger people are most likely to apply for photo renewals and replacement cards after misplacing their licence
- drivers aged 70 and over, who must renew their licence every 3 years, are increasingly choosing to do this online
- since 2010 the number of drivers aged 70 and above renewing their licence online has tripled to over 700,000 last year

Notes to editors:

- 27 million transactions have taken place on the Driving Licence Online

service since the service launched a decade ago at www.gov.uk/apply-online-to-replace-a-driving-licence
- The most popular transaction is the ‘change of address’ service, allowing drivers to keep their licence up-to-date should they move.
- Where fees apply they are pooled to help recover overall running costs. Over three quarters of all transactions we process are free of charge. These include some of the most common transactions, such as change of address or change of details.
- The fee for replacing a lost driving licence is £20, through the online service or through the post.

Survey detail:

- 22.7% of those surveyed from Wales said they kept their licence at home
- 3.10% of those surveyed from Scotland keep their licence in their car (compared to 1.7% national average)
- 18.5% of over 55s keep their licence at home compared with 7% of 16 to 34 year olds

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Speech: Speech to the annual data privacy conference

I’m delighted to be speaking at this event hosted by Taylor Wessing today. From the very start of my Commission as an independent regulator this law firm has been a good friend to my offices particularly in supporting my knowledge and understanding of the world of data protection and its application to video surveillance camera systems. Indeed you hosted my first ever webinar regarding surveillance camera systems. I thank you for that enduring friendship and acknowledge the calibre of your offices.

In the context of regulating surveillance camera systems am going to tell you a little about my role and regulatory interests, provide a synopsis of my views as to the regulatory framework and discuss a new paradigm.

I am mindful that I am amongst a host of data protection experts today, however what I really want to talk to you about is a subject which I consider to be the key issue occupying my regulatory focus, namely the growing capabilities and appetite for use of increasingly intrusive technologies integrated with surveillance camera systems in society. Of course data protection is a significant element of this subject but it is a much broader consideration than data protection alone.

For over six months now I have been endeavouring to energise engagement, discussion and debate on this matter with, amongst others, the Home Office, Government Ministers, the National Police Chief’s Council, police forces, civil libertarians, the public and indeed fellow regulators. It is a matter

which is gathering momentum in the public consciousness and I will continue to encourage debate and engagement as I believe that doing so will be a catalyst for change in support of public interest. The public interest which demands clear legislation, transparency in governance and approach and a coherent and effective regulatory framework in which they can have confidence.

Let me use the example of Automated Facial Recognition, or AFR as it is referred to, as an illustration. When I launched my National Surveillance Camera Strategy just over a year ago I engaged with a broad spectrum of stakeholders including police, public and privacy campaigners to better understand the divergence of opinion around its use. In the case of Liberty the message I received was; "…we are deeply concerned by the lack of progress on securing any form of independent oversight of the use of AFR -particularly used by LE (Law Enforcement Agencies).

I agree.

Then consider the view of the eminent David Anderson QC, formerly the Government's independent reviewer of counter terrorism legislation who said; "either you think technology has presented us with strong powers that the government should use with equally strong safeguards or you believe this technology is so scary we should pretend its not there. And I firmly believe in the first category not because I say government is to be trusted but instead because in a mature democracy such as this one we're capable of constructing safeguards that are good enough for the benefits to outweigh the disadvantages.

I agree.

David has a sharp mind -let me tell you about a programmed use of AFR in China called 'Sharp Eyes' as an insight as to where the use of intrusive surveillance technologies can lead. Sharp Eyes -Xue Liang – Chongqing -the future?

This is a capability developing in China which connects security cameras with AFR that scans roads, shopping malls and transport hubs. It can connect to private and compound cameras and buildings and integrate then into one nationwide surveillance platform. This capability is backed up with a police cloud scooping up information of citizens, be it criminal, medical, commercial, socio -demographic upheaval and political unrest. Indeed the police commander Chongqing said; " With AFR we can recognise strangers, analyse their entry and exit points, see who spends the night there and how many times'.

As you may know I have a background in strategic leadership in the field of counter terror-ism. I consider this to be a nightmare scenario where the will of a totalitarian state continues its intrusive evolution through technology, seemingly unhindered by any regard to the will of the people or mechanisms to keep things in check.

That of course is China -it will not happen here will it? But could it? Only

last month I wrote to Chief Constable Sarah Thornton, chair of the National Police Chief's Council formally bringing to her attention my concerns regarding discussions in police circles about bringing together public space video surveillance camera systems and integrating them for police use. There are aspects of these proposals which for me resonate with 'Operation Champion' – a police initiative to erect a ring of ANPR cameras around a predominantly Muslim community under the guise of 'Crime Prevention' -when the larger intent was to support counter terrorism policing. The public outcry which followed in that particular case ensured that the cameras were never switched on.

But first, my role.

I thought it might be useful if I give you a little background about my role as Surveillance Camera Commissioner. It was created under the Protection of Freedoms Act 2012. I was appointed by the Home Secretary but am independent from Government. My commission was extended for a further term of three years as recently as last March. I'm entrusted to ensure that surveillance camera systems are used to support and protect communities – not spy on them. My primary focus is the overt use of surveillance cameras in public places by relevant authorities as defined in the legislation, in England and Wales by statutory mandate and indeed this extends to any organization operating such systems in encouraging them to voluntarily adopt the Code which I oversee. The Code in question is the Surveillance Camera Code of Practice which is issued by the Secretary of State and contains 12 guiding principles which if followed will mean cameras are only ever used proportionately, transparently and effectively. Typically surveillance cameras falling within my purview include CCTV, ANPR, body worn cameras, drone and helicopter mounted cameras, dashboard cameras and analytic systems, reference systems, automatic facial systems etc.

It is very important that I make it clear that in publishing the Secretary of State's Code, the use of evolving technologies in society was foreseen by Government and indeed the use of facial recognition systems explicitly referenced within its pages. Those of you familiar with the content of the Code will of course know that the Code sets out that such technologies will be regulated by it and paragraph 3.2.3 makes it clear that the use of such systems must be validated, and that I am a source of advice on validation. You will understand therefore my enduring determination and commitment to ensure that this is debate which remains energized and to which I will remain central.

My statutory role is three fold, namely to encourage compliance with the code, review the operation of the code and in reviewing the impact of the Code, to advise on any amendments to how it should develop. Indeed I have recently made recommendations with regards to ANPR. My Annual Report was laid before Parliament only a few weeks ago. Chapter 5 of the SC Code describes how I may regulate.

Relevant Authorities are my key focus and they are essentially police, local authorities, Po-lice and Crime Commissioner's, National Crime Agency and non designated police forces. They all have 'a duty to have regard to the Code'.

The Code also touches on obligations of operators of surveillance camera systems under the provisions of the Data Protection Act and significantly paragraph 2.2 of the Secretary of State's Code provides that increasingly intrusive technologies when used as part of a surveillance camera system must be regulated by the Code. The guiding principles within the Code also specifically refer to areas where I must engage with new technology.

You may be forgiven for asking why AFR is considered as a video surveillance system at all when it is in fact merely a biometric algorithm. The answer lies in Section 29(6) Protection of Freedoms Act 2012 which defines the surveillance camera systems of my focus as being CCTV, ANPR, any other system for recording or viewing visual images for surveillance purposes, any systems for storing, receiving, transmitting, processing or checking images or information obtained by those systems, and, wait for it, any other systems associated with, or otherwise connected with those systems. Integrated technologies!

My journey with technology thus far reaches back to 2014 when AFR was a little more than a mere pixel in the eye of the motherboard. In 2015 when 'Slipknot and Muse ' should have been making headlines for their musical calibre at the Download Festival it was Leicestershire Police who instead grabbed the headlines due to public concerns about their use of AFR at this event. Why? Well concerns included an absence of clarity as to the legal basis for its use, limited transparency and civil engagement, the credentials of the equipment being used, the database of images involved, where was regulatory over-sight and who said it was ok to use it and on what basis?

The Metropolitan Police made use of AFR at the Notting Hill Carnival in 2016. This too attracted concerns because the results of the deployment were not published, and concerns were raised regarding engagement, legality, reliability of equipment being used, the image database, evaluation and governance. They repeated this exercise in 2017 and whilst concerns remain, they reached out to regulators for guidance and completed my Self Assessment tool and a DPIA issued by the ICO.

South Wales Police employ AFR and have used it at major sporting events. They have worked hard to engage stakeholders, the Home Office, regulators and the public and have ensured strategic governance and independent consultation.

Let me make it clear, I think that the police are genuinely doing their best with AFR in what I consider to be an absence of a sufficiently robust legal and regulatory framework. It is inescapable that AFR capabilities can be an aid to public safety particularly from terrorist threats in crowded or highly populated places. It is inevitable therefore that there is an appetite particularly within law enforcement to exploit these capabilities, an appetite which is doubtlessly borne out of a sense of duty and determination to keep us safe. Many of those technologies such as Automated Facial Recognition already exist in society for our convenience and therefore the public will have something of an expectation that those technologies are so used by agents of the state, but only in circumstances which are lawful, ethical proportionate and transparent. But by the same measure the public also need to be safe from disproportionate and illegitimate state intrusion.

The challenge is arriving at a balance and for that to happen there need to be a clear framework of legitimacy and transparency which guides the state, holds it to account where necessary and delivers confidence and security amongst the public. I don't believe we are there yet. I don't believe that GDPR and new data protection legislation in isolation takes us there either.

Let's now consider areas outside of the state. In 2015 a survey conducted by the Computer Services Group found that 25% of retailers use AFR including 59% of fashion retailers. There was a total absence of signage, a priority data protection consideration.

A review of 28 High Street Retailers found that only John Lewis, Waitrose and Monsoon declared that their use of CCTV was for 'more than crime purposes'.

Demonstrating compliance with legislation which governs the use of surveillance camera systems is a good place to start when it comes to engendering the trust and confidence of the public you are looking at through your cameras. The Surveillance Camera Code of Practice provides a whole system approach to standards of operation and the ICO Code for operators of surveillance camera systems 'In the Picture' enables compliance with data protection responsibilities. Is this enough where overt surveillance using new technologies is concerned? I don't think so.

Let's look at another widely used technology, Automated Number Plate Recognition (ANPR), which in the context of effective governance and regulation has parallels with AFR. "The Face ain't dissimilar to the Number Plate".

ANPR is arguably the largest non- military data base in UK collecting up to 40million reads of innocent citizens number plates a day and upwards of 30 billion reads a year. It harnesses personal information and enables data mining of immense personal invasion across the UK. There is no statutory footing for ANPR although a legal framework sup-ports some of it. It is capable of providing misinformation as a result of irregular, cloned or defective plates and vulnerable to fraud. It has an error rate of 3 % in National Standards – 1.2 million reads a day!

I have led the regulatory debate on these issues with the police and Home Office for a number of years particularly in respect of the issue of data accuracy. The police response has been magnificent, culminating in asking me to establish and chair the National Independent ANPR Independent Advisory Group which comprises academics , privacy specialists , ICO, motor industry specialists etc.

Unlike ANPR, there are no national standards in place regarding AFR and central coordination within the NPCC is still evolving. The Home Office continues to fail to deliver a Bio-metric Strategy despite promises over last 4 years. A Home Office custody image policy has been produced which is arguably an improvement on the previous position but in my view still falls well short of fully respecting privacy rights.

So what have I been doing about this issue? I have written to the NPCC lead

for surveillance camera systems, ACC Tim Jacques urging better strategic governance and suggesting that the College of Policing help design standards. I have written to all Chief Officers in England and Wales reminding them of their responsibilities and my role under PoFA, I have written to the Chair of the NPCC and to the Minister of Policing setting out my observations. I have met with other regulators and discussed areas of potential synergy, visited police trials in South Wales, the Metropolitan Police and the NEC, presented at numerous forums including the Police and Ethics Board in London and engaged with HMIC and the Crown Prosecution Service and even held a public engagement 'Question Time' event at the London School of Economics to engage public opinion and debate with a panel of experts from across the civil spectrum. In that regard, there is more to come.

Is the current and anticipated regulatory framework fit for the purpose of regulating technologically advanced surveillance camera systems in public? Well let's look at our regulatory fingers in the surveillance camera pie!

Can anyone tell me the collective noun for a group of regulators in that respect? How about 'a murder of regulators?' as you can be forgiven for thinking that is what we are doing to the subject matter at hand.

Firstly, the ICO – AFR relies on cameras and produces data – the ICO have a very clear strategic role in regulating the management and privacy of personal data- GDPR is coming over the horizon and Jonathan Bamford (ICO) has already talked about the new requirements – DPIA, Consent, Sensitive subject material It needs to be relevant and made relevant? The fine should help there! Data is the new oil and it will be interesting to see how the new requirements will be precisely policed? The ICO is developing fabulous guidance to help with what is an increasingly complex framework. It is only part of the regulatory picture however.

The Biometric Commissioner; One senses this title must have responsibility for this field, it makes good sense as Paul Wiles is the leading regulatory ambassador for ethical standards in the use of biometric capabilities –but in statute he bizarrely has no mandate where AFR is concerned. Paul has been and continues to be a strong advocate for a more ethical approach to the use of custody images and has like me, made repeated calls for the production of a government Biometric Strategy.

The Forensic Science Regulator very clearly sets and regulates the standards of digital forensics to ensure that the public interest is appropriately served by standards of evidential and procedural integrity in cases where judicial proceedings involve the use of digital images.

The Investigatory Powers Commissioners Office (IPCO), that very powerful and impressive UK privacy regulator in the field of data capture across a wide spectrum of covert techniques. Now in the covert domain the regulatory regime for covert surveillance is clear and unequivocal and in my view reassuring.

There is a clear basis in law for covert surveillance to be conducted provided by the Regulation of Investigatory Powers Act 2000 and the Investigatory Powers Act 2016. There is provisions for independent judicial

oversight and approval, there is a clear regulatory framework within the relevant legislation which prescribes governance in so far as authorisation levels for covert surveillance activity is concerned and the key principles to be considered and recorded within specified timescales to ensure constant review. There is an inspection regime which scrutinises compliance in respect of every public authority which has powers vested in it to conduct covert surveillance which results in reports and recommendations being considered by senior officers and judicial figures alike. That is a regime which has stood the test of time – 17 years, and is necessary because of the degree of intrusion which covert surveillance causes and the use of technologies involved.

But arguably, overt surveillance is becoming increasingly intrusive on the privacy of citizens and in some cases more so than aspects of covert surveillance because of the evolving capabilities of emerging technologies. It may be AFR today but what about augmented reality, gait analysis, behavioural analysis, lip reading technology and whatever else may be around the corner?

Technology can enable OVERT surveillance camera systems to harvest an exceptionally detailed picture of your PRIVATE and personal information, in some cases far better than a surveillance officer covertly following you to the supermarket. But my point is this; – there is a clear legal and regulatory framework to underpin covert surveillance. There is a more complex legal framework which underpins overt surveillance activity which includes Common Law, DPA, PofFA FoI, Counter Terrorism Act 2008 and others.

Whereas the new GDPR and DPA provisions and proposals will undoubtedly provide a more comprehensive basis in law for the management of personal data, overt surveillance is a wider legal consideration of which GDPR and DPA is an element but not the all. The academics and civil libertarians who sit on my advisory group would be happy to have the debate with anyone here who has a differing view. Fortunately my role is to apply balance.

A new paradigm

I made it clear in my recent Annual Report that I believe the current regulatory framework is not fit to manage the challenges emerging from new surveillance technologies in society. My role has drawn me through the camera lenses and in to the back office artificial intelligence systems in the preceding five years.

I launched a National Surveillance Camera Strategy in March last year- One strand of this strategy is that of Citizen Engagement and a programme of public engagement and de-bate has begun. I joined Big Brother Watch, the police, a member of the House of Lords, an academic and a Channel 4 correspondent on a panel to discuss these issues with an audience in a lively event at the London School of Economics.

How does society maximise the use of new technology without creating a creepy, oppressive breach of our fundamental freedoms? More importantly what is government doing about it, or at least, what’s the plan? Is it right to

say to our emergency services, don’t de-ploy technology that can save lives as the government isn’t ready yet, any more than it is to say you can be as intrusive as you like in deploying what are essentially biometric check points where your face is your ID card?

I do think regulators can work closer on these matters in bringing the debate to deliver tangible outcomes to benefit the public interest. Threats to society and threats to civil liber-ties are of equal magnitude these days and becoming increasingly complex. It is simply not satisfactory to expect law enforcement, emergency agencies and the public to ‘just get on with it’. In the context of surveillance in society, voices who shout ‘you should’ or you shouldn’t’ resonate with equal conviction.

My view has consistently been that to establish a true balance regulators need to work closer together and Government needs to engage far better than has hitherto been the case. Most importantly there needs to be a constant heartbeat of constructive and mature challenge and debate from the citizens of this country who are ultimately on the other end of the camera lenses and its intrusive capabilities. The public voice is the lifeblood of change and progress to the greater good. We need to listen, to understand and to act sensibly and the ‘we’ includes government.

News story: Would you like to help shape the development of a new service?

We Need You

Are you a Community Interest Company (CIC) or do you file on behalf of one?

Would you like to help shape the development of a new service to allow CICs to file their annual report and accounts online?

We are looking for CICS located in Cardiff, Newport and Bristol (initially) to participate in user research either at Companies House, Cardiff or at their own place of business.

If you are interested in taking part please email surveys@companieshouse.gov.uk; with your details and the type of research you would be interested in taking part in.

Published 14 March 2018
Last updated 14 March 2018 + show all updates

1. 14 March 2018 change of email address
2. 14 March 2018 First published.

Press release: Four in 10 smokers incorrectly think nicotine causes cancer

Over 58% of smokers still try to quit without using an aid and going ‘cold turkey’ despite this being the least effective way. A Public Health England (PHE) report highlights that public misunderstanding of the harmfulness of nicotine containing products, such as nicotine replacement therapy (NRT) and e-cigarettes, may be linked to inaccurate and confused perception of the risks of nicotine.

The risks of nicotine use are likely to be very low or negligible. NRT is safe and licenced for use in pregnancy and for people with cardiovascular disease. And there is now wide international consensus that e-cigarettes are far less harmful than smoking. It is the cocktail of deadly chemicals in cigarette smoke, including tar and carbon monoxide, which causes almost all of the harm of smoking.

Four in 10 smokers and ex-smokers incorrectly think that nicotine in cigarettes is the cause of most of the smoking-related cancer. Understanding of the harms of nicotine among the general population is similarly poor. In 2017:

- only 7.5% thought that none or a very small part of the risk of smoking comes from nicotine
- 14% thought that it was nearly all the risk
- almost a quarter (24.2%) of the population didn’t know

The use of quit aids can greatly increase your chances of quitting successfully. Research shows that:

- using NRT as a quit aid, such as patches and gums, or e-cigarettes makes it one and a half times as likely you’ll succeed
- your chances of quitting are doubled if using a stop smoking medicine prescribed by a GP, pharmacist or other health professional

- expert support from a local stop smoking service gives you the best chance of quitting successfully
- combining quit aids with expert support makes it four times as likely you'll stop smoking successfully

Professor John Newton, Director of Health Improvement at PHE said:

> Misunderstanding about the risks from nicotine may be deterring smokers from using quit aids such as e-cigarettes or nicotine replacement therapies like patches and gums.
>
> Nicotine is addictive but it's the many thousands of chemicals in tobacco smoke that are responsible for almost all of the harm caused by smoking. Using nicotine quit aids helps manage cravings and can be one of the solutions to helping you stop for good. Going 'cold turkey' is not recommended as it's the least successful way.
>
> To get the most benefit, make sure you use as much nicotine replacement as you need, and for as long as you need, as this will help you stop smoking and stay smokefree. Combining quit aids with support from a stop smoking service gives the best success rates. With the wide range of aids now available, there's never been a better time to stop.

PHE has been supporting all NHS trusts across the country to do all they can to become truly smokefree. The government and NHS England have both made commitments to a smokefree NHS, in the latest tobacco control plan and the NHS five year forward view.

Professor Newton comments:

> For a truly smokefree NHS to become a reality, our emphasis is to support hospitals shift their efforts away from simply 'enforcing' no smoking towards offering on-going support to help smokers stop for good, including encouraging them to use quit aids.
>
> Smoking rates are at their lowest ever level (15.5% of the adult population), but there are still nearly 7 million smokers in England. Smoking kills 79,000 people in England every year and for every death another 20 smokers are suffering from a smoking-related disease.

For further information or interview bids contact:

NHS Smokefree

Visit the NHS Smokefree site for support and advice on quitting smoking.

PHE’s e-cigarette evidence review

Read the annual update of PHE’s e-cigarette evidence review by leading independent tobacco experts.

Smoking prevalence figures

In 2016, 15.5% of adults aged 18 and over in England currently smoke, down from 19.9% in 2010. In 2000, 26.8% of adults aged 16 and over were smokers. Prevalence since 2010 has fallen most in younger age groups according to Statistics on Smoking, England 2017.

PHE’s Tobacco Control Profiles

For local smoking prevalence figures and additional local data see Local Tobacco Control Profiles.

Costs of smoking

The total cost from smoking to society in England is approximately £14.7 billion a year. This includes the cost to the NHS of treating diseases caused by smoking which is approximately £2.5 billion a year.

Source: ASH: The Local Cost of Tobacco – ASH Ready Reckoner and Towards a Smokefree Generation: A Tobacco Control Plan for England.

Tobacco Control Plan for England

The government’s new Tobacco Control Plan sets a series of challenging ambitions:

- reduce adult smoking rates from 15.5% to 12% or less
- reduce the prevalence of 15 year olds who regularly smoke from 8% to 3% or less
- reduce the prevalence of smoking in pregnancy from 10.7% to 6% or less

Public Health England

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 Social Care, and a distinct organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific expertise and support. Follow us on Twitter: @PHE_uk and Facebook: www.facebook.com/PublicHealthEngland.