



Public Health  
England

Protecting and improving the nation's health

# PHE Strategy 2020-25

September 2019

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# Foreword



This strategy outlines our foremost priorities which we will focus on for the next five years to both protect people and help people to live longer in good health.

When we think about good health, the vast majority of us think about our NHS and the care we get through hospitals and GPs. But the NHS of itself cannot improve the health of the nation. This depends more substantially on a prosperous economy and the choices that we make as individuals and families.

The most important contributors to a life in good health, including mental health, are to have a job that provides a sufficient income, a decent and safe home and a support network. More simply put – a job, a home and a friend.

There is obviously an ethical reason for caring about all of this, but there is an even more evident economic one. For children, what matters to their future economic prosperity is to have the best possible start in life and to be ready to learn when starting school. For young people entering adulthood, it is to have something meaningful to do in education, training or employment. For adults, it is to have a job and, when unwell, to be able to keep that job.

There is a 19 year difference in years spent in good health between the most affluent and the poorest communities and we see the effect of this at all stages of life, starting with our children. Prosperity shared broadly across all communities is how nations improve productivity and become both healthier and wealthier.

The next most important factor affecting our health are the choices that we make, which contribute up to 40% of early deaths and poor health. The four biggest risks are whether we choose to smoke, what and how much we choose to eat, whether we exercise and how much alcohol we drink, with obesity and smoking competing for top spot.

Running parallel to this is the critical importance of keeping people safe and avoiding the threats of infectious disease and environmental hazards. Our experts work around the clock to protect people and act when harm does occur.

Through these priorities, working with everyone at home and overseas, we can strengthen the public health system and make the country healthier, fairer and safer.

Duncan Selbie,  
Chief Executive

# Introduction

The new PHE Strategy sets our direction and defines our role for the next five years as we work to protect and improve the public's health. It follows on from PHE's previous strategy which provided the focus for our activities between 2016/17 and 2019/20. This strategy is owned by everyone in PHE and is the product of a collaborative process taking in all parts of the organisation and our many partners across the public health system.

## Part 1 – Our purpose

This section outlines the aims that guide all PHE's work as an organisation – keeping people safe, preventing poor health, narrowing the health gap and supporting a strong economy. All the activities and actions set out in this strategy serve one or more of these goals.

## Part 2 – Our context

Here we provide a brief summary of some of the most important issues, developments and trends that shape public health in England and around the world today. This section looks at system-wide progress, significant challenges and major opportunities.

## Part 3 – Our role

This section is about our place within the wider public health system and what we do to make a difference to the public's health. It describes PHE's work within five overarching roles, underpinned by a commitment to address health inequalities in all our activities.

## Part 4 – Our priorities

We have gone through an extended collaborative process to identify ten areas where we believe PHE can deliver the biggest impact for the public's health over the next five years:

- smoke-free society
- healthier diets, healthier weight
- cleaner air
- better mental health
- best start in life
- effective responses to major incidents
- reduced risk from antimicrobial resistance
- predictive prevention
- enhanced data and surveillance capabilities
- new national science campus

For each priority, we present our overarching ambition, specific aims that we will work with our partners across the public health system to achieve and key elements of our approach over the next five years.

## Part 5 – How we will develop as an organisation

To achieve our goals across both our strategic priorities and wider activities, we recognise that we must develop the underlying capabilities within PHE across three principal themes: developing our people, improving our processes and realising the potential of new technologies. This section highlights nine areas that cut across the organisation where we will focus our efforts.



# Our context

This strategy responds to the context in which PHE and our partners operate – what the public health system has achieved in recent times, where the public's health stands today and the issues which will shape our work in the future. Much of this is captured in the range of publications and data that PHE produce each year, such as the Health Profile for England and Public Health Outcomes Framework. We have also considered evidence published by our partners who have provided vital insights that have influenced the direction of this strategy.

Looking at the evidence, we see notable progress on many fronts as a result of concerted public health action, new and enduring challenges and a range of promising opportunities to enhance our work and improve outcomes for the public. This section highlights some of the most noteworthy trends and developments in each of these areas. The next five years will bring further change, which we will monitor closely and factor into our decision-making as we work to implement the strategy.

## The progress we have made

### Enabling longer lives

Since 1990, overall life expectancy has risen by over 5 years among men and over 3 years among women whilst infant mortality has fallen by more than half. The biggest driver behind increases in life expectancy has been dramatic and sustained reductions in the number of people dying early from cardiovascular disease (CVD). The fall in CVD-related mortality is thanks largely to a combination of decreasing smoking rates, changes in diets, expanded access to preventative medication and improvements to treatments.



### Falling smoking rates

Smoking rates are in terminal decline. In 1974, just under half the people in England were smokers. As awareness of the health risks of tobacco use has increased and successive governments have implemented measures to discourage smoking, this figure has fallen to one in six.

### Screening for disease

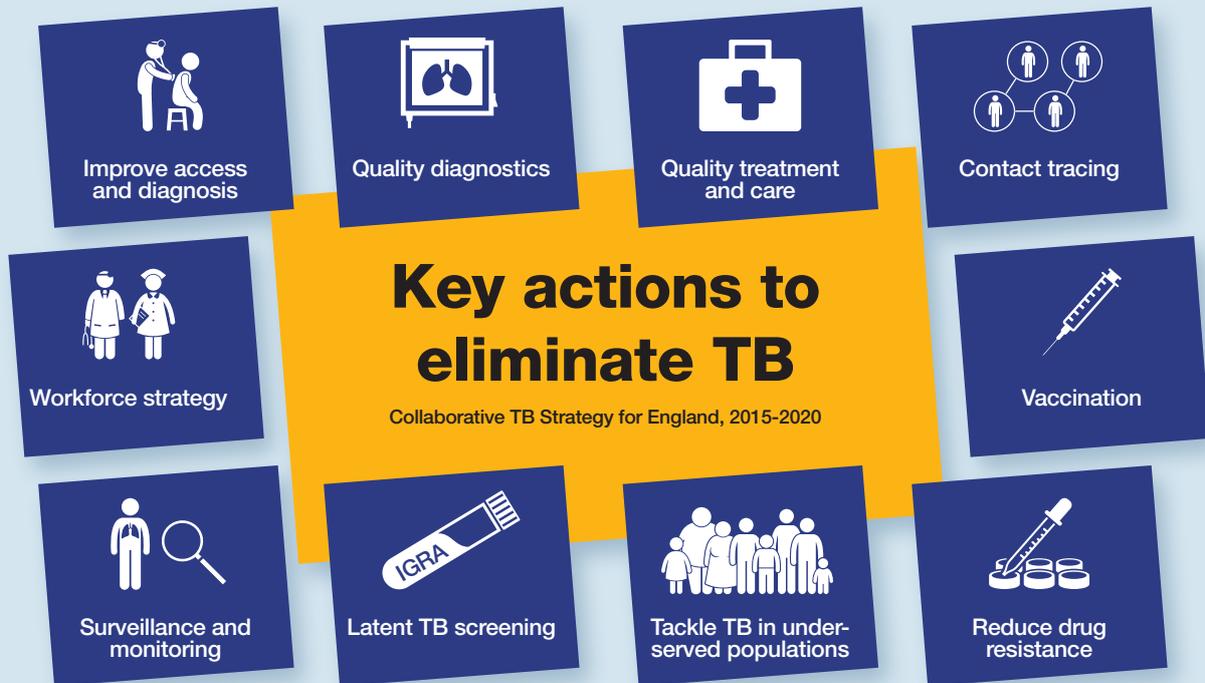
More than 21 million screening tests are performed annually in England, covering over 30 conditions. This includes more than 600,000 newborn babies who receive tests for 15 congenital disorders. For over 450,000 people a year, screening produces results that lead to further tests or treatments, with cancer screening programmes preventing 9,000 deaths each year.



## Reducing rates of infectious disease

Vaccination has saved more lives than any other medical procedure or product in the last 50 years and continues to protect millions of people from previously common infections.

Tuberculosis cases are at a record low whilst we have also seen new HIV diagnoses fall to their lowest level since 2000, with the UK meeting United Nations targets for ensuring that people living with HIV know their status and receive effective treatment.



## Responding to crises

PHE and partners in the health protection system have repeatedly demonstrated the capacity to deal with crises both at home and overseas. Since 2016, there have been 16 deployments of UK public health experts to support international responses to infectious diseases and natural disasters. Beginning in 2014, over 100 PHE staff worked on the ground in West Africa to help end the world's worst outbreak of Ebola, with many more contributing from the UK.



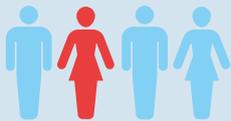
# The challenges we face

## What makes us healthy

The circumstances and environment in which we live have a major effect on our physical and mental health and can create or close off opportunities to make healthy choices. For most people, the ingredients for a healthy life include a good education, a good job, a decent place to live and friends and family to care for and about. This demands a joined-up approach where all parts of society work together to create inclusive growth and healthier and more productive communities.



Around **1 in 4** adults now live with **two or more** health conditions at the same time



## Reversing trends in life expectancy and poor health

Over the past few years there has been a slowdown in improvements in infant mortality and life expectancy, with reductions in deaths from heart disease plateauing and no real change in healthy life expectancy. For many people, a longer life means more time spent in poor health. There are an estimated 4.6 million people with both a mental health problem and a long-term physical condition.

## Addressing unhealthy behaviours

Supporting people to adopt healthy behaviours that can help to prevent poor health remains one of the top challenges for the public health system. Despite progress in reducing rates of smoking, it is still the leading cause of premature death in the country, with a disproportionate impact on low income and vulnerable groups. Every year obesity, poor diets, high blood pressure, high cholesterol, risky drinking, drug use and physical inactivity each cost people in England hundreds of thousands of life years.

## Smoking in pregnancy

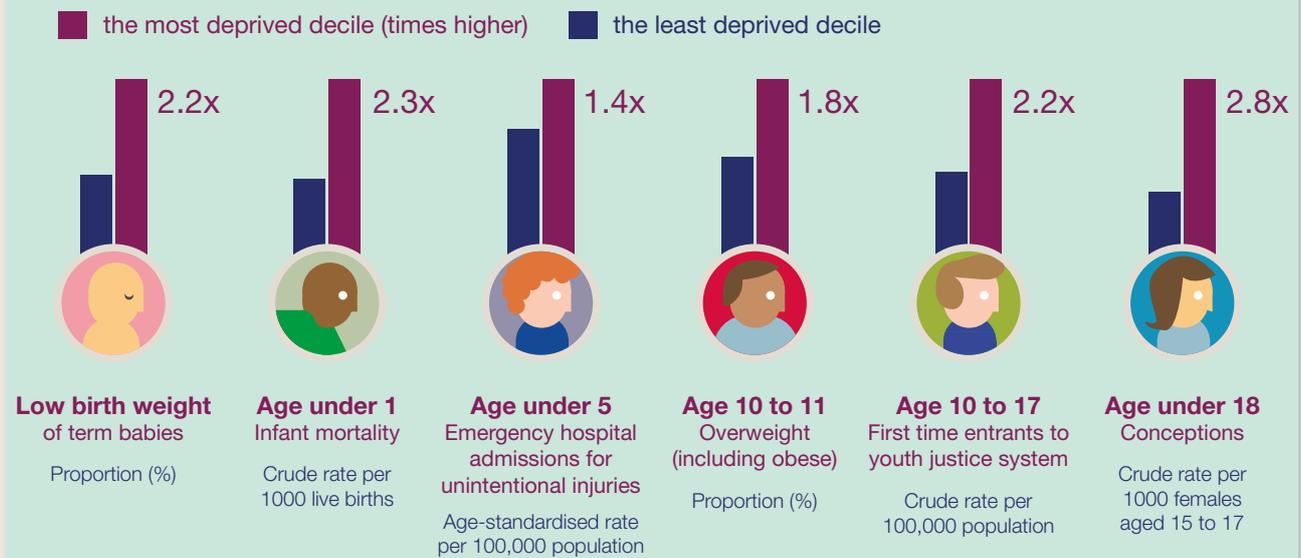


## Persistent and growing inequalities

Many differences in health associated with social disadvantage have not improved over the past decade and, in some cases, the gap is widening.

Inequalities in health begin early in life, where we see disparities between poorer and more affluent communities in levels of infant mortality, low birthweight, childhood obesity, tooth decay and adverse childhood experiences. Later in life, there are similar inequalities across a wide range of conditions and risk factors. People living in deprived areas are more likely to smoke, have a poor diet, be physically inactive and die early from cancer or heart disease.

### Comparison between **the most** and **least** deprived



## Health protection threats

In recent years, PHE has responded to a rising number of major emergencies classed as ‘enhanced incidents’. Among the risks identified in the Government’s latest assessment of significant threats to public safety are terrorist attacks, extreme weather events and new and emerging diseases, which have shown the ability to spread rapidly between communities and countries with devastating effects. The scale and nature of many of these threats is likely to shift as a result of climate change.



### Tackling infectious diseases

Whilst the overall impact of infectious disease on the public’s health remains at a historically low level, there is a clear case for continued action and vigilance. Recent outbreaks of measles highlight the importance of maintaining high vaccination coverage. There are over 400,000 diagnoses of sexually-transmitted infections in England each year, as cases of syphilis have reached their highest level since 1949. The threat from antimicrobial resistance continues to grow, with drug-resistant infections now estimated to cause 700,000 deaths globally every year.

# The opportunities we have

## Making the economic case for prevention

Evidence shows that prevention and early intervention represent good value for money. Well-chosen interventions implemented at scale help people to avoid poor health, reduce the growth in demand on public services, and support economic growth. PHE's own analysis has highlighted a wide range of interventions across a variety of health conditions and risk factors that offer a positive return on investment.

### Making the case for prevention

Investing in prevention can protect individuals and their health, but also wider parts of the economy:

#### NHS costs



e.g. hospital care and medical treatment

#### Social care costs



e.g. residential care

#### Productivity losses



e.g. sickness absence

#### Wider economic costs



e.g. alcohol-related crime

## Optimising behavioural science

Whether it is supporting smokers to quit, increasing uptake of the NHS Health Check, or reducing the number of inappropriate prescriptions for antibiotics, behavioural science has an ever-increasing role in informing our work with insights into why people make the decisions they do.

## Realising the potential of new technologies

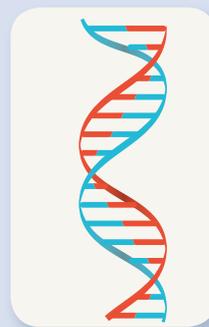
From online tools to wearable devices, technology is opening up new opportunities to monitor our health, identify problems earlier and reach people with tailored advice and support. The expanding role of technology within public health goes hand in hand with advances in how we collect, combine, analyse and utilise different kinds of population and personal data.



## Harnessing progress in science and research

We are seeing continuing advances and innovation in science and research that are expanding our understanding of health and disease. The knowledge and evidence we gain from this can be used to create real change through policies and services.

For example, whole genome sequencing is already helping us to deal more quickly and decisively with disease outbreaks and food safety incidents.

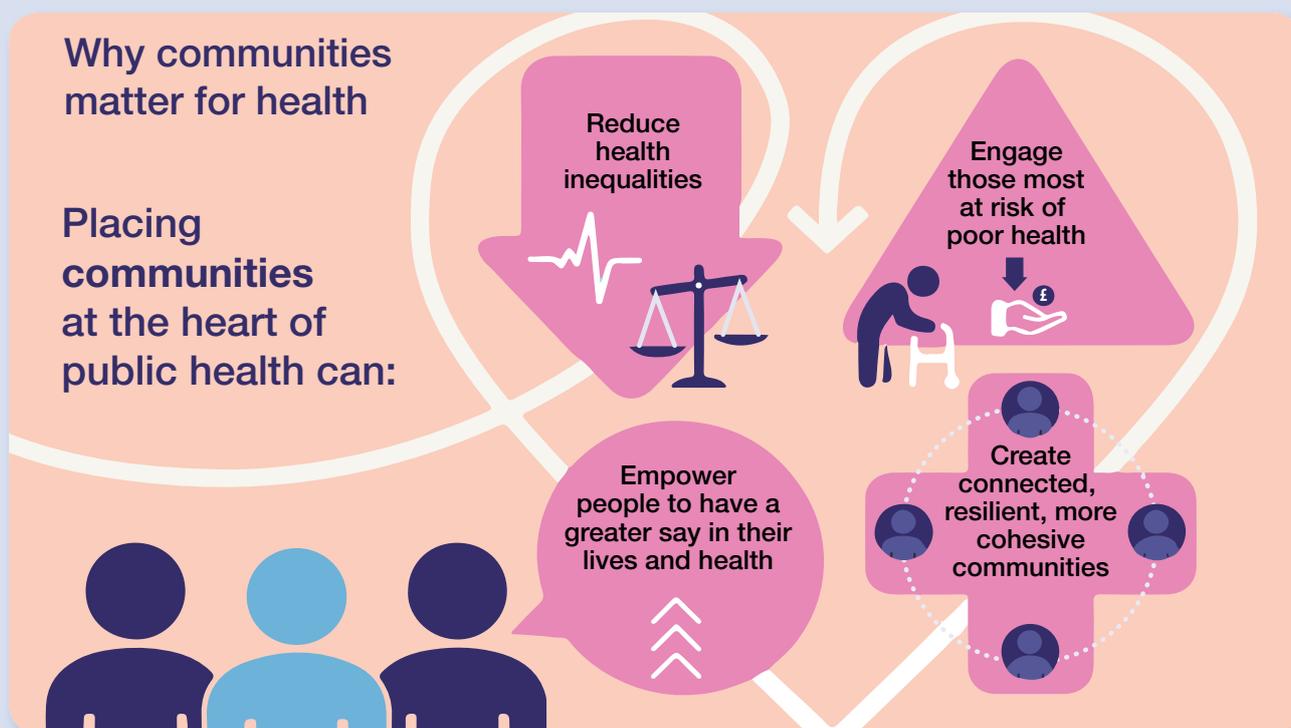


## Supporting our system partners

PHE is part of a system. We maximise our impact as an organisation by working with and through partners across the public health system, who are increasingly recognising the importance of prevention. Prevention has been put centre stage for the NHS through the NHS Long Term Plan and by the Government in the Green Paper on prevention. PHE will work nationally and regionally in supporting the implementation of these, including by providing a Director of Public Health to each of the seven NHS England and Improvement regional teams. At the same time, local authorities are continuing to invest billions of grant funding each year in essential preventative services and integrating health into the wider local policy agenda.

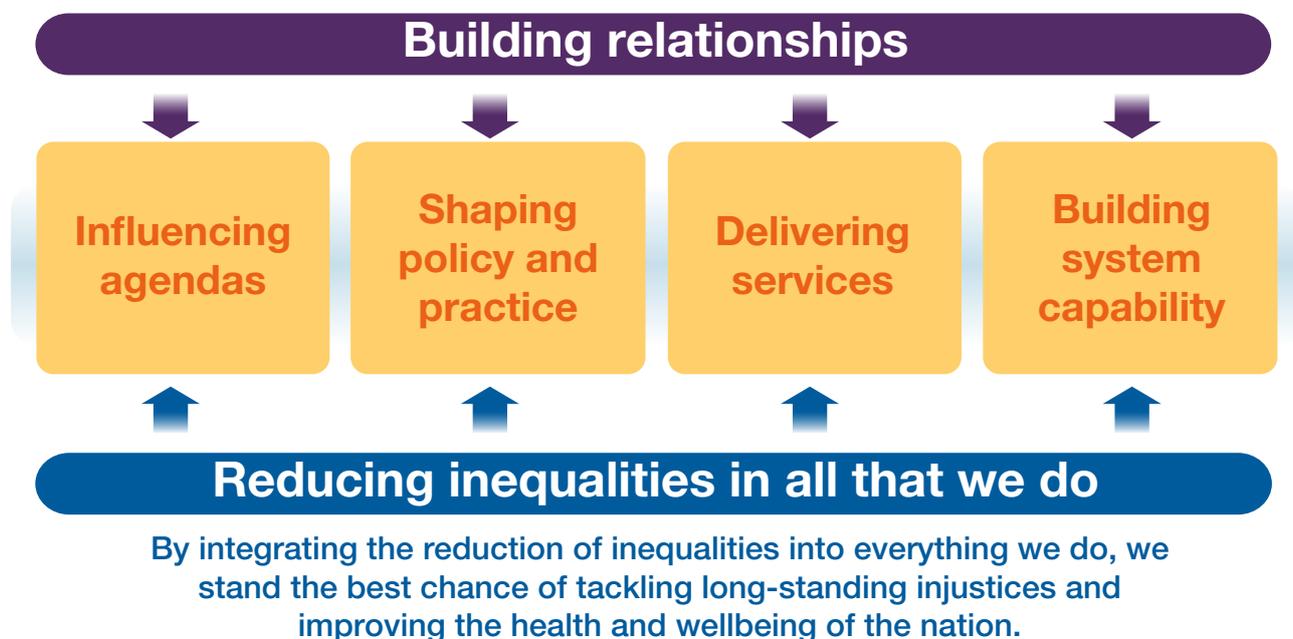
## Creating healthy communities

By working ever more closely together in a place, local authorities, the NHS and community organisations can secure better outcomes for the people who live there. This creates opportunities to promote place-based approaches and support the process of integrating services locally, including through the devolution of powers where combined authorities under metro mayors are working to put population health at the heart of local and regional efforts to create economic growth and reform public services.



# Our role

We work as One PHE, making the best possible use of the expertise and commitment of our people to deliver the biggest impact and best value for the taxpayer and our partners. We perform five key roles within the public health system, which are underpinned by a commitment to incorporate the reduction of health inequalities into all areas of our work.



## 1 Building relationships

We work with partners locally, nationally and internationally, utilising our collective capabilities to address public health challenges, focusing on people and place as the organising principle.

It is only by working in partnership with the full range of actors across the public health system – recognising and building on our different roles, resources, capabilities, areas of expertise and relationships with the public – that we are able to protect and improve people's health and reduce inequalities on the scale that we want to see.

### Example:

#### **Voluntary, Community and Social Enterprise Health and Wellbeing Alliance**

Since 2017, PHE has worked with the Department for Health and Social Care and NHS England and Improvement to coordinate the Voluntary, Community and Society Enterprise Health and Wellbeing Alliance. This is a partnership between the voluntary, community and social enterprise (VCSE) sector and the health and care system, bringing together 20 VCSE member organisations that represent communities who share protected characteristics or experience the greatest health inequalities. The Alliance facilitates communication and collaboration between the VCSE sectors, national government, local authorities and the NHS, amplifying the voice of disadvantaged and vulnerable communities to inform policies and services. In 2019 Alliance members helped to co-produce PHE's guidelines supporting local authorities to address health inequalities.

## Example:

### **WHO collaborating centre for public health nursing and midwifery**

In 2017, PHE's Nursing, Maternity and Early Years (NME) directorate was designated a World Health Organisation (WHO) collaborating centre, becoming the first such centre for public health nursing and midwifery internationally. As one of



**World Health  
Organization**

over 800 collaborating centres located across more than 80 countries worldwide, the NME directorate assists the WHO to implement its global work programme and turn evidence on effective public health nursing and maternity, early years and childhood services into practice.

PHE's activities as a collaborating centre are underpinned by stakeholder networks, which include an academic network of nurses and midwives from higher education institutions with a background in research. A network of clinical leaders brings together knowledge and experience across a range of areas such as public health nurses, practice nurses, mental health and learning disability nursing. These networks support WHO requests for expert advice, such as a recent review of the curriculum for healthcare professionals providing maternity services in Africa.

## Example:

### **Cardiovascular disease prevention**

Cardiovascular disease affects over 6 million people in England and is responsible for 1 in 4 deaths. In 2018, PHE convened the National Cardiovascular Disease Prevention System Leadership Forum (CVDSLFF), which brings together over 40 partners from government departments and arm's length bodies, the NHS, professional organisations, academia, clinicians and the voluntary sector. The CVDSLFF facilitates collaborative working on shared objectives, with the group agreeing and launching England's first ever national ambitions for CVD prevention in 2019. These ambitions will guide system-wide efforts to address three high risk conditions associated with CVD – high blood pressure, high cholesterol and atrial fibrillation – up to 2029. This will contribute to the aim in the NHS Long Term Plan to prevent up to 150,000 heart attacks, strokes and cases of dementia over the next 10 years.

At local level, PHE Centres played a leading role in the CVD Prevention Project, working with local authorities, the NHS, voluntary organisations and academic partners to expand CVD prevention. The project drew on PHE data resources and tools to understand the scale and drivers of poor health and inequalities within local areas and create and implement plans to improve the detection and management of cardiovascular risk. By the end of the project, the proportion of sustainability and transformation partnerships and integrated care systems taking action on at least one of the high risk conditions had risen from 39% to 93%.

## 2 Influencing agendas

We produce data, analysis and scientific research that provide authoritative information on the big factors affecting the public's health and use this evidence to influence the priorities of national and local government and the NHS. This includes:

- managing a range of national datasets that we use to produce analyses that provide definitive accounts of the health of the nation
- engaging with stakeholders across the system at local, national and global level to highlight the public health challenges that most merit their attention and action
- publishing tools and resources using local health data to present local leaders and people with a detailed picture of the health of their communities
- managing disease registries to monitor and detect changes in health and disease across the population and within local areas
- translating and synthesising academic research in evidence reviews that give decision-makers accessible and authoritative insights on major threats to health

### Example:

#### **National Cancer Registration and Analysis Service**

PHE's National Cancer Registration and Analysis Service (NCRAS) aims to collect data for every case of cancer in England. This is the world's largest single database of cancer, covering over 14 million diagnoses of cancer. Working closely with the NHS and other system partners, NCRAS uses this information for analysis, publication and research to drive improvements in standards of cancer care and outcomes for people with cancer.

Work undertaken by NCRAS demonstrates that diagnosing cancer at an early stage significantly improves an individual's chances of survival. As part of the NHS Long Term Plan, the Government has set an ambition to diagnose 75% of all cancers at stage 1 and 2 by 2028. NCRAS has improved the quality of data on cancer stage across England and is working to develop a new indicator that will enable better understanding of the stage at which a range of cancers are diagnosed. This will help the NHS to target services and treatments to diagnose cancers earlier and increase survival rates.

## Example:

### Health Profile for England

In 2017, PHE produced the first annual Health Profile for England. The Health Profile brings together data and knowledge from a range of sources in a single report that provides a broad picture of the health of people in England today and how this is likely to develop into the future. It highlights the most significant risks, conditions and factors affecting the population's health, and quantifies and assesses trends in health inequalities. The 2018 publication has been widely used by national and local decision-makers, in particular informing the NHS Long Term Plan. It was accompanied by a series of blogs which focused on key messages from the publication and the actions underway across the public health system to address the issues raised.



### 3 Shaping policy and practice

We identify and promote effective evidence-based solutions to public health problems. Our advice informs real-world policy, practice and the delivery of essential services by our partners. This includes:

- giving trusted guidance to government ministers, the Department for Health and Social Care (DHSC), other government departments and arms-length bodies on how best to use the powers and policies at their disposal to improve health outcomes
- supporting local authorities to invest effectively in public health services and create physical, social and economic environments that promote and facilitate good health
- advising the NHS and wider health and care providers on incorporating evidence-based prevention into the services they provide to people at all stages of life
- engaging with industry to encourage changes to the goods and services they provide to the public where this can produce a positive impact on people's health
- conducting evaluations of programmes and interventions to identify examples of best practice and sharing insights across global, national and local networks
- producing economic analyses that set out the cost effectiveness of public health programmes, showing how investment in prevention can offer value for money
- conducting cutting edge scientific research

## Example:

### **What Good Looks Like**

Across the public health system, there is a growing emphasis on improving health and reducing health inequalities through the coordinated actions of partner organisations working with local people in a defined place. Since 2018, the Association of Directors of Public Health and PHE have worked together to produce a series of 'What Good Looks Like' publications, describing the guiding features and principles of what a high quality public health function looks like in a local place.

The publications cover a range of public health topics, such as tobacco control and sexual health, and combine a synthesis of the existing evidence base with examples of best practice, the experiences of practitioners and consensus expert opinions. Directors of Public Health across England are now using the 'What Good Looks Like' resources with local partners to support the development of system wide evidence-based local programmes and to facilitate improvements to public health services and outcomes.

## Example:

### **Alcohol evidence review**

In December 2016, PHE published a review commissioned by the Department of Health of the harmful impacts of alcohol in England and possible policy solutions. This presents the evidence on the effectiveness and cost-effectiveness of alcohol control policies ranging from taxation and regulation to education programmes and specialist treatments. An abridged version of the evidence review was published in the *Lancet* medical journal, receiving widespread media attention both nationally and internationally.



The review continues to be influential to this day. The findings were used to shape the approach to alcohol in the NHS Long Term Plan and have supported the development and implementation of new commissioning guidelines on the prevention of risky alcohol-related behaviours.

## Example:

### **Spatial Planning for Health**

Many of our most pressing health challenges, from obesity and physical activity to mental health and air quality, can all be influenced by the quality of our built and natural environment. In 2017, PHE published 'Spatial Planning for Health: An evidence resource for planning and designing healthier places', which assessed the impact of neighbourhood design, housing, transport, the natural environment and the food environment on health.

This provides local planners, policy-makers and health professionals with a summary of the available evidence to guide good practice, showing how the design of sustainable environments can help provide the conditions for good health and reduce health inequalities by improving access to leisure and green spaces, public services and community facilities. The findings add to the case for upstream action to address key obstacles to healthy living and have supported PHE's work with the Ministry for Housing, Communities and Local Government and the NHS Healthy New Towns programme to put health at the heart of key national planning activities.

## **4 Delivering services**

We deliver a number of public health services and interventions, from responding to emergencies at local, national and global level to direct-to-the-public campaigns which reach millions. This includes:

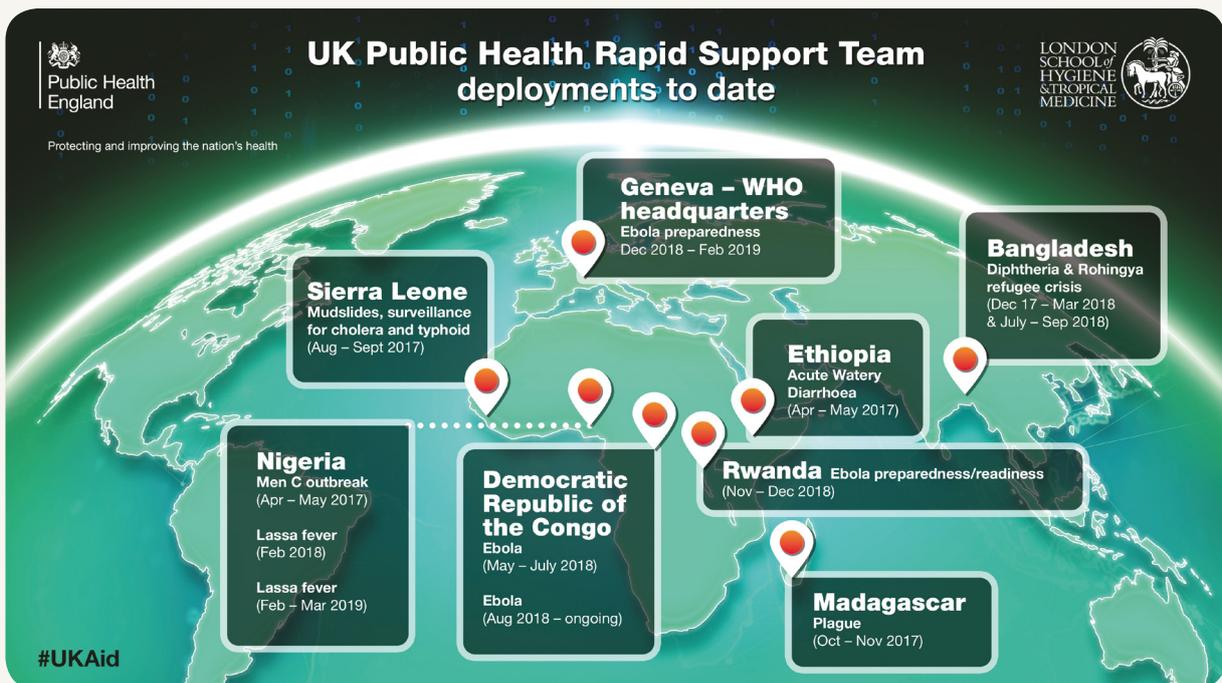
- preparing and delivering responses to threats to the public's health at national, regional and local level ranging from infectious diseases to chemical hazards to terrorism
- managing an extensive surveillance system to monitor and investigate instances of dangerous infectious diseases
- providing specialist microbiology services from our network of laboratories to help identify and address infectious diseases and threats to food, water and environmental safety
- managing and contributing to international responses to major outbreaks of infectious diseases
- supporting and assuring the commissioning and delivery of screening and immunisation services, such as cancer screening programmes and annual flu vaccinations
- communicating directly with the public, providing information, advice and tools that encourage and empower people to make positive changes and live healthy lives

## Example:

### UK Public Health Rapid Support Team

In 2016, Public Health England and the London School of Hygiene and Tropical Medicine were commissioned by the Government to establish a UK Public Health Rapid Support Team (UK-PHRST). The UK-PHRST provides and coordinates the country's public health response to outbreaks of infectious disease in low- and middle-income countries, helping to prevent these events from becoming larger public health emergencies. The team also conducts research to develop the evidence base on optimal responses to outbreak-prone diseases and supports low and middle-income countries to improve their own health protection capabilities.

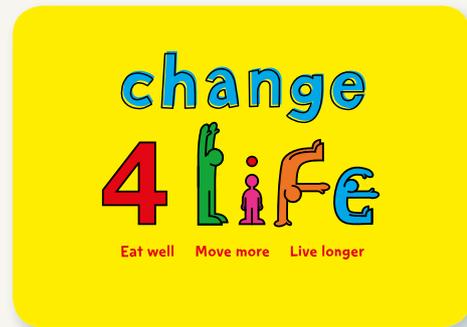
The core of the UK-PHRST is a full-time team consisting of specialists in epidemiology, laboratory microbiology, infection prevention and control, clinical case management and research, social science, data management and logistical support who are available to deploy to disease outbreaks within 48 hours. Following the outbreak of Ebola virus disease in the Democratic Republic of the Congo, the UK-PHRST have played a continuous and significant role in providing epidemiology and data analytics support to the outbreak coordination since August 2018.



## Example:

### Change4Life

PHE's Change4Life is the flagship marketing programme supporting the childhood obesity policy agenda. Recent Change4Life campaigns highlight the issue of sugar, motivate parents to change and support action in various ways including advice on swaps, money-off coupons and digital tools such as the Food Scanner app. Change4Life is designed to create sustained change by providing parents with an offer that is simple, memorable and easy to incorporate in daily life. It also influences industry by growing consumer demand for healthier products and lower sugar alternatives.



Change4Life has been instrumental in putting sugar on the public agenda, achieving high levels of awareness (91% of all mothers of children aged 5-11), trust (93% of those aware trust it) and engagement (98% of state-funded primary schools). There have been 6.6 million downloads of the Food Scanner app and over 4 million sign-ups to our email communications programme. In a follow-up survey for the 2019 Sugar Swap campaign, 42% of respondents reported having made a switch to a lower sugar product as a direct result of the campaign.

## 5 Building system capability

We build capability, fostering research and innovation and supporting health and care professionals with the training, guidance and standards they need to deliver effective interventions to improve the public's health. This includes:

- collaborating with partners including Health Education England, professional and representative public health organisations, NICE and the NHS to ensure that health and care professionals have the training, guidance and standards they need to deliver effective preventative interventions
- working with partners in the voluntary and community sector to develop their capacity and strengthen the place of community at the centre of the public health system
- working with the Department for International Development (DfID), DHSC and international partners to strengthen public health systems in low and middle-income countries, supporting progress towards the UN Sustainable Development Goals
- collaborating with the National Institute for Health Research (NIHR) and academic partners to direct funding and expertise towards high quality research in areas where it is most needed
- working with partners in the public, private and research sectors (such as NHSX) to harness new technologies and scientific advances for the benefit of public health

## Example:

### **PHE's support to Pakistan**

PHE has been working in Pakistan since April 2016, following a request from the Government of Pakistan for assistance in tackling the threats and impact of infectious diseases in the country. PHE has been helping Pakistan to strengthen and streamline its surveillance and response systems, develop essential public health functions and build its public health workforce. This work is bringing Pakistan closer to compliance with international regulations on infectious disease control intended to strengthen global health security and reduce the risk of disease transmission across borders.



Key to PHE's success in Pakistan has been the building of strong trusted relationships with Pakistani colleagues, with PHE staff providing peer-to-peer support to counterparts in federal departments and agencies and provincial governments. They also collaborate closely with international partners including the World Health Organisation, and US Centers for Disease Control and Prevention as well as other UK departments. PHE's in-country team is co-located with the Foreign and Commonwealth Office and DfID and works with the Ministry of Defence and DfID to help the Pakistan military medical corps build capacity and expertise in preventing, monitoring and responding to outbreaks of infectious disease.

## Example:

### **Reproductive Health, Sexual Health and HIV Innovation Fund**

PHE's Reproductive Health, Sexual Health and HIV Innovation Fund is a grant scheme which aims to reduce the impact of HIV and improve sexual and reproductive health in England. It supports voluntary sector organisations to deliver innovative community-led interventions through online campaigns, outreach, patient support, testing and media and art projects. To date, it has provided funding to 46 projects across England and reached over 170,000 people in 2018.

Initiatives supported by the fund include the OutREACH Cumbria project, which introduced HIV testing to local community pharmacies across the county. It was developed through a collaboration between a local LGBT charity (OutREACH Cumbria), a sexual health consultant and the Local Pharmaceutical Committee, through which 15 pharmacies were commissioned to take part in the project. The project succeeded in reaching a new audience, with almost half of the people using the service reporting that they had never taken an HIV test before. This service has now been commissioned by the local authority, with a number of other areas now looking into implementing a similar scheme.



# Our priorities

We have considered what PHE should focus on for the next five years to both protect people and help people to live longer in good health. The process to determine our priorities has involved extensive consultations with people working in all parts of PHE as well as engagement with external stakeholders. They have told us about what matters most to them and the people they serve and represent, which we have factored into our decision-making alongside the latest evidence base. During the final stages of this process, experts and leaders from across PHE were asked to identify areas where:

- we see major implications for the public's health
- there is substantial scope to improve outcomes and reduce inequalities
- PHE is well-placed to make a significant contribution
- we can generate a good return on investment

The ten priorities outlined in this strategy are of course not everything that we are responsible for or will be doing (for example, on cancer, sexual and reproductive health and screening), but they are those where we believe we can have the biggest impact.

<b>HEALTHIER</b>	<b>1 Smoke-free society</b> Take steps towards creating a smoke-free society by 2030
	<b>2 Healthier diets, healthier weight</b> Help make the healthy choice the easy choice to improve diets and reduce rates of childhood obesity
	<b>3 Creating cleaner air</b> Develop and share advice on how best to reduce air pollution levels and people's exposure to polluted air
	<b>4 Better mental health</b> Promote good mental health and contribute to the prevention of mental illness
<b>FAIRER</b>	<b>5 Best start in life</b> Work to improve the health of babies, children and their families to enable a happy healthy childhood and provide the foundations of good health into adult life
<b>SAFER</b>	<b>6 Effective responses to major incidents</b> Enhance our ability to respond to major incidents (including pandemic influenza) by strengthening our health protection system
	<b>7 Reduced risk from antimicrobial resistance</b> Work to help contain, control and mitigate the risk of antimicrobial resistance
<b>STRONGER</b>	<b>8 Predictive prevention</b> Utilise technology to develop targeted advice and interventions and support personalised public health and care at scale
	<b>9 Enhanced data and surveillance capabilities</b> Improve our data capability and strengthen our approach to disease surveillance using new tools and techniques
	<b>10 New national science campus</b> Transition to a new national science campus with state-of-the-art facilities at PHE Harlow

# We will promote a healthier nation

## 1 Smoke-free society



Despite significant progress in recent decades, smoking remains the leading risk factor for premature death and poor health in England. It accounts for around half of the difference in healthy life expectancy between the most and least deprived communities in the country and is estimated to cost society around £12.6 billion each year through lost productivity and demand on health and care services.

### *Ambition*

To make smoking obsolete by 2030 by reducing the overall number of people who smoke, preventing young people from smoking in the first place and targeting vulnerable population groups and areas where people smoke at higher rates.

### *Aims*

This will contribute to the Government's aims in the Tobacco Control Plan to reduce the smoking prevalence among adults to 12%, the percentage of pregnant women smoking at the time of delivery to 6% and the rate of regular smoking age at 15 to 3% by 2022.

- reduced death and disease attributable to smoking, including from cardiovascular disease
- reduced variation in smoking prevalence rates between socio-economic groups

### *Approach*

We will maintain our leading role in this area and advocate for local and national action across the health and care system to reduce the health impact and inequalities of smoking in England. We will:

- advise and influence government on effective national and local tobacco control policy, including on harm reduction and effective treatment, that works to reduce overall rates of smoking and inequalities affecting lower socio-economic groups and vulnerable communities
- partner with the NHS to advise on, evaluate and provide implementation support for new models for identifying and supporting smokers to quit across NHS services nationwide, including a specific model for pregnant women
- influence and advise local authorities on the provision of evidence-based tobacco control action and local stop smoking services, including increasing targeting towards groups and local areas with the highest need
- deliver national marketing campaigns to stimulate effective quit attempts tailored to lower socio-economic groups
- commission, manage and promote reviews of evidence on e-cigarettes and emerging nicotine products and provide advice on their toxicological impact
- advise on national regulation activities for smoking and tobacco-related products following the UK's exit from the EU

## 2 Healthier diets, healthier weight



Across the population, we consume too much sugar, salt and saturated fat and not enough fruit, vegetables, fibre and oily fish. According to latest estimates, poor diets and excess body weight deprive people in England of more than 2.4 million life years through premature mortality, illness and disability each year. Rates of obesity continue to cause a disproportionate impact on families from poorer areas as the gap between the most and least deprived widens.

### *Ambition*

To enable current and future generations to live in local environments that promote a healthier weight as the norm and make it easier for everyone, regardless of background, circumstance or where they live, to access healthier food, enjoy healthier diets and live active lifestyles.

### *Aims*

This will contribute to the Government's aims in the Childhood Obesity Plan to halve childhood obesity and reduce the gap in obesity rates between children from the most and least deprived areas by 2030.

- 20% reduction in levels of sugar in a range of everyday foods consumed by children
- 20% reduction in numbers of calories in a range of everyday foods consumed by children
- increased consumption of healthy food groups among children
- reduced levels of salt in average diets across the population

### *Approach*

We will further strengthen our national leadership in this area emphasising interventions that can deliver the biggest impact for children in the most deprived areas. We will:

- advise national government partners on policies to improve diets and lower obesity rates across the population and among disadvantaged groups
- lead the reduction and reformulation programme to reduce sugar and calories in everyday foods, including advising government on the reformulation of infant foods
- provide expert advice and monitoring of the nation's diet to support the salt reformulation programme, including work to lower levels of salt in those everyday foods which are the greatest contributors to average population salt intakes
- develop and roll out a national learning and development programme for the broader health and care workforce on nutrition and action to tackle obesity
- partner with local government, the NHS, voluntary organisations and communities to support local models of care to promote a healthier weight, focussing on areas where there is greatest need
- work with local government and other partners, to support the implementation of a 'whole systems' approach that considers how all elements of local places, communities and services can help to address obesity and the variation in obesity between the most and least deprived areas

- support local authorities to create vibrant, health-promoting environments, including healthier high streets, which facilitate healthier food options and physical activity
- encourage and embed innovative practices across the system, using data to understand, evaluate and extend the evidence base on effective action to prevent and reduce obesity and tackle inequalities in rates of obesity
- use digital technologies to offer personalised behavioural approaches for children and their families designed to fit with local support and the needs of families with the most to benefit

### 3 Cleaner air



Poor air quality is the largest environmental risk to public health, with long-term exposure to man-made pollution in the UK estimated to contribute towards 28,000 to 36,000 deaths each year. Reducing fine particulate air pollution in England by 1 microgram per m<sup>3</sup> could prevent an estimated 50,000 cases of coronary heart disease, 16,500 strokes, 9,000 cases of asthma and 4,000 lung cancers over 18 years. High levels of air pollution affect many of the most deprived communities in the country which are primarily located in urban areas. The overall costs of poor air quality to society have been estimated at over £20 billion a year.

#### *Ambition*

To make the case for action to address air pollution so that people in England enjoy cleaner air and healthier lives wherever they live.

#### *Aims*

This will contribute to the Government's aim in the Clean Air Strategy to halve the number of people living in locations where concentrations of particulate matter are above 10 micrograms per m<sup>3</sup> by 2025.

- reduced exposure to polluted air and lower rates of ill health attributable to air pollution
- better health outcomes for vulnerable groups most affected by poor air quality

#### *Approach*

We will grow and share the evidence base on the impact of air pollution on health and influence national and local partners to implement the most effective interventions. We will target our actions towards the most vulnerable population groups, including more deprived communities, people with pre-existing respiratory and cardiovascular conditions and young and older people. We will:

- develop the evidence base on air quality, including on sources of pollution, levels of exposure and how this contributes to health outcomes
- advise and influence decision-makers on the effectiveness of actions to promote healthy indoor and outdoor environments (including their ability to reduce inequalities) and support their implementation, sharing information and learning from local, national and international partners
- working with Defra, the Sustainable Development Unit, third sector organisations and other partners, develop the Air Pollution Control Plan, implement the Clean Air Strategy, and inform existing and emerging legislation and regulation
- improve how advice and information on indoor and outdoor air pollution can be communicated, drawing on behavioural science and, where resourced, supporting awareness-raising activity

## 4 Better mental health



According to survey data, 1 in 6 adults will have experienced a common mental health disorder such as depression and anxiety in the past week. Taking the negative impacts on people's quality of life into account, poor mental health is estimated to carry an economic and social cost of £105 billion each year, with suicides the leading cause of death for people between the ages of 10 and 34. People living with serious mental illnesses have a life expectancy of up to 20 years below that of the general population.

### *Ambition*

To contribute towards measurable improvements in mental health.

### *Aims*

This will contribute towards the Government's aim in the Cross-Government Suicide Prevention Workplan to reduce suicides by 10% by 2021/22 and maintain a downward trend beyond 2022.

- reduced development and exacerbation of mental health problems, including among high risk groups and children and young people
- increased mental health literacy across the population and particularly among high risk groups, with at least one million people taking action on their own and other people's mental health by 2021
- reduced inequalities in premature mortality for people with long-term and severe mental health problems
- improved social connections, housing and employment prospects for people at risk of, living with and recovering from mental health problems

### *Approach*

We will work towards ensuring mental health has parity with physical health, modelling the role that organisations can play as employers and embedding good mental health across PHE's work. We plan to target efforts towards the most disadvantaged communities and those living with and recovering from serious, long-term mental illness. We will:

- influence and advise national and local government, voluntary and community partners, academia, business and employers on the delivery of evidence-based mental health preventative interventions to people of all ages, including an extended Prevention Concordat for Better Mental Health
- influence, advise and support the NHS on the key mental health components of the NHS Long Term Plan, such as suicide prevention and new models of care to improve the health of people with severe mental illnesses
- deliver national marketing campaigns and digital tools that focus on or incorporate mental health to improve the public's mental health literacy, targeting towards groups with higher rates of mental health problems
- work with Health Education England and other system partners to improve the capabilities of the public health workforce to promote mental health, prevent mental health problems and prevent suicide

# We will work towards a fairer society

## 5 Best start in life



Giving children the best start in life is vital for a healthy thriving society. The foundations of good physical and mental health, healthy relationships and educational achievement are laid in preconception through to pregnancy and the early years of life, which is when many inequalities in health often begin. Investment in the early years has been shown to offer good value for money, delivering significant impacts on social and emotional health and wellbeing and reducing inequalities.

### *Ambition*

To help reduce inequalities and improve health outcomes for children and families across England. We want all mothers to experience good health before, during and after pregnancy and all children to have a happy healthy childhood.

### *Aims*

- reduced inequalities across key markers of maternal and child health
- reduced rates of infant mortality and low birthweight
- improvements in rates of key protective factors linked to better child health outcomes, such as maternal mental health and breastfeeding
- higher rates of childhood immunisation
- more children ready to learn by the age of two and ready to start school by the age of five
- lower rates of tooth decay and hospital attendances due to preventable accidents and illnesses

### *Approach*

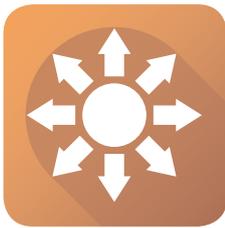
We will work with partners to create a modernised, evidence-based Healthy Child Programme that is universal in reach and personalised in response to the health needs of every family and child. With a greater focus on all aspects of prevention and early intervention, the Healthy Child Programme will be extended to include the health of mothers before conception and during pregnancy. Our work will amplify the voices of children and parents, particularly those in deprived and vulnerable communities. We will:

- work with partners in academic, professional organisations and the NHS to provide evidence and leadership for the development of a schedule of interventions for the modernised Healthy Child Programme that includes screening, immunisation, oral health, reviews of child development and support and guidance in areas such as parenting and mental health
- develop new indicators to improve the monitoring of outcomes and inequalities in the early years and facilitate evaluations of early years services
- collaborate with local authorities and other key partners within communities to develop healthy places for families that help to reduce inequalities, vulnerability and adversity experienced by children and parents

- advise and influence national, regional and local government partners and service commissioners and providers on a range of programmes to improve maternal and children's health
- work with NHS Digital and NHSX to deliver the child digital strategy and develop digital child health records to enable the collection of high quality information on early years services and support improvements to standards of care and early intervention

## We will enhance our ability to keep the public safe

### 6 Effective responses to major incidents



In 2018/19, we dealt with over 10,000 disease outbreaks and emergencies across England and have faced a growing number of enhanced incidents in recent years. Our responses to these incidents have proven the resilience of the health protection system but we want to strengthen this further to ensure we remain able to tackle the most serious threats to the public's health over the next five years. At present, pandemic influenza is considered the highest risk in the Government's National Risk Register, with estimates suggesting that such an outbreak could lead to up to half the UK population being infected.

#### *Ambition*

To ensure that the UK health protection system is integrated, resilient and able to prepare for and respond to all major hazards.

#### *Aims*

- a refreshed plan for handling an influenza pandemic
- a strengthened system of health protection at a local and national level that provides an all hazards emergency preparedness, resilience and response system, consistent with world-leading standards and approaches
- reduced number of outbreaks of preventable diseases affecting at-risk communities

#### *Approach*

We will respond quickly and effectively to outbreaks of infectious disease and all other threats, continually learning from our responses to improve our approach to future emergencies. We will:

- identify and use the latest evidence to update our understanding of the requirements and standards for an efficient, effective and safe health protection system
- assess current capability and governance of the health protection system nationally and locally for responding to major incidents and identify and address key risks and areas for improvement
- develop and integrate international, national and local relationships to ensure a joined-up public health protection system where all can respond and coordinate their efforts where appropriate

- define and agree PHE's role in a set of high intensity and high demand scenarios, establishing the core and surge capability needed to address these scenarios and participating in test exercises to assure our emergency preparedness
- increase and improve evaluations of PHE's health protection work and responses to outbreaks and incidents to inform how we can use our capacity and capabilities to greater effect
- upgrade our systems for overseeing and maintaining the workforce, skills mix and supporting infrastructure needed to respond to potential major incidents

## 7 Reduced risk from antimicrobial resistance



Antimicrobial resistance (AMR) occurs when microorganisms such as bacteria, viruses, fungi and parasites change in ways that render the antibiotics used to cure the infections they cause ineffective. Without effective antibiotics, minor surgery, routine operations and cancer treatments could become higher-risk, leading to prolonged illnesses and higher numbers of deaths. Across Europe, infections caused by key antibiotic-resistant bacteria are responsible for over 33,000 deaths annually and the loss of more healthy life years than HIV, influenza, and tuberculosis combined.

### *Ambition*

For the risk of AMR to be effectively contained, controlled and mitigated for the people in the UK, as part of global efforts to address antimicrobial resistance.

### *Aims*

This will contribute towards the Government's aims in the AMR National Action plan to:

- reduce healthcare associated Gram-negative bloodstream infection by 50% by 2024, from a 2016 baseline
- reduce key antibiotic-resistant infections by 10% by 2025, from a 2017 baseline
- reduce antibiotic use by 25% from a 2014 baseline by 2024

### *Approach*

We will draw on PHE's unique expertise to help optimise antibiotic prescribing to prevent antimicrobial resistance and deliver world-leading surveillance for the drug-resistant infections that do occur. Our programme of work will target the most challenging multi-drug resistant pathogens, including those causing gonorrhoea, tuberculosis and Gram-negative infections. We will work to develop, implement and evaluate evidence-based interventions to prevent infections and define and prevent tipping points when AMR infections go from rare events to endemic diseases. We will:

- improve understanding of antibiotic prescribing and its unintended consequences, including the implications of reduced antibiotic prescribing and the impact of the failure of treatments for drug-resistant infections on clinical outcomes
- grow the evidence base and advocate for interventions to improve the prevention and control of infections in hospital and community settings and support partner organisations to improve how health professionals prescribe antibiotics

- work with local authorities to maximise infection prevention efforts focusing on hand hygiene and opportunities in public spaces
- develop predictive models to identify patient groups at greatest risk of established and emerging AMR problems
- use and improve whole genome sequencing and data processing capabilities to better understand the microbiology and impact of drug-resistant infections, including how they develop resistance
- develop consistent methodologies for the surveillance and reporting of existing AMR infections and a unified England-wide infection dataset to improve understanding of AMR infections, antibiotic usage, health outcomes and inequalities
- improve surveillance of emerging resistance, and underlying mechanisms of resistance, to last-line and newly developed antimicrobials to enhance our understanding of the effectiveness of various therapeutic approaches
- work with partners to maximise uptake of available vaccinations, including with the Joint Committee on Vaccination and Immunisation to ensure any relevant new vaccines are adopted
- collaborate with national partners to influence funding models for new antimicrobials, ensuring that PHE systems can measure the impact of these drugs

## We will strengthen the public health system

### 8 Predictive prevention



With increasing numbers of people reporting multiple health concerns, the growing complexity of people's health needs has created challenges and limits for 'one size fits all' approaches to public health. At the same time, the public's expectations of public health services have risen as technology has advanced and become more accessible. New digital approaches, person-generated data and the latest behavioural science techniques create opportunities for public health interventions to be more tailored and relevant to people's individual needs, social circumstances and environment.

#### *Ambition*

To help provide people, particularly among vulnerable and disadvantaged groups, with personalised public health interventions that empower them to take greater control of their health and prevent avoidable illness.

#### *Aim*

Together with priority 9 on enhanced data and surveillance capabilities, this will contribute to the Government's aim in the Industrial Strategy to use data, artificial intelligence and innovation to transform the prevention, early diagnosis and treatment of chronic diseases by 2030.

- increased understanding among the public of health risks and options for preventative action
- expanded access to evidence-based digital interventions to enable people to identify and address their health issues as early as possible
- increased capabilities to connect lifestyle, health and environmental data for individuals at scale

### **Approach**

We will collaborate closely with NHSX to develop our predictive prevention programme, engaging with the health tech industry and academia to promote innovation across the system. We will work with partners to ensure that the needs of people in disadvantaged and vulnerable groups are reflected in our priorities and the design and delivery of our products and services. We will:

- use user-centric design approaches to create new digital products and services that support people to identify and reduce risks to their health
- conduct and publish evaluations of products and services and engage with external research to establish and expand the evidence base on what works
- develop and apply models of ‘dynamic consent’ that ensure that people understand and retain control over how their personal information is used
- draw on the latest behavioural science to develop approaches to communicating personal health risks that motivate people to take action and adopt healthy behaviours

## **9 Enhanced data and surveillance capabilities**



Data and surveillance provide an essential basis for our understanding of health and disease across the population, our responses to emergencies and our plans to improve the public’s health. Improving the quality and accessibility of information across all causes and forms of disease is essential if we are to increase the effectiveness of existing public health programmes. By strengthening links between different data sources, increasing our data science capabilities and strengthening our surveillance activities, we can support more informed decision-making across the system to produce better outcomes for the public.

### **Ambition**

To develop a world-leading public health data and surveillance infrastructure that supports effective decision-making and action by generating public health intelligence which is accessible, consistent, flexible, timely and of high quality.

### **Aims**

- enhanced insights into the population’s health and health inequalities
- easier access to data and surveillance information for partners across the system, leading to policies, services and research that make a difference to the public’s health

## Approach

Working closely with the NHS and other partner organisations, we want to facilitate links between existing datasets to provide a more integrated understanding of the public's health. We plan to expand our approach to non-communicable disease surveillance and further strengthen our surveillance of infectious disease and environmental hazards. We will:

- review and, where appropriate, rationalise and integrate our data collections and surveillance activities, reducing the burden on data providers and promoting more analysis at the data source where possible
- improve consistency in how data are collected and stored and how analytical and data science tools are applied to ensure that analytical outputs are of high quality, evidence-based, timely, transparent and trustworthy
- develop a national all-disease registration service in partnership with NHS Digital
- increase the efficiency of our data analytics, including through automation, and strengthen our prioritisation processes to target effort more effectively towards work that will inform action
- make use of opportunities presented by novel data sources and new technologies, such as artificial intelligence and machine learning
- develop a flexible, adaptable and skilled workforce who are able to make the best use of new and emerging technologies and approaches and are recognised as experts in their field

## 10 New national public health campus



Public health science is the foundation for all our work at PHE. PHE Harlow will become our new national campus, providing us with modern and flexible facilities and bringing together specialists from diverse backgrounds such as data science, microbiology, policy, behavioural science, health economics, social science, service improvement and virology in a single national centre. Located in the heart of the UK's life science cluster, PHE Harlow will position us to deliver world-leading science that we will use to protect and improve the public's health and to play a critical role in supporting research and development in the UK life sciences sector.

## Ambition

To establish a new state-of-the-art public health science campus at PHE Harlow that enables our mission to meet the challenges of a changing world.

## Aims

- more innovative and more responsive public health services for local government, the NHS and the public
- increased and improved translation of public health research for the benefit of the public and UK economy
- better partnerships with leading scientific organisations locally, nationally and internationally
- improved ability to retain, attract and develop the excellence of public health science experts
- enhanced collaborative working with improved sharing of practice, knowledge, capabilities and experience across PHE

## Approach

At PHE Harlow, we will embrace the very latest advances in technology and knowledge. We will:

- design a campus with state-of-the-art facilities that encourage innovative approaches to delivering on public health challenges, support flexible ways of working and enable joined-up working between and across all our services nationwide
- develop new national bases for key national scientific assets, including the national public health microbiological laboratories and the PHE national emergency response centre
- grow and develop research partnerships with academic institutions and commercial businesses, driving forward the Government's vision for the UK to be a global scientific leader



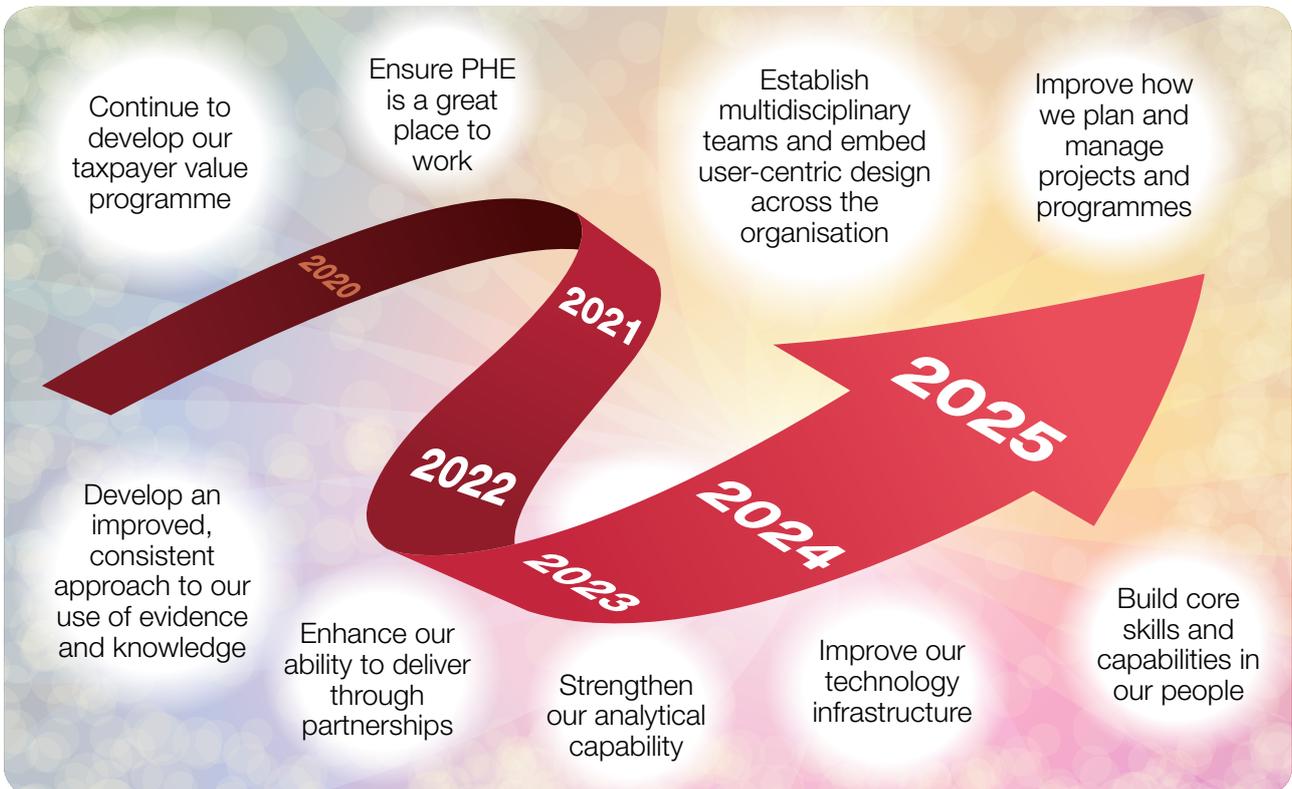
PHE Harlow campus. Images are artist impressions for illustrative purposes

# How we will develop as an organisation

Six years on from the formation of PHE, to achieve the ambitions in this strategy, we need to continually evolve and develop as an organisation, which we will do across three key themes:



We have identified nine areas where, by improving our capabilities over the next five years, we can create the necessary foundation for ambitious action on all of our strategic priorities:



### ***Ensure PHE is a great place to work***

Our people provide the basis for all PHE's plans and aspirations for the future. As we seek to protect and improve the public's health, it is vital that we maintain an environment within PHE that prioritises the health and wellbeing of our workforce. We will ensure that our people feel engaged and supported as they move through the organisation and build careers in PHE. We will:

- model best practice for employers in supporting our people to maintain positive mental and physical health
- ensure we are as inclusive as possible, so that all staff feel valued for who they are as much as what they do
- facilitate better communication between teams within PHE and raise awareness of organisational priorities to help people work flexibly across the organisation
- where our people are moving their base to Harlow, support them to make the best possible transition there, using the new national campus to increase opportunities for flexible and collaborative working

### ***Build core skills and capabilities in our people***

It is the knowledge, skills, capabilities and experience of our people which enable us to play a leading role within the public health system in this country and internationally. We will:

- support the professional development of all our people, including specialist staff and scientists, both within their areas of expertise and as managers and leaders
- enable increased flexibility in our workforce by providing opportunities for people to develop a broad range of widely applicable skills and reviewing the balance of specialists and generalists that we need in our workforce
- develop new and emerging skill sets to ensure we are fit for the future, including strengthening forecasting, horizon scanning and data science (such as bioinformatics)



### ***Enhance our ability to deliver through partnerships***

Effective partnerships across the public health system are vital to PHE's success. We will make a concerted effort to strengthen the capabilities that underpin successful engagement with a range of stakeholders. We will:

- strengthen the skills needed to support the NHS and local government to build on our existing relationships and drive forward our shared ambitions for prevention and public health
- ensure our people have well-developed policy and engagement skills so that we can influence agendas across government as effectively as possible
- support more people in PHE to build the skills required to create and manage collaborations and partnerships with industry, academia and the voluntary and community sector to help reach people where they live and work

### *Continue to develop our taxpayer value programme*

PHE has delivered significant savings over the past six years and we remain committed to achieving efficiencies wherever possible. We will focus on providing the best possible value to the taxpayer in all our activities and manage our finances to maintain capability and capacity to deliver our strategic priorities throughout the five-year period of this strategy. We will:

- complete a programme of ‘best value reviews’ to consider options to release capacity and make headroom over the next five years and to enable us to meet any savings requirements in an evidenced and sustainable way
- bring teams across PHE together to find ever better ways to deliver our work and identify cross-cutting areas where there are potential efficiencies and savings



### *Improve how we plan and manage projects and programmes*

We will continue to develop our approaches to programme management across PHE and adopt streamlined and consistent processes that enable us to make the right decisions and manage business change and delivery effectively. We will:

- build and embed universal approaches to programme and project pipeline planning, reporting, and resource planning for use across PHE
- improve governance structures around projects and programmes to support decision-making, help identify barriers to progressing projects and ensure projects are properly evaluated throughout and closed when complete
- embed capacity planning within all programmes across PHE and, where relevant, agile approaches to bring greater flexibility and innovation to the work we do

### *Develop an improved, consistent approach to our use of evidence and knowledge*

PHE has a responsibility to use relevant, high quality evidence to inform local practice and national policy. Robust evaluations of our national programmes and local activities are essential to demonstrate that we are effective in achieving our goals. Working with NICE, the National Institute for Health Research, academia and local authorities, we will improve how we generate, find, synthesise and translate evidence in PHE so that we can provide the best and most useful support to the wider public health system. We will:

- increase our skills, capacity and systems in evidence handling, translation of knowledge and evaluation
- develop and embed a universal approach for conducting evaluations across PHE
- focus on producing evidence of what works in local practice and presenting evidence and data in an engaging and accessible manner for all the people we work with

### ***Strengthen our analytical capability***

PHE has an opportunity to take a stronger role in forecasting how the prevalence of risk factors and poor health will change in the medium and longer term and using modelling to explore the implications of different scenarios. We want to build our capacity and capability in non-communicable disease (NCD) modelling and create stronger links with our more established modelling functions focused on infectious disease. We will:

- develop the initial work programme and longer-term roadmap for our new NCD modelling function, consulting and collaborating with other parts of the organisation conducting modelling work and economic analysis to maximise our collective impact
- build strong links with other organisations that are engaged in modelling and forecasting activities and develop a research so that PHE is at the leading edge in NCD modelling
- develop consistent approaches for the quality assurance of key models across all PHE modelling teams
- share skills and knowledge across the different modelling activities within PHE, coordinating learning and development activities between relevant teams

### ***Establish multidisciplinary teams and embed user-centric design across the organisation***

Our people have a vast array of skills and specialisms that can help us to understand and respond to the needs of the public. By bringing digital teams together with experts in social marketing, health economics, behavioural science, data science, systems-thinking and policy-making and channelling their combined skills and knowledge through person-centred design approaches, we can become more effective at creating products and services that deliver real benefits to people and communities across the country. We will:

- use person-centred design approaches to deliver the highest quality user-friendly digital public health products and services
- create and upskill cross-organisation multidisciplinary teams to make maximum use of our existing expertise
- strengthen evaluations of the digital products and services we deliver directly to the public to help direct our efforts towards what we know we will be effective



## Improve our technology infrastructure

The challenges of creating and using complex evidence and data in a rapidly changing digital world mean we require a world-class technology infrastructure to maintain and improve the quality of the work we produce. Working with NHSX, we will:

- embed world-class scientific and computing technology (including genomic analysis), providing the necessary tools and training to ensure our people can deploy the technology effectively
- investigate new IT platforms that support collaborative working, enable easier transfer of datasets internally and externally and help bring disparate data sets together
- establish consistent policies, standards, processes and tools to enable a single, effective knowledge and information management system, building appropriate cyber and privacy safeguards into every product, service and platform
- ensure we make the most of emerging technologies in our services and research

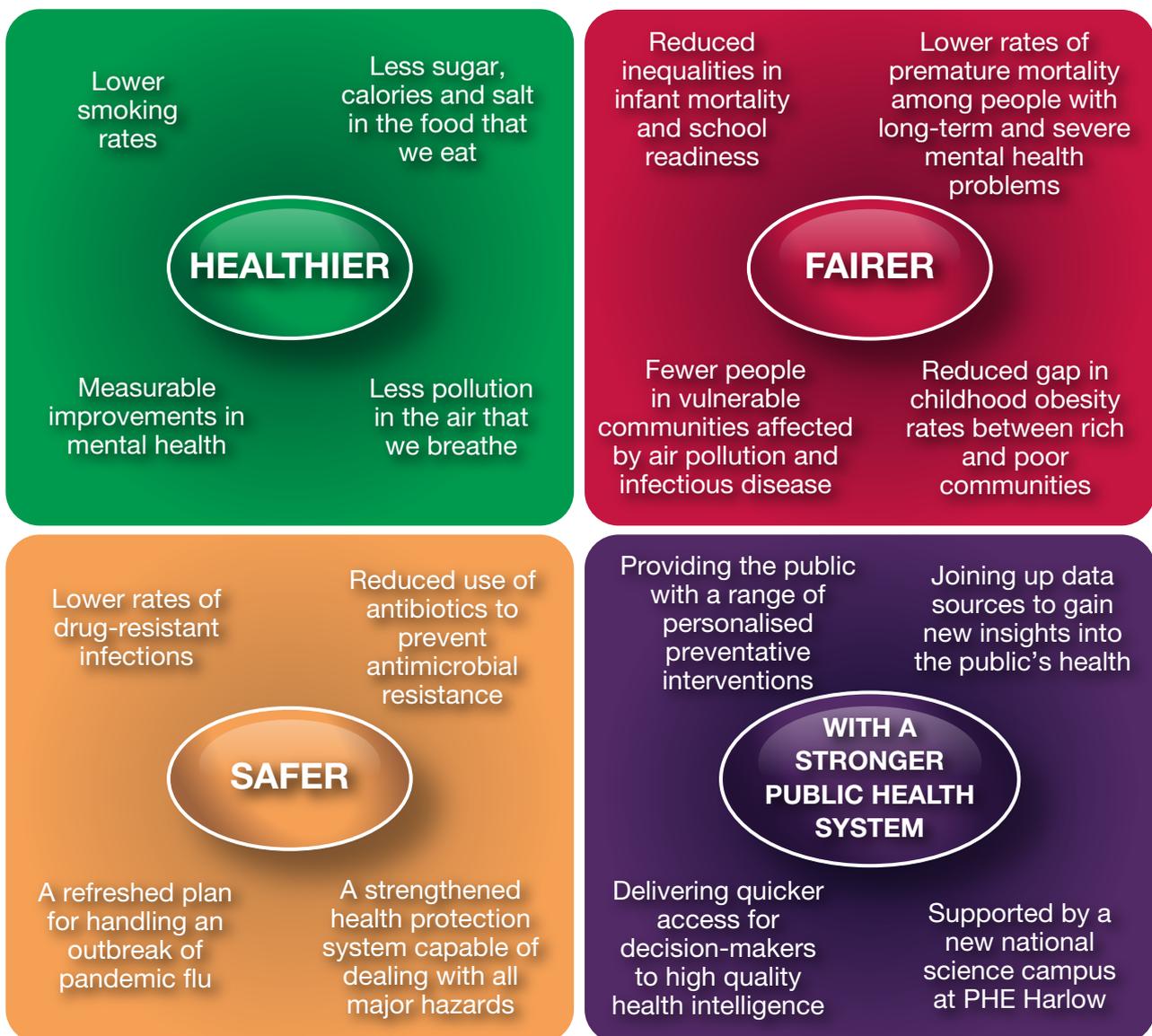


# Next steps

This strategy has been developed by all parts of PHE and in consultation with our partners, and everyone will have a part to play in delivering it. We will refresh the governance around our priorities, ensuring that we have processes and structures in place that facilitate cross-PHE collaboration and effective decision-making and oversight. We will embed the strategy into our corporate planning and performance management, enabling teams and individuals across the organisation to connect their work to PHE's strategic objectives.

Our Annual Business Plans, beginning with 2020/21, will outline the key activities to deliver our priorities and develop our organisation as well as actions to address other areas of high importance to the public health system.

Our aim for the strategy is that, by providing a focus and a foundation for PHE's work over the next five years, it will support system-wide progress against each of our goals so that by 2025 England is:



# Our local and national presence

PHE has local bases across England and three main scientific campuses, with approval to develop a new national science campus at PHE Harlow:

## PHE Chilton



Includes the headquarters of the Centre for Radiation, Chemical and Environmental Hazards (CRCE). CRCE operates from 11 locations over England, Scotland and Wales

## PHE Colindale



Includes infectious disease surveillance and control, reference microbiology, other specialist services such as sequencing and high containment microbiology, plus food, water and environmental services

## PHE Porton

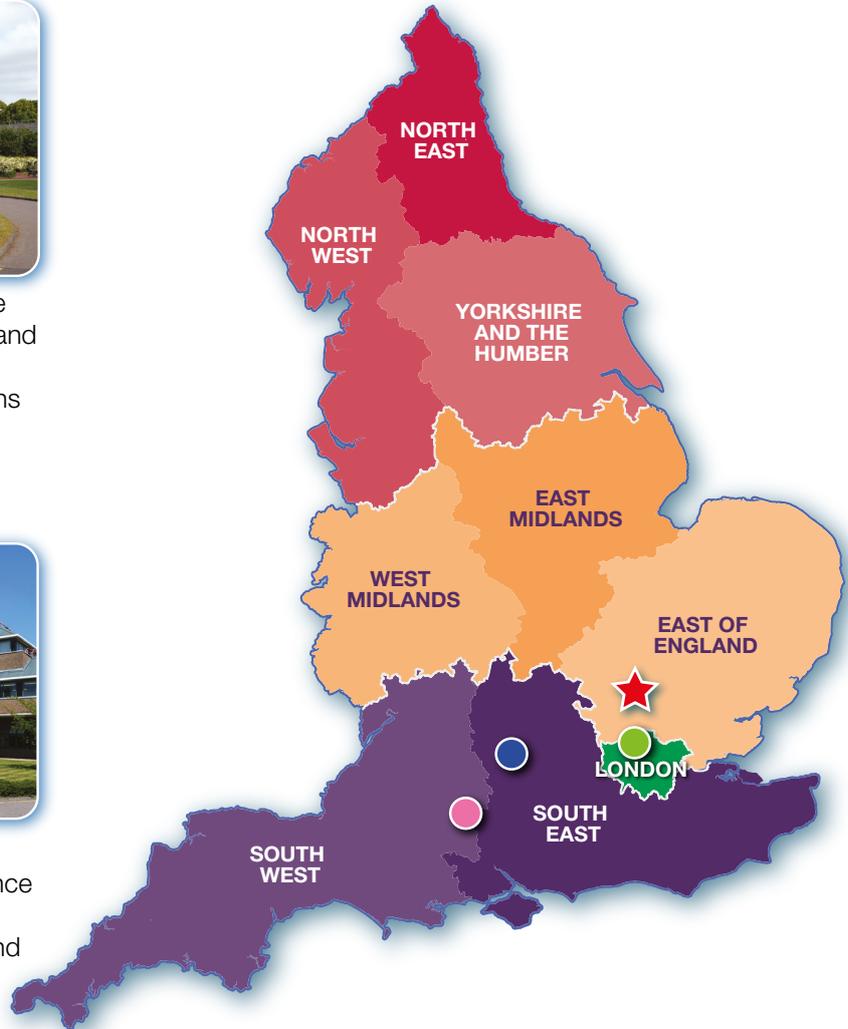


Includes departments for rare and imported pathogens, research, culture collections and emergency response, plus food, water and environmental services

## PHE Harlow



PHE future national campus for public health science, bringing together the work of PHE Colindale, PHE Porton and the PHE HQ



# About 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, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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