



UK Health
Security
Agency

UKHSA Strategic Plan 2023 to 2026



About UKHSA

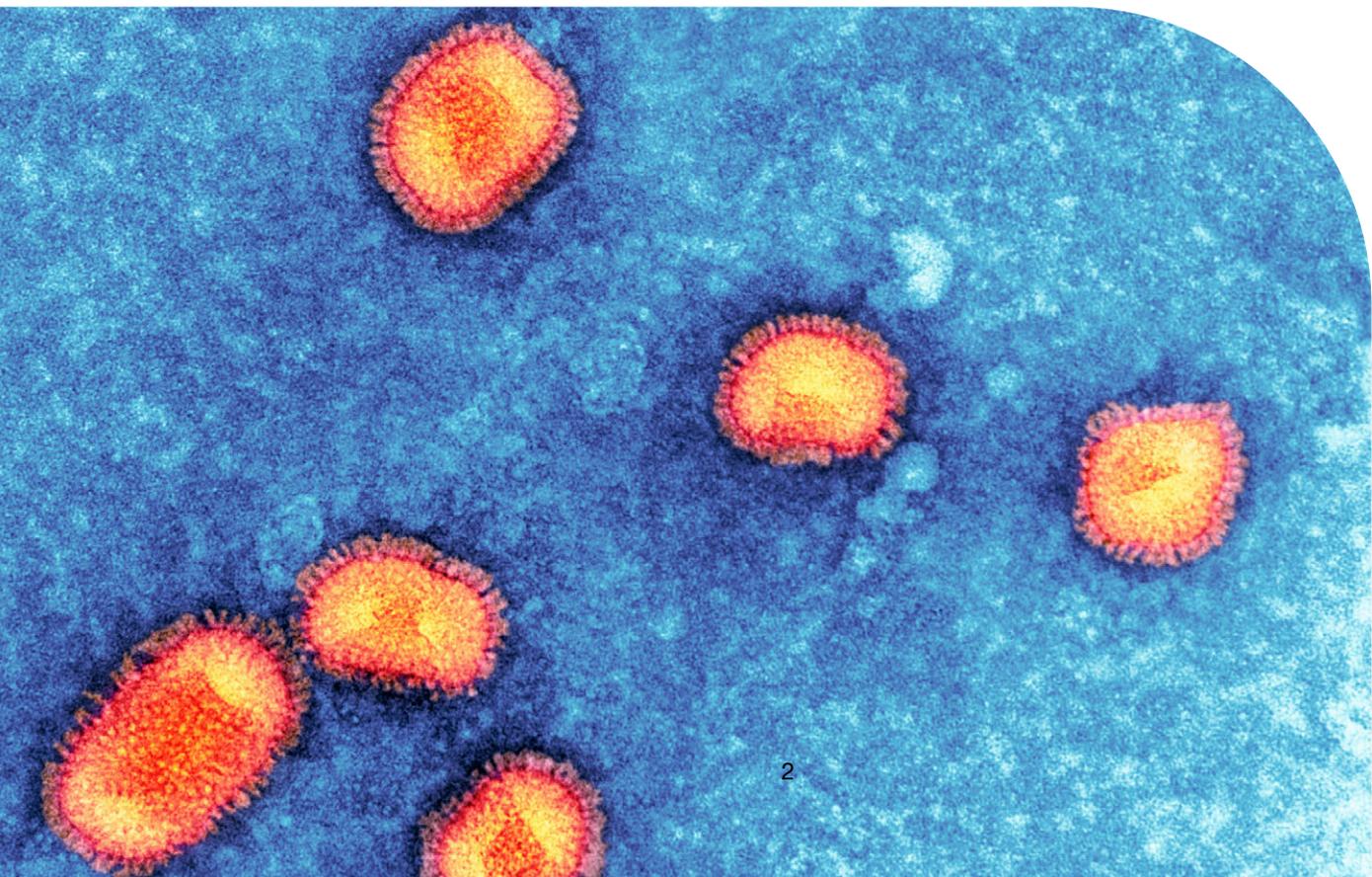
The UK Health Security Agency (UKHSA) prepares for and responds to infectious diseases, and environmental hazards, to keep all our communities safe, save lives and protect livelihoods.

We provide scientific and operational leadership working with local, national and international partners to protect the public's health and build the nation's health security capability.

UKHSA is an executive agency, sponsored by the [Department of Health and Social Care](#) (DHSC).

For most of UKHSA's work, our remit covers England as health protection is largely a devolved policy area. We hold some UK-wide responsibilities on reserved matters where the UK government has retained policy responsibility.

This strategic plan relates to UKHSA's work in England, with the exception of sections where we note we are referring to reserved matters, such as our work in preparing for and responding to the effects of radiation on public health and international obligations on global health security. UKHSA recognises the cross-border nature of health threats and works in close partnership with the devolved governments on common challenges.



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Foreword from Chief Executive



Dame Jenny Harries
Chief Executive, UKHSA

The range of health security threats faced by the UK and the global community is significant, diverse and growing, spanning from antimicrobial resistance and respiratory infections to foodborne illnesses, emerging zoonotic diseases and environmental, chemical and radiological hazards. Over the coming years, the impact of climate change is likely to amplify many of these threats still further and in a cumulative manner.

Feeling safe and secure is fundamental to our personal wellbeing. In addition to the harmful impacts of these risks to individuals, the COVID-19 pandemic has reinforced the importance of health security to society as a whole – to our local communities, to our country and to the global economy.

Quite simple interventions which protect ourselves, our families and our friends – such as vaccines – can also protect our economy and our public services. Research into the 2012 to 2013 measles outbreak showed that ensuring higher rates of MMR vaccination uptake, could have averted the outbreak at a cost of just 4% of the total final cost of managing the measles outbreak which ensued¹. That economic loss is on top of the significant discomfort and distress borne by the young people and their families affected by the illness itself.

Strong health protection systems are therefore critical to protect individual and societal wellbeing. The same scientific endeavour we use to prevent and respond to incidents and outbreaks can also enable new and applied scientific discovery which simultaneously contributes to economic growth and the development of the UK's life sciences industry. We have opportunities for new vaccines, novel treatments and innovative point of care testing – new tools to allow us to focus on the prevention of, as well as the response to, health hazards.

To meet these challenges and to enable new scientific opportunities, I am committed to building a health security agency that excels in preparedness and prevention, in agile and community focused emergency response and in scientific growth.

My vision for UKHSA is to be a scientific and operational leader in health security, working seamlessly and transparently with trusted partners who share our agenda at local, national and global level.

And we will always remember that health threats do not affect everyone equally. Deprived and vulnerable communities bear the brunt of adverse health outcomes and addressing health inequities will be an integral part of everything we do. We will embed equity in the implementation of this strategy and in the specific projects we run, to ensure our efforts benefit everyone in society but above all provide a focus of support for those with greatest need and at greatest risk.

The publication of UKHSA's first strategy marks an important milestone. It reflects our commitment to address threats to the nation's health and economy now and in the future. I am proud to lead a team of passionate, dedicated, and talented people taking this agenda forward.



Foreword from Chair



Ian Peters
Chair, UKHSA

UKHSA's mission is to respond to health threats, save lives and protect livelihoods.

This strategic plan sets out the health security challenges and opportunities for the UK over the next 3 years.

The risk of infectious disease and environmental hazards on our society and economy can have devastating consequences, reinforcing the importance to the nation of a high-performing, science led and operationally dynamic health security agency. As highlighted by the COVID-19 public inquiry, UKHSA will need to ensure the UK is prepared for a wide range of hazards from small outbreaks to large-scale pandemics. The agency also now plays a key role in the nation's security.

UKHSA will be an outcomes-focused agency. Our goal is to create a safer population, society and economy, less disrupted by the impact of infectious disease and other hazards to health.

This strategic plan shows how we will do this through 6 priorities, and it explains the impact we aim to have over the next 3 years. We will hold ourselves to account for delivery of our priorities and our annual business plans will set out the actions we intend to take each year in pursuit of them.

UKHSA is a young organisation putting into place the systems, processes and culture to ensure accountability, transparency and good financial management. But this is just the start. As UKHSA matures, we will ensure that our science and health security expertise has increasing value to the public, the NHS, the government and the life sciences sector.

Demonstrating positive impact and value for money are 2 of my priorities as Chair, alongside good governance, strategic clarity, appropriate risk management, developing operational excellence and a culture of effective collaboration with our many partners across academia, the private sector and our peer organisations globally. These priorities are shared by UKHSA's Advisory Board whose non-executive members bring a wealth of expertise and insights from diverse backgrounds with rich and varied experience in health, technology, local government, the military, the media and third sector organisations. We aim to support, advise, and help create the right environment for the many brilliant staff working at UKHSA to flourish in pursuit of our mission.

I would like to take this opportunity to thank everyone working at UKHSA and our partners at local, national and international level who have contributed to the shaping of this strategy and our new agency.

The context: challenges and opportunities for health security

The emergence of COVID-19 is indicative of a wider surge in hazards to health in recent years. The last decade has seen new or increased risks from infectious diseases such as mpox, Zika and Ebola and warnings from the World Health Organization (WHO) of the need for focused vigilance against the risk of pandemic flu from the H5N1 strain². Harmful health impacts from extreme weather are increasing. Antimicrobial resistance continues to emerge and has been declared by the WHO as one of the top 10 global public health threats facing humanity³. All of these threats pose significant risks to the public, the economy and our society, often exacerbating health inequalities.

The way our world is changing is driving greater health security risks. Climate change is escalating the incidence of environmental health hazards, such as flooding and heatwaves, while also creating conditions which increase the risk of both the incidence and impact of infectious diseases. Upward trends in the global movement of people, goods and animals amplify the likelihood of infectious diseases and drug-resistant microbes being introduced into the UK. Advances in DNA synthesis technology have the potential to bring new benefits to health by boosting research but could also be misused to create new pathogens. UKHSA is responsible for preparing for, preventing where possible, and responding to these threats to health, drawing on our broad-ranging skills including scientific, data and analytical clinical and public health, and significant learning from past incidents.

The accelerated pace of innovation seen during the COVID-19 response resulted in rapid and successful deployment of diagnostics, vaccines and antivirals. This demonstrated the potential to boost the pace of developing and deploying new tools for preventing and responding to disease, through innovative regulatory strategies, industry and academic partnerships, and deployment models tailored to meet the needs of users.

Advances in genomics and surveillance allow us to better understand and respond to infectious disease through faster and more effective diagnostics; improved identification and control of outbreaks; advances in the development of vaccines and therapeutics; enhanced monitoring of changes in pathogens; and improved situational awareness for policy formation. UKHSA supports the NHS and wider health system by using genomic sequencing to identify different strains of pathogens to inform the development and use of effective interventions, including vaccines and therapeutics, and to spot and respond to clusters of related infections faster.

The COVID-19 pandemic has bolstered the commitment and resolve of the 4 nations of the UK, and global partners to collaborate and better anticipate health hazards, strengthening UK-wide approaches, improving global surveillance and tackling health hazards as close to source as possible.

New information technologies and systems, advances in data science and the use of advanced analytics are enabling rapid improvements in the effectiveness and efficiency of action to protect health. The COVID-19 response generated new data streams and analytical channels that enabled rapid understanding of the pandemic as it unfolded. We are using those experiences and insights from behavioural and data science to improve the way we obtain, curate and analyse data to improve policy and actions as they develop. Better understanding communities, behaviours and risk allows us to embed a health equity approach across all our work, helping to achieve better outcomes for everyone in society.

UKHSA will use these developments – whether new epidemiological insights, novel approaches tested in the pandemic or increased public knowledge and awareness – to improve the way we prepare for, prevent where possible, and respond to, future hazards.



UKHSA's strategic plan in summary

Our mission

To prepare for, prevent and respond to health threats, save lives and protect livelihoods

Our vision

Through our scientific and operational expertise, we aim to protect every person, community, business and public service from infectious diseases and environmental hazards, helping to create a safe and prosperous society

Our goals

Prepare

Be ready for, and prevent, future health security hazards

Strategic priorities

Be ready to respond to all hazards to health

- Improve health outcomes through vaccines

Respond

Save lives and reduce harm through effective health security response

Strategic priorities

Reduce the impact of infectious diseases and antimicrobial resistance

- Protect health from threats in the environment

Build

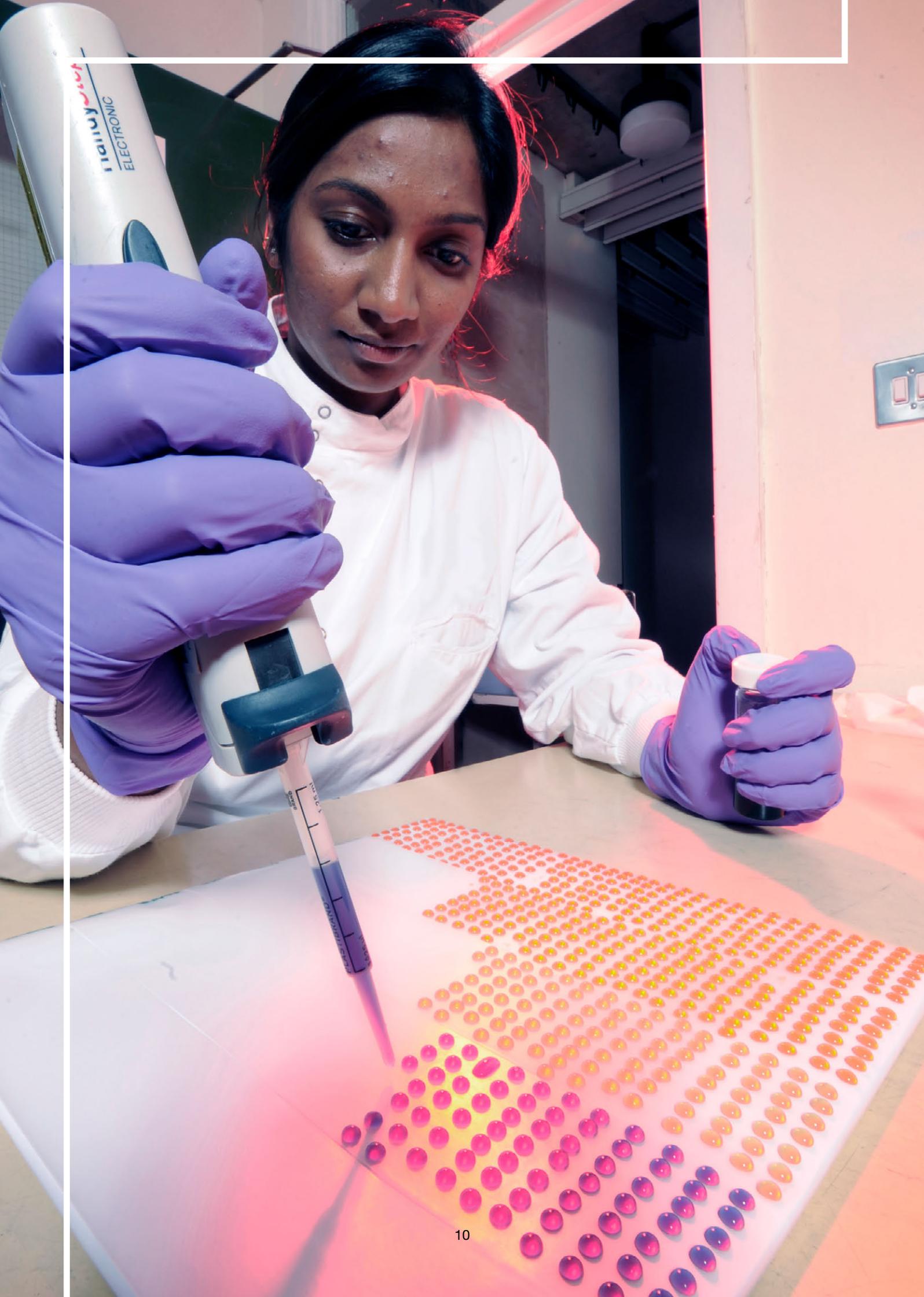
Build the UK's health security capacity

Strategic priorities

Improve action on public health through data and insight

- Develop UKHSA as a high-performing agency

Achieve more equitable outcomes



UKHSA's vision and goals

Our mission

To prepare for, prevent and respond to health threats, save lives and protect livelihoods

UKHSA is the nation's expert health security body, established to prepare for, prevent wherever possible and respond to health security hazards. We are a centre of scientific and operational excellence in health protection. We are a category 1 responder alongside other organisations at the core of emergency response. In our work to protect health and prevent future ill health, we also provide services for and reduce costs for the NHS and other public services, and we minimise the impact of health security hazards on livelihoods and the economy.

The hazards to health which UKHSA protects against are:

- infectious diseases (covering the main routes of transmission which can give rise to epidemics or pandemics: gastrointestinal; respiratory; sexual / blood-borne; touch; and vector-borne)
- chemical, biological, radiological and nuclear hazards
- other environmental hazards, such as weather events
- health hazards that arise from disasters such as major fires or accidents

These hazards range in nature – from floods to new types of infectious disease; as well as in intensity – from common infections to life-threatening incidents; and in scale – from local outbreaks to global pandemics.

We use our public health, scientific, data, operational and policy capabilities to work locally, nationally and globally, collaborating and supporting system partners to protect health security and deliver better and more equitable health outcomes.



Our vision

Through our scientific and operational expertise, we aim to protect every person, community, business and public service from infectious diseases and environmental hazards, helping to create a safe and prosperous society.

At UKHSA, our aim is that the country can thrive, uninhibited by the impacts of health security threats. We achieve this by delivering rapid and highly effective responses to health threats, preventing or reducing their potential harmful impacts as much as possible, in close co-ordination with other parts of the health system.

Our work will demonstrate how investing in health security provides value for money through preventing future ill-health and minimising the impact of health security incidents on livelihoods and wider society. UKHSA's work delivers financial savings for the NHS and the economy, as well as health benefits for all of us. It is estimated that the savings for the NHS and the economy from UKHSA activities in 2022 both exceeded UKHSA's core budget, without accounting for the public health benefits felt by individuals⁴. We want these benefits to grow over the coming years, as we deliver on our 6 priorities.

UKHSA will continue to make a significant impact on the health and prosperity of the nation. This includes:

- delivering better health outcomes for all **individuals** by preventing and reducing the impact of hazards to health
- supporting the improved health of the **overall population**, reducing health inequalities, minimising the burden and cost of health security hazards to the public, the NHS and other public services
- enabling a resilient **economy**, with services and businesses better protected from the impacts of health security incidents
- driving innovation and growth in the **life sciences industry**, particularly in diagnostics, emerging technologies, and the development and evaluation of vaccines

We will build our reputation as a trusted and expert advisor with the public, health professionals, partners and the government, through consistent high-quality advice, insight and operational delivery.

We will strengthen our scientific capabilities, developing our people, facilities and research and help deliver the government's ambition for the UK to be a global science superpower, working in partnership with industry and academia to save more lives and contribute to prosperity. Further detail on this can be found in our [UKHSA Science Strategy 2023 to 2033](#)⁵.

We will advance our insight and expertise at a local, national and international level, through maximising our data, surveillance, analytic capabilities, and our partnerships.

We will build a modern and scalable operational response capability. We will maximise the assets we have – data, technology, laboratories and other infrastructure – to ensure that the responses we deliver and support are effective and efficient. We will work with Directors of Public Health on designing responses from a local level as much as possible, supporting scaling up where appropriate and delivering better and more equitable health outcomes for local and national populations.

We will continue to be system leaders, using our unique capabilities to support the health system. We will influence, co-ordinate and support our partners in health protection, working closely with DHSC, the NHS, the devolved governments, local government, the voluntary sector and others. We will act as a catalyst to drive health protection innovations that will enhance our collective abilities to provide health security.

We will invest in building a diverse workforce for now and the future. Our people are our greatest asset. We will ensure UKHSA continues to attract and retain the best talent and expertise. We will invest in existing talent and build a pipeline to attract and retain the specialist skills we need for the future.

We will be innovative and influential, building dynamic and productive relationships. We will be partners of choice for industry, academia, the voluntary sector and the wider health system, driving innovation. We will use our key skills and assets, such as genomics, vaccines and data analysis, to foster collaboration. We will work in partnership with industry, academia and other organisations on research and development to protect health and contribute to prosperity.

We will maintain a focus on equity and addressing health inequalities in all our work, recognising that health threats often disproportionately impact certain groups.



Our goals

UKHSA has 3 overarching goals. All of UKHSA's work contributes to realising one or more of these goals. By ensuring our preparedness for, and ability to respond to, current and future health security threats, we will save lives and reduce harm, support the NHS, protect the nation's public services and support economic growth.

Prepare – Be ready for, and prevent, future health security hazards

UKHSA aims to ensure that the country is prepared for – and when feasible can prevent – future health security hazards, including pandemics. We act as the first line of national defence against health threats at home and abroad. We will prepare and plan for health security hazards, be agile in our response and relentless in preventing outbreaks and pandemics of various diseases wherever possible. In practice, this means knowing what threats are on the horizon through effective surveillance, using our scientific capabilities and tools to develop new evidence and insight to best protect against them; reviewing the evidence to enable effective guidance; and having the right tested response plans and capabilities in place to protect the whole population.

We use our clinical, operational and analytical expertise and experience to deliver against this goal. We work with the NHS and local authorities to deliver preventative services. We work across government on a One Health approach, recognising the interconnection between people, animals, plants, and their shared environments. We also work with commercial partners to put in place plans to respond quickly and at scale. We share insight and intelligence with partners early and transparently, on how best to respond to health security hazards locally, nationally and globally.



Respond – Save lives and reduce harm through effective response

UKHSA protects people from health threats every day. We respond to infectious disease outbreaks, such as mpox and salmonella; health security incidents from radiation, chemical and environmental hazards, such as floods and chemical incidents; and enduring health security problems, such as antimicrobial resistance. Last year, we responded to more than 25,000 health security incidents.

Our goal is to act quickly to protect people at risk, tailoring our work to reflect how some groups are disproportionately exposed to and impacted by health hazards. We deliver agile, rapid, evidence-based responses at a local, national and global level, enabling and supporting local responders and scaling up our response to meet the size of the threat as required. We provide evidence, evaluation and insight to inform interventions and programme design – whether our own or that of other organisations – developing and sharing scientific insight, intelligence and guidance. We support government as a whole with robust evidence and advice to create timely and effective policy. We also support the response of our delivery partners through the provision of services, such as microbiology and rare pathogen services, that directly reduce pressure on the wider system and free up capacity in the NHS.

Build – Develop the UK’s health security capacity

It is vital that we continue to build and invest in the scientific, clinical, public health, analytical and operational capabilities needed to protect the country’s health now and in the future. We develop expertise and capabilities in areas such as genomics, diagnostics, radiation and data analysis. We will optimise and secure the national assets and critical infrastructure in our care, such as high-containment laboratories and a wealth of public health data. We are modernising our approaches and technology, ensuring we are a high-performing and efficient agency. We will lead a transformation in how we use data and ensure that we make the most cost-effective use of the possibilities of new technology. This will ensure that UKHSA and our partners can use the best evidence and insight to inform policy, preparation for and response to health security hazards.

We work across the national and local health and social care system – in close alliance with the devolved governments, the NHS, local authorities, academia and industry – to collectively identify what capabilities are required across the whole system and support our partners to improve their ability to address health threats alongside our own. UKHSA invests in developing the pipeline of talent needed to ensure the UK remains at the cutting edge of science, data and operations.

Achieving more equitable outcomes

We recognise that health threats impact people in different ways, and often disproportionately impact certain groups⁶. We know that to be successful in our mission, we must sensitively and effectively address the specific needs of the people and communities at greatest risk. The importance of strong health protection systems that address health inequalities has never been clearer.

We work closely with DHSC including the Office for Health Improvement and Disparities (OHID), the NHS and other government departments to support partners through provision of evidence, data and advice on how to achieve more equitable outcomes in infectious disease and environmental hazards.

We want to see reductions in health inequality over the lifetime of this strategic plan. We will deliver specific projects aimed at supporting vulnerable people and groups, develop a strategic, multi-year approach to health equity, and enhance our knowledge, understanding and data for high-risk groups and settings.



An example of how we work in partnership: UKHSA and the NHS in England

Prepare: UKHSA collaborates with the NHS on vaccination, supports operational emergency response planning, and provides clinical guidance and resources. We undertake joint surveillance work with the NHS on healthcare associated infections, saving lives and resources through better infection prevention and control systems. UKHSA contributes to the development and implementation of national action plans to ensure the work of partners such as NHS England are informed by the latest scientific evidence and analysis as well as being system partners with integrated care partnerships, enabling them to address health protection challenges.

Respond: UKHSA undertakes horizon scanning and systematic surveillance to detect emerging hazards and provides analysis of threats for the NHS (such as specialist diagnostics, epidemiology, genomic sequencing, and laboratory testing) as well as guidance and advice. This allows frontline health workers to respond effectively to infectious disease outbreaks or to manage chemical or radiation incidents with minimum risk. We also work to maximise the effectiveness of the NHS response, for example by supporting specific vaccination programmes to respond to outbreaks such as mpox. UKHSA's timely responses to notifications of infectious disease cases and outbreaks minimises onward spread, reducing the number of cases and potential impact on the NHS and keeping wards and emergency departments operating. UKHSA also supports the immediate response to environmental hazards, working with emergency responders to keep the public safe.

Build: UKHSA works closely with DHSC and other partners to ensure we have the right capabilities and policies to support the best outcomes for patients. For instance, we develop tests for potential future pathogen groups, provide test access for specific vulnerable clinical groups and ensure early immunological assessment of potential new treatments. UKHSA has unique technical capabilities, such as UKHSA's specialist and microbiology laboratories, reference services and genomic sequencing, which are crucial for enabling effective analysis of pathogens and decision-making on effective transmission and disease management strategies.

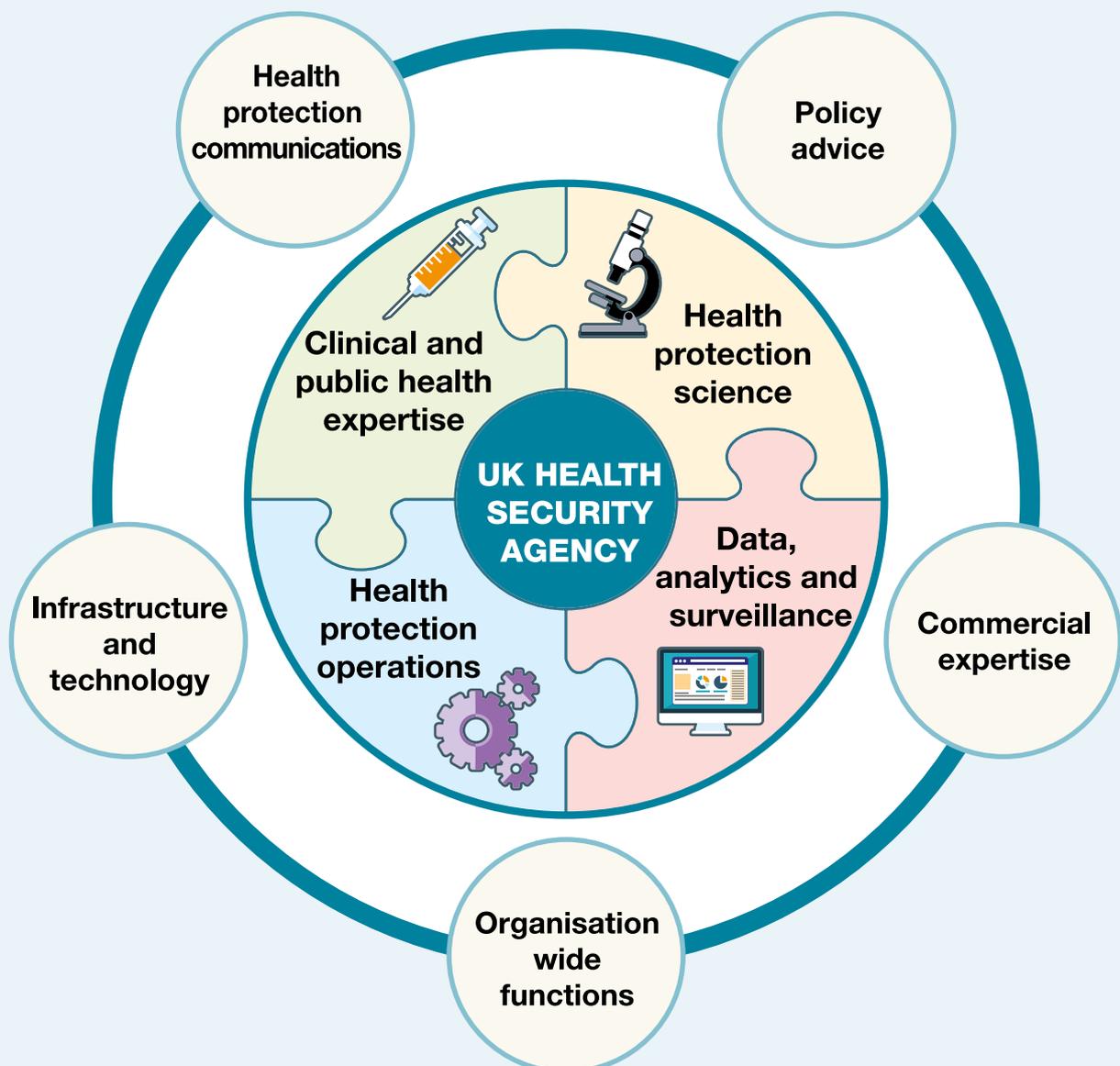




How we will deliver our goals

Our core capabilities

UKHSA brings together a unique collection of capabilities critical to the country's resilience against health security threats. Each capability is underpinned by UKHSA's expertise and infrastructure. We use these capabilities in combination to tackle both existing and emerging threats, flexing our capacity to enable UKHSA to mount an immediate response to health threats.



Clinical and public health expertise

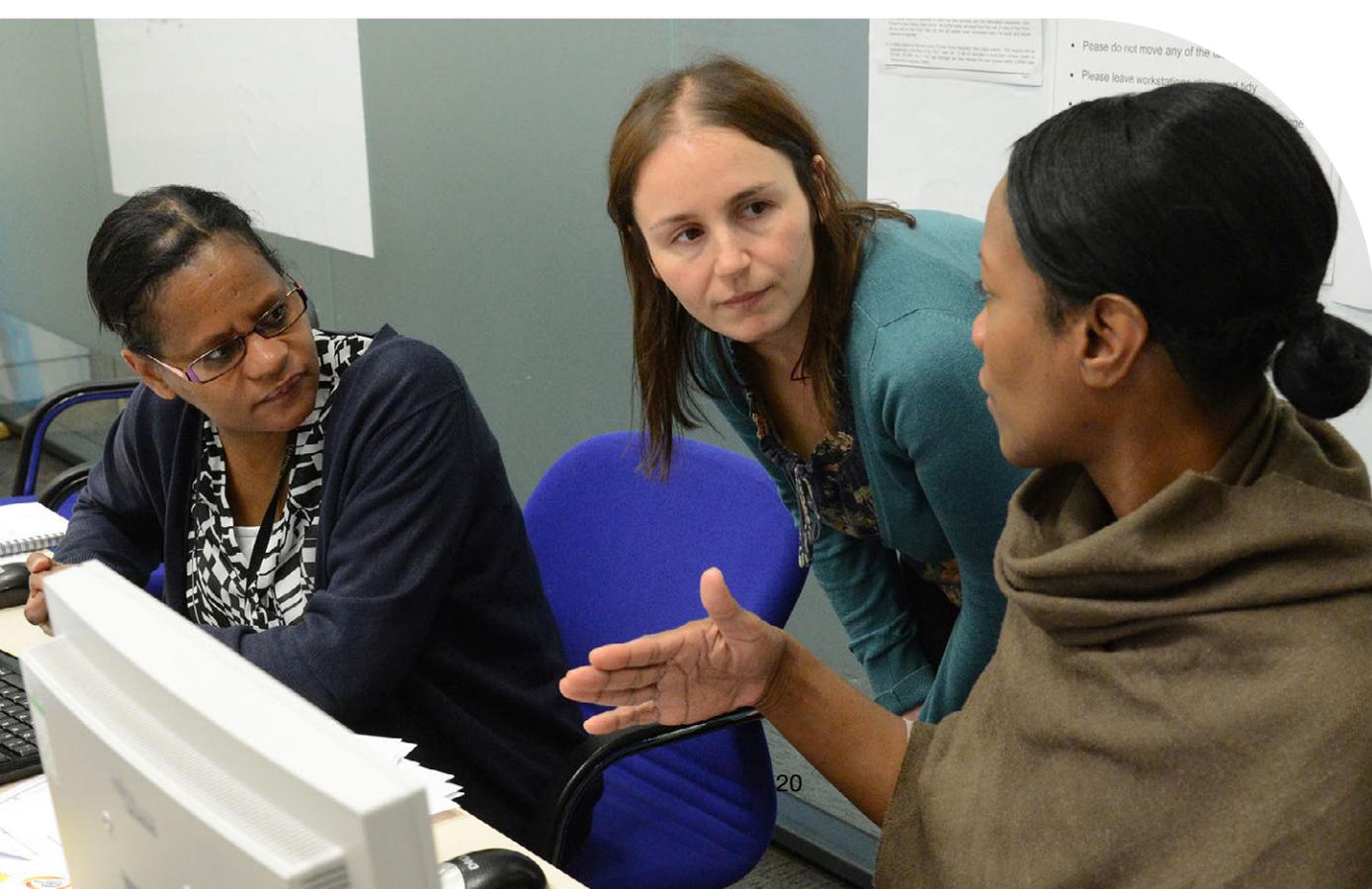
Our public health experts and clinicians develop, deliver and evaluate health protection interventions. We work closely with local government and NHS teams at a local and national level, delivering expert clinical, scientific and epidemiological evidence and guidance and we work directly with the public. We advise across government through participating in numerous expert committees. We share our expertise globally, engaging with global experts on emerging and recognised threats.

Health protection science

UKHSA employs world leading scientific experts, including epidemiologists, microbiologists, virologists, toxicologists and radiation protection scientists. We partner with industry and academia to accelerate ground-breaking research and translation into action in priority areas, advancing the UK's competitive advantage in life science innovation.

Health protection operations

UKHSA leads and delivers expert health protection services locally, nationally and globally to respond to infectious disease cases and outbreaks and other health security incidents, scaling our response according to the size of the threat and needs of the communities at risk. We lead the specialist response to public health incidents by managing cases and contacts and others at risk and providing tailored technical advice on outbreak management to partners locally, regionally, nationally and globally. Internationally, we advise on strengthening health protection in priority countries and regions and provide direct support, for example, through overseas deployment of the UK Public Health Rapid Support Team.



Data, analytics and surveillance expertise

UKHSA detects, tracks, analyses and interprets data, and develops forecasts on threats to health. Data underpins our ability to make policy and operational decisions which are grounded in evidence. We safely and appropriately collect and generate valuable data, which in turn drives our evidence and insight, identifying groups at specific risk from harm. We have specialist analytic capabilities – including genomic sequencing capability – which we use to identify threats and rapidly inform responses on the ground. The insight from our data is recognised internationally and is used to support global evidence-based action to tackle health threats.

Cross-cutting capabilities

Policy advice

UKHSA advises across UK government on matters of health security globally and nationally, by using our expertise, evidence, insight and experience of delivering health protection responses, in support of health policy, national security and economic prosperity.

Health protection communications

Our communications team ensures the public is supported to understand periods of heightened risk through announcements that warn and inform communities of outbreaks and how to respond to them, and builds our reputation as a trusted partner.

Commercial expertise

Our commercial team underpins our ability to develop innovative partnerships with industry, brings market insights into our planning and ensures that we get best value from our investments.

Infrastructure and technology

UKHSA maintains unique capabilities and assets that are part of the country's critical national infrastructure. This includes our network of public health and specialist laboratories, which enable critical, cutting-edge work on genomics, diagnostics and rare pathogens.

Organisation-wide functions

UKHSA's work cannot be achieved without effective corporate functions such as finance, people, strategy, project management, legal, parliamentary and estates. For example, our finance team ensures we manage budgets responsibly and drives our income generation strategy, and our people team builds a diverse workforce with the critical skills we need to keep the public safe now and enables a pipeline for the skills we will need in the future.

How we use these capabilities to protect health

UKHSA uses these capabilities to protect the nation's health including:

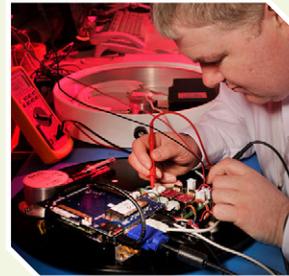
- detecting and analysing infectious disease outbreaks and delivering agile, adaptable responses
- detecting and analysing rare serious infections
- surveillance of a wide range of infections and environmental hazards to inform elimination and control programmes
- responding rapidly to the health impacts of radiological, chemical and environmental incidents
- providing high-quality scientific expertise, data, insight and evaluation to support decision-makers, drive policy development, inform responses and catalyse innovation in areas such as diagnostics and genomics
- delivering overseas, both to prevent health threats coming to the UK, and in support of our commitments to the WHO and other United Nations (UN) bodies
- optimising the effectiveness of the UK vaccination programme, with new vaccines introduced safely and effectively, through the use of evaluation, modelling and expert public health advice
- using our understanding of groups most at risk to deliver on our responsibility to improve health equity
- supporting innovation in life sciences and health security sciences, thereby promoting economic growth

UKHSA also delivers key services to both government and the wider health system that are fundamental to how the system functions and help to reduce pressure on the NHS.

These include:

- diagnostic and microbiology services for the NHS – providing tests, analysis, interpretation, advice and training to NHS trusts to support them in accurate diagnosis and effective treatment of patients
- our rare and imported pathogens service – specialising in diagnosis and case management support of unusual or hazardous infectious disease (including high consequence infectious disease) – both for individual cases and for wider public health responses
- evaluation of vaccines and diagnostics – undertaking the validation and verification of assays, and contributing to innovation in the development of vaccines with industry and academia
- air quality monitoring and other environmental and toxicological services – conducting surveillance of air quality, building the evidence base on chemical and environmental hazards and advising partners in local authorities and Integrated Care Systems so they can work with communities to improve the public's health

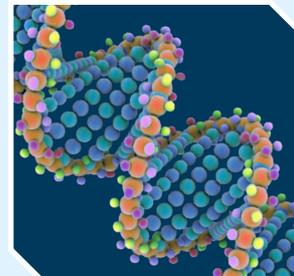
UKHSA has a range of **Chemical, Radiological and Nuclear (CRN)** response capabilities that ensure the public is protected from the risks of accidental or intentional use of CRN substances. We protect the public from exposure to all forms of radiation, including medical and dental exposures, and we conduct environmental surveys across all 4 nations of the UK, as the UK government retains radiation policy responsibility. UKHSA also holds capabilities for the identification of, and assessment of risk from, chemical substances, to inform regulation of these substances and support responses to such hazards in England and collaborates with the devolved governments on responses in Scotland, Wales and Northern Ireland.



Laboratories: UKHSA has a network of specialist public health reference and research laboratories. We have unique expertise in containment microbiology and biological models. Our level 4 facilities allow us to detect and respond to the highest risk human and animal pathogens and to undertake the research needed to understand the threat they pose to our health. They enable the development of the diagnostics, vaccines and therapeutics we need to protect health, supporting research programmes including in-vivo programmes of work.



Pathogen genomics is transforming outbreak control and pandemic preparedness by providing rapid and accurate identification of pathogens, allowing for targeted and personalised treatments (through detection of drug resistance), and enabling a more effective response to outbreaks and emerging infections (by understanding transmission, identifying new variants and their properties, determining growth rates and effectiveness of vaccines). UKHSA is leading the development and delivery of a pathogen genomics strategy, designed to secure maximum public health benefit from this technology.



Our **regional teams** lead UKHSA's response to all health-related incidents within their part of the country. They provide specialist input to local authorities, the local NHS and other partners to prevent and reduce the impact of infectious diseases; environmental, chemical and radiation hazards; and major emergencies. This includes investigating and managing health protection enquiries, cases, incidents and outbreaks, as well as delivering regional disease surveillance and alert systems. Our regional teams also lead UKHSA's regional contribution to emergency planning, resilience and response, and aid national resilience and mutual support.





UKHSA's strategic priorities

From the broad range of responsibilities outlined above we have identified 6 strategic priorities for the next 3 years. These represent key areas of focus for UKHSA where we believe a concerted focus will make a significant difference to health outcomes. We will pursue these priorities alongside the activities we do every day that are critical to keeping the country safe.

Our goals

Prepare

Be ready for, and prevent, future health security hazards

Strategic priorities

- Be ready to respond to all hazards to health
- Improve health outcomes through vaccines

Respond

Save lives and reduce harm through effective health security response

Strategic priorities

- Reduce the impact of infectious diseases and antimicrobial resistance
- Protect health from threats in the environment

Build

Build the UK's health security capacity

Strategic priorities

- Improve action on public health through data and insight
- Develop UKHSA as a high-performing agency

Achieve more equitable outcomes

Prepare – Be ready for, and prevent, future health security hazards

Strategic priority 1: Be ready to respond to all hazards to health

New and emerging hazards can inflict significant harm to health, the economy and society. The next threat may be an outbreak of an infectious disease, a chemical, biological, radiological, nuclear or environmental hazard or a disaster event. Whatever its nature, we can only prevent it or respond effectively if we are prepared. That means understanding the threats we could face, together with the risks to different populations and places, and using this to ensure we have the right surveillance to detect threats. It means having the right mitigations, plans, expertise, infrastructure, capabilities and countermeasures in place to actively prevent hazards or be ready to respond as required.

UKHSA's experience of responding to large-scale incidents and pandemics enables us to ensure that future responses are more effective, efficient and more equitable. Our vision is for a country better prepared to stop health security hazards and potential future pandemics and, when necessary, for UKHSA to deliver world-leading responses to major health emergencies to minimise harm. We will be a resilient organisation with the ability to adapt and scale our response to different incidents as needed.

We will keep the growing and harmful health impacts of climate change at the forefront of our preparedness. Climate change increases the threat of infectious diseases (for example, diseases carried by mosquitoes) as well as environmental hazards (such as heat waves and flooding). We will better understand the impacts on health, particularly for the people and places at highest risk of poor outcomes, as well as supporting effective interventions to strengthen resilience and adapt to these changes. We will operationalise the One Health approach, working seamlessly across human and animal health to detect and mitigate risks from the emergence of zoonotic infections.

What UKHSA will achieve

Ready to respond to all hazards, including pandemics:

- **improved UKHSA capacity and capability to respond to all hazards**, including pandemics, emerging infectious disease risks (including high consequence infectious diseases) and environmental hazards (chemical, biological, radiological and nuclear hazards, and natural disasters)
- **strengthened UK preparedness for future pandemics** by planning and undertaking contingency exercises for the range of health threats, transmission routes and scenarios. This will build on learning from responses to previous health hazards, in particular the findings of the UK COVID-19 Inquiry and be developed through consultation and co-design with DHSC, NHS England (NHSE), Directors of Public Health, the devolved governments and other partners, making best use of capabilities in both the public and private sectors. We will work with DHSC on renewing the strategic approach to pandemic preparedness

- **improved ability to rapidly and safely scale up UKHSA's capabilities**, including in response to exceptional health security demands, through a range of mechanisms including pre-arranged commercial contracts and collaborative working with academic institutions
- **a resilient health protection system that can be scaled up quickly**, working in collaboration with local and national partners, including the NHS, local Integrated Care Boards, Directors of Public Health and local authorities. We will draw on lessons from the COVID-19 pandemic and work with DHSC to support the readiness of the wider health system to respond to future pandemics or other major public health incidents
- **strengthened arrangements across all 4 UK nations to prepare for and respond to future emerging infections, pandemics and other incidents** with a UK-wide impact. To do this, we will work closely with the governments, the UK Chief Medical Officers and public health agencies in Scotland, Wales and Northern Ireland including through the UK Health Protection Committee under the Common Framework on Public Health Protection and Health Security
- **improved understanding of the impact of different health hazards on different groups and communities**, to ensure that we are better prepared to address the needs those who are vulnerable or at high risk. This will enable UKHSA and partners to respond more effectively and achieve more equitable health outcomes

Ready to respond to the health impacts of climate change:

- **strengthened evidence base on the health effects of climate and environmental change**, including for the people and places at highest risk of harmful outcomes, and effective interventions to address these. This will be delivered through the newly established Centre for Climate and Health Security. We will share this evidence to inform the design and delivery of effective policies and interventions to protect health, livelihoods, the economy and society



Strategic priority 2: Improve health outcomes through vaccines

Infectious diseases harm health and livelihoods, exacerbate health inequalities and damage the economy. Vaccines are a powerful tool to prevent, control the spread of and reduce the severity of disease. Vaccines prevent up to 3 million deaths worldwide each year⁷ and analysis suggests the UK's COVID-19 vaccination programme likely prevented more than 100,000 deaths⁸.

Many partners collaborate to develop and deploy safe and effective vaccines, including the NHS who implement the majority of national vaccination programmes in our local communities. UKHSA is a unique and critical contributor at all stages of the vaccine pathway, using our scientific, public health, procurement and logistical skills. Our work encompasses research to support vaccine development; market-shaping and procurement; storage and distribution; design and optimisation of the immunisation schedule; and analysis of real-world impact to ensure the most appropriate vaccines are used in the most appropriate way. We provide authoritative clinical guidance on policies and procedures for vaccination through the "[Green book](#)"⁹, training for health care workers and patient information to ensure safe consent. UKHSA also collaborates internationally to support global responses to vaccine-preventable disease through WHO targets and initiatives.

The COVID-19 pandemic saw innovative approaches and unprecedented collaboration leading to faster development and deployment of new vaccines. UKHSA will take advantage of the latest innovations in vaccine development, furthering the approaches key to the success of the Vaccine Taskforce to deal with current and future threats. This includes strengthening strategic partnerships to support the accelerated development and appropriate use of new vaccines and building an approach to future procurement which combines flexibility with the best value for the taxpayer.

While the range of diseases that can be prevented or controlled by vaccines is growing, there has been a steady decline in coverage of some existing vaccines, with lower uptake in specific population groups. This has resulted in increasing risks of infection to those who are unvaccinated from diseases such as measles, polio and diphtheria. UKHSA will work with NHS providers and other partners to increase coverage and reduce the inequalities in uptake we are seeing across the country.

What UKHSA will achieve:

Increased uptake of vaccinations, optimisation of routine immunisation programmes

- **sustained progress against global targets and the recovery of existing public health immunisation programmes**, through targeted communications with partners; the provision of expert clinical advice and public health guidance to NHS England and NHS providers on the need for catch-up campaigns; and establishing the measles elimination whole genome sequencing programme. We will achieve the UK's certification by the WHO on the eradication and containment of polio, regain the UK's measles elimination status and sustain rubella elimination

- **reduced disparities in access to, and uptake of, vaccines** working in collaboration with NHS England, NHS providers, local authorities, the voluntary sector, regional partners and the public, to increase efforts to reach under-served communities in alignment with the NHS vaccination strategy. UKHSA will monitor both vaccine coverage and outcomes of infection. We will undertake analysis, modelling and use behavioural and health service science to identify and develop and tools to support effective interventions and guidance on which population groups should be eligible and prioritised for vaccination
- **enhance UKHSA's scientific secretariat support for the Joint Committee on Vaccination and Immunisation (JCVI)**, as well as modelling and health economics capacity, to ensure timely decision making to optimise the vaccination schedule and achieve a cost-effective programme that maximises protection across the life course, including pregnant women, children, adults and older-age groups
- **increased public support for the individual and societal benefits of vaccines**, through advocacy with key decision makers and by reducing the impact of mis-, dis- and mal-information through the availability of, and access, to, trusted sources of information, working with partners across government, NHS England and trusted community groups

Discovery, development and innovation of safe and effective vaccines

- **enhanced support for the development of new vaccines** through the Vaccine Development and Evaluation Centre: supporting the identification of the most promising vaccine candidates at the earliest stages of discovery and development, maximising efficiency in the development process, and performing pre-clinical and clinical trial testing of vaccines to support policy and deployment. We will do this in close partnership with industry and the Medicines and Healthcare products Regulatory Agency (MHRA) as appropriate, supported by robust governance arrangements
- **advances in vaccine development and enhanced vaccine safety and effectiveness** by supporting research, engagement and collaboration. This includes identifying our research priorities (through systematic analysis of the burden of disease and epidemiological surveillance and assessment) and signalling these to industry and key partners
- **enhanced preparedness for future global health incidents** through playing a significant leadership role for the UK in the 100 Day Mission – an initiative to make safe, effective vaccines, therapeutics and diagnostics for unknown diseases within 100 days of identification – including leading the domestic secretariat

Procurement and distribution of vaccines

- **a commercial framework** with appropriate governance, developed in partnership with industry, to ensure we are positioned to procure safe, highly effective vaccines at the best value so that the UK population is able to access them when they are needed
- **more effective and efficient supply chains and safe and efficient vaccine storage and distribution** for national immunisation campaigns and emergency use, working with suppliers and the NHS.

Embedding learning from COVID-19 vaccine development

- **application of lessons and best practice from the COVID-19 pandemic** to streamline and optimise the UK's vaccines pathway with our partners
- **stronger UKHSA partnerships with industry to support the development of new or improved vaccines** for COVID-19 and other illnesses



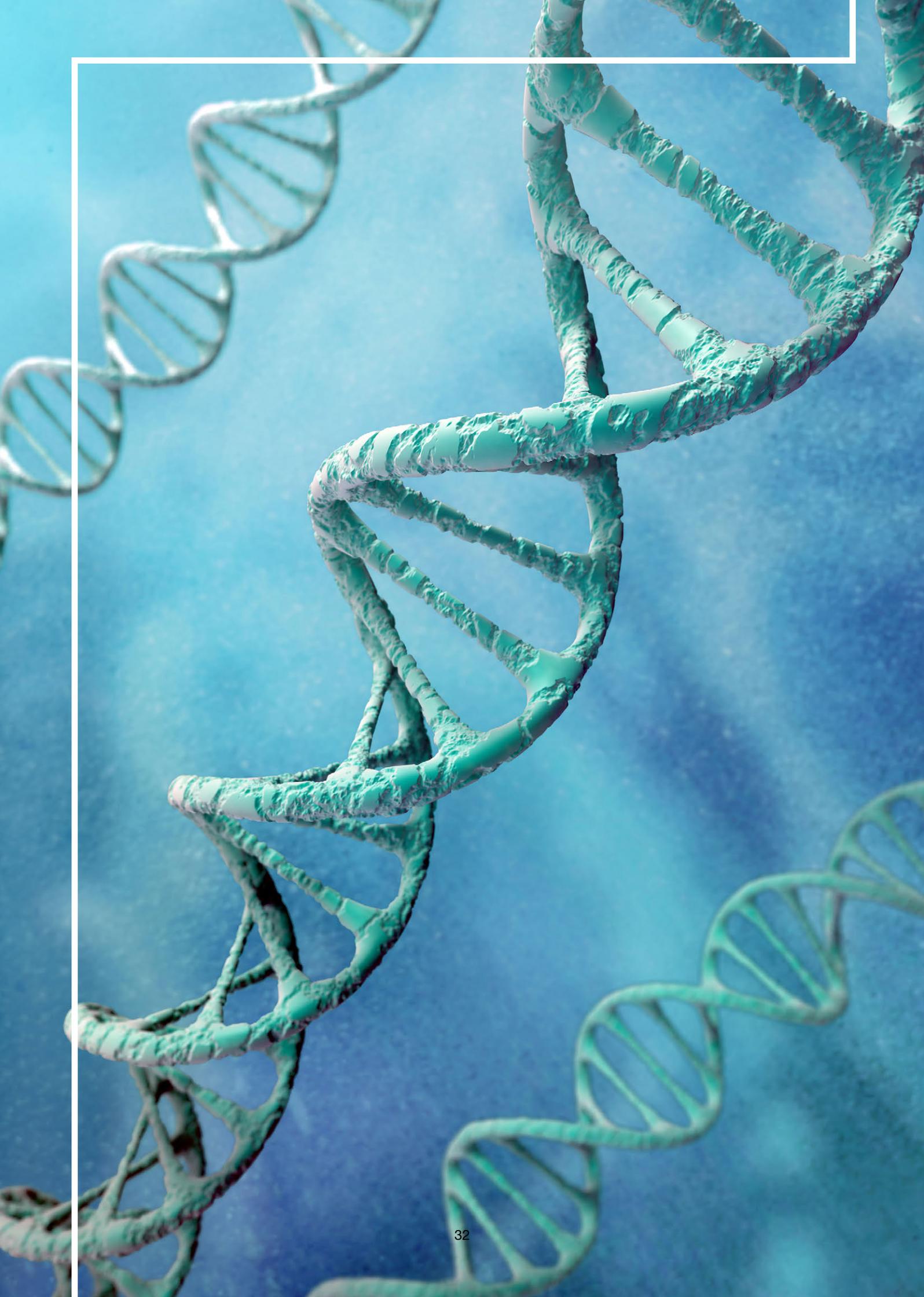
Case study: Collaborating across UKHSA - COVID vaccine development, procurement and distribution model

The swift action of the Vaccine Taskforce (VTF) and its partners, building on many years of scientific research, enabled the UK to launch the world's first COVID-19 vaccination programme in December 2020, administering almost 120 million doses in the first year. It has saved countless lives and allows us to live with this virus without restrictions.

The continued COVID-19 programme is truly a team effort, as vaccines are continually updated as the virus continues to evolve. UKHSA epidemiological expertise on virus transmission and evolution is key. The UKHSA COVID-19 Vaccine Unit (CVU, previously part of the VTF), UKHSA Vaccines and Countermeasures Response (VCR) and the NHS in all 4 nations succeeded in procuring and enabling the deployment of safe and effective vaccines at unprecedented speed, thanks to close collaboration across UKHSA and with the entire health system.

The CVU has access to vaccines from multiple developers, giving resilience in a rapidly changing market. The advice of the JCVI is informed by market engagement, evidence on immune responses provided by UKHSA's Vaccine Development and Evaluation Centre, and the rapid real-world effectiveness data generated by the Clinical and Public Health Group.

In line with JCVI advice, the CVU ensures that adequate doses are available for all eligible cohorts at the right time, with additional surge supply. The VCR stores and then distributes vaccines to NHS hubs in all 4 nations, the Crown Dependencies and Overseas Territories. Our clinical and public health teams provided the training materials and guidance for healthcare practitioners and non-clinical vaccinators to administer the vaccines safely, as well as posters and leaflets for patients.



Respond – Save lives and reduce harm through effective health security response

Strategic priority 3: Reduce the impact of infectious diseases and antimicrobial resistance

UKHSA takes action to minimise the harmful impact of infectious diseases, drawing on learning from our previous health protection responses, including to COVID-19. We do this through harnessing our science and research, our diagnostic services, our data, our clinical expertise, our knowledge of population groups and settings, our expertise in vaccines and our operational capabilities. We prevent future ill health amongst the public and achieve more equitable outcomes, protecting both local and national economies, and easing pressure on the NHS, local authorities and other public services.

We have 3 specific areas of focus under this priority: COVID-19; antimicrobial resistance (AMR) and progressing WHO disease elimination goals.

COVID-19 contributed to over 2,000 deaths in England during March 2023 and its ongoing global circulation continues to present a risk of new, more harmful, variants. We will maintain our work with partners to deliver a proportionate response. Whilst remaining vigilant to COVID-19 and new variants, we are moving towards integrating our work on COVID-19 into our wider infectious disease approach, combining the best of new and historic learning.

Inappropriate or excessive use of antimicrobials allows pathogens to develop antimicrobial resistance. This makes antimicrobials less effective at treating infectious diseases and increasing the risk of serious health outcomes to previously treatable infections. The WHO has identified AMR as one of the top 10 global public health threats to human health⁹. There were just under 5 million deaths worldwide associated with bacterial AMR in 2019¹⁰, and this figure could double by 2050¹¹. We will work with global partners towards a world in which antimicrobial resistance is effectively contained, controlled and mitigated by 2040, supporting the work of the UK Special Envoy on AMR. Acting now will reduce direct harm to health from AMR and allow us to continue to have confidence in antimicrobials for the treatment of infection.

Hepatitis C, Hepatitis B, human immunodeficiency virus (HIV) and tuberculosis (TB) have serious public health impacts, and disproportionately impact certain groups, resulting in significant inequalities in outcomes. We want to deliver on the UK government's commitment to the WHO elimination goals¹² and utilise the potential of recent scientific advances in prevention and treatment to reduce the harm caused by these pathogens.

What UKHSA will achieve

Reducing the impact of COVID-19:

- **protection for the population from COVID-19** through highly targeted testing to protect high-risk individuals and settings (with responsibility for anti-viral testing transitioning to NHS England in the business year 2023 to 24); supporting the COVID-19 vaccination programme; surveillance to understand prevalence, new variants and the impact of treatments and vaccines; and proportionate preparedness against a significant or dangerous new COVID-19 variant
- **more equitable health outcomes** by targeting support where most needed, based on our surveillance and analysis of the impact of incidents and outbreaks on different groups and communities

Reducing the impact of antimicrobial resistance:

- **work alongside DHSC and the devolved governments to develop the next UK 5-year national AMR action plan** and use it to drive coordinated efforts nationally and internationally to reduce the burden of AMR via a cross-sectoral One Health approach
- **improved laboratory diagnostics for AMR infections**, using a range of scientific methods to test bacterial responses to antimicrobials
- **a development and evaluation pipeline to develop new ways to tackle AMR** and improve the evidence base, providing the information needed to drive new, improved interventions, nationally and internationally
- **strengthened international networks tackling AMR**. UKHSA will continue to work closely with global health organisations for example WHO and individual countries to strengthen national and global AMR surveillance, guidance, policy and detection of emerging threats

Progressing disease elimination targets:

- **enhanced evidence base, surveillance and evaluation of public health interventions on blood-borne viruses** (Hepatitis B and C, and HIV) to support services critical to reducing new infections and preventing avoidable illness and deaths
- **improved understanding of acquisition, transmission and reinfection of new blood-borne virus infections**, including barriers to testing, treatment and retention in care to help us and system partners identify and respond to outbreaks, and optimise initiatives that reduce transmission
- **reduced health inequalities associated with blood-borne viruses and TB** through improved identification of and reach to undiagnosed and under-engaged populations, drawing on our surveillance data and behavioural science expertise to inform NHS testing and treatment initiatives
- **sustained progress towards the WHO elimination targets for TB**, delivering UKHSA contributions to the control of TB, working closely with the NHS

Genomics:

- **strengthened genomics capabilities to support improved responses to infectious diseases** through rapid identification of pathogens, improving understanding of patterns of transmission and informing decisions about interventions, the development of diagnostics, assessments of vaccine effectiveness and new vaccine development

Case study: Leading the UK response to an international outbreak – mpox 2022

Mpox is a viral infection, previously diagnosed infrequently in the UK as a rare, imported infection. 2022 brought an emergence of widespread community transmission in the UK, and many other countries worldwide, of an initially unidentified, apparently novel sexually transmitted, infection. UKHSA identified these non-travel associated cases as mpox and notified WHO and other European countries, sharing investigations and technical briefings to support the wider understanding of this new pattern of epidemiology and rapid international spread.

We established an incident management team and a cross-agency oversight group involving local authorities, NHS England, clinical experts, advocacy groups for those most affected, community partners and relevant colleagues across the devolved governments. UKHSA increased laboratory diagnostic capacity by 400%, providing urgent advice including on clinical case management and community transmission control. Regional health protection teams investigated and managed communications to potential and identified cases and contacts. UKHSA led policy advice for updated regulations to ensure suspected and confirmed cases were formally reported, undertook urgent research with academic partners and developed a research strategy to address knowledge gaps.

Using our insights, evidence demonstrated that most cases were transmitted within sexual networks and affected gay, bisexual and other men who have sex with men. Therefore, we collaborated with the British Association of Sexual Health and HIV (BASHH) and other key stakeholders on a joint action plan to ensure coordinated, timely messaging to the public and media, being careful to avoid stigmatisation.

Together with JCVI, UKHSA examined the potential role for vaccination and published the first vaccine strategy to control the outbreak. UKHSA used existing smallpox vaccine stock and procured further doses to enable the vaccination of thousands of those most at risk of mpox to prevent further cases and trialled new antivirals to treat severe infections appropriately.

Strategic priority 4: Protect health from threats in the environment

Exposure to environmental hazards, including chemicals, radiation, adverse weather and natural disasters results in significant ill-health and loss of life, as well as impacts on the economy and wider society. There were estimated to be almost 3,000 excess deaths during heatwaves in England in 2022¹³. Meanwhile, air pollution contributes to up to 43,000 deaths in the UK each year and causes a range of long-term conditions, with many deprived communities disproportionately affected¹⁴.

We will provide scientific expertise, advice and guidance to policy makers to protect health from these threats. We will increase public and cross-government understanding of evidence-based interventions to protect health from hazards such as heat waves and flooding. We will monitor the impact of climate change on environmental hazards.

We will increase our capabilities to protect the UK from the health effects of chemical, radiological and nuclear incidents of any scale. Such incidents endanger the public and first responders and can have significant negative effects on healthcare and the wider economy.

We will continue to work with industry, academia and our international partners on a range of chemical, radiological, nuclear and environmental hazards to better understand risk and reduce harm.

What UKHSA will achieve:

- **improved UKHSA planning and preparedness**, including greater capacity and capabilities to mount an effective response to chemical, radiological and nuclear incidents, minimising risks to health security
- **enhanced cross-system capabilities** for responding to chemical, radiological and nuclear incidents, built in collaboration with partners. We will bolster UKHSA's team of highly-specialist experts in fields such as toxicology, radiation protection and environmental monitoring, and strengthen knowledge and expertise across UKHSA to support the wider system
- **clear public health leadership across chemical, radiological and nuclear risks** and input to policy development. This includes UKHSA's contribution to the National Security Risk Assessment, and our direct input to cross-government responses where there is a health security element, domestically and internationally
- **delivery of the Adverse Weather and Health Plan** including updating adverse weather guidance, developing a supporting evidence document, implementing a new alert system for adverse weather events and providing specialist support and advice to partners and the public
- **a more developed evidence base on the health impacts of outdoor and indoor air quality**, with a greater understanding of the health impacts on different groups and communities, and effective health interventions to address these, working closely with the Office for Health Improvement and Disparities (OHID)

Build – Save lives and reduce harm through effective health security response

Strategic priority 5: Improve action on public health through data and insight

Data is an essential component of effective public health action. Data underpins our ability to respond and make evidence-based decisions. There will always be health security threats to monitor and understand, particularly with the emergence of new diseases and re-emerging diseases, the impact of climate change and a mobile global and animal population.

The response to the COVID-19 pandemic highlighted the value of accessible, relevant, and real-time data to support policy development and a public health response. UKHSA will continue to develop and optimise our data and surveillance infrastructure and capabilities to keep ahead of the next health security threats and prevent them where possible. We will identify the burden of health security threats across all population groups to prevent and minimise the impact these threats have on health, society, public services and the economy, locally and globally.

Our vision is to derive the greatest public health value out of the data we hold, for example from our genomic sequencing, working at all times within legal and ethical frameworks. This will enable the most effective health protection response, inform policy and improve population health outcomes in an equitable manner. UKHSA will be a thought leader around the improved and increased use of data to protect health.

What UKHSA will achieve:

- **lead a data transformation**, as a key contributor to the health data and analysis landscape, by developing a new modern enterprise data and analytics platform for UKHSA and simplifying and rationalising our legacy data environment. This will enable us to make high-quality data accessible at scale and in a timely manner and improve our understanding of people and places at most risk from external health hazards
- **improved decision-making through reduced ‘data latency’**, ensuring insights can be acted upon quickly. This will enable the efficient, effective and more equitable response to health threats. We will create systems and a culture where clinicians, scientists, analysts and policy makers work together to prevent time lag between data collection, analysis and synthesis
- **a data culture change** in UKHSA, through a single agency-wide data strategy and information risk programme evaluating UKHSA’s maturity in its use of data, enhancing our information compliance and supporting wider ambitions to improve the coherence of the health statistics and analysis landscape. We will develop our talent, building and rewarding skills and keeping pace with innovation in data engineering, epidemiology, data science, modelling, health economics

- **greater public health impact from improved insight development**, using cutting edge tools, methods and advanced analytics to help find and disseminate actionable insights in our data. We will transform UKHSA's development and use of intelligence through new situational awareness and assessment tools, improving our confidence in anticipating future scenarios we face and enabling health security operations and decision-making for regional health teams and UKHSA's global health programmes. We will be transparent and open with our data wherever we can, and develop innovative tools and skills to enable and inform policy and interventions for more equitable health outcomes
- **improved surveillance locally** by building our capabilities and ways of working to position UKHSA to detect and respond to new and existing health security threats. This includes further embedding data produced from genomic sequencing in our surveillance and outbreak response activities and supporting phased establishment of a cross-government National Biosurveillance Network to detect biological threats at home and abroad
- **enhanced global surveillance activities**, through seeking out new opportunities and collaborating on the International Pathogen Surveillance Network, WHO Hub for Pandemic and Epidemic Intelligence, Global Health Security Initiative and the Global Health Security Agenda
- **strengthened partnerships across data, analytics and surveillance**. As part of the health family, we will seek out and establish partnerships with the NHS, academia, industry and the voluntary sector to deliver solutions for public health threats. The timely and safe sharing of public health surveillance data, statistics and insights enables better preparedness and response, locally and globally
- **greater understanding of the risks of health hazards to different population groups**, by gathering evidence to inform interventions such as vaccinations, health campaigns and health protection responses. Improving our understanding of health hazards affecting specific populations and places will enable effective use of resources and reduce inequalities in health outcomes
- **strengthened cyber safety systems** through a cyber transformation project. This will assure our ability to collaborate across health services and wider government and secure the capabilities we rely on to protect the public from health security threats

Case study: Using our genomics capabilities to detect, investigate and stop an international salmonella outbreak linked to chocolate products

In February 2022, a cluster of cases of salmonella was identified by UKHSA using routine whole genome sequencing (WGS). The discovery was worrying; most cases were in children under the age of 5, who are more vulnerable to severe outcomes from salmonellosis, and the number of reports escalated rapidly.

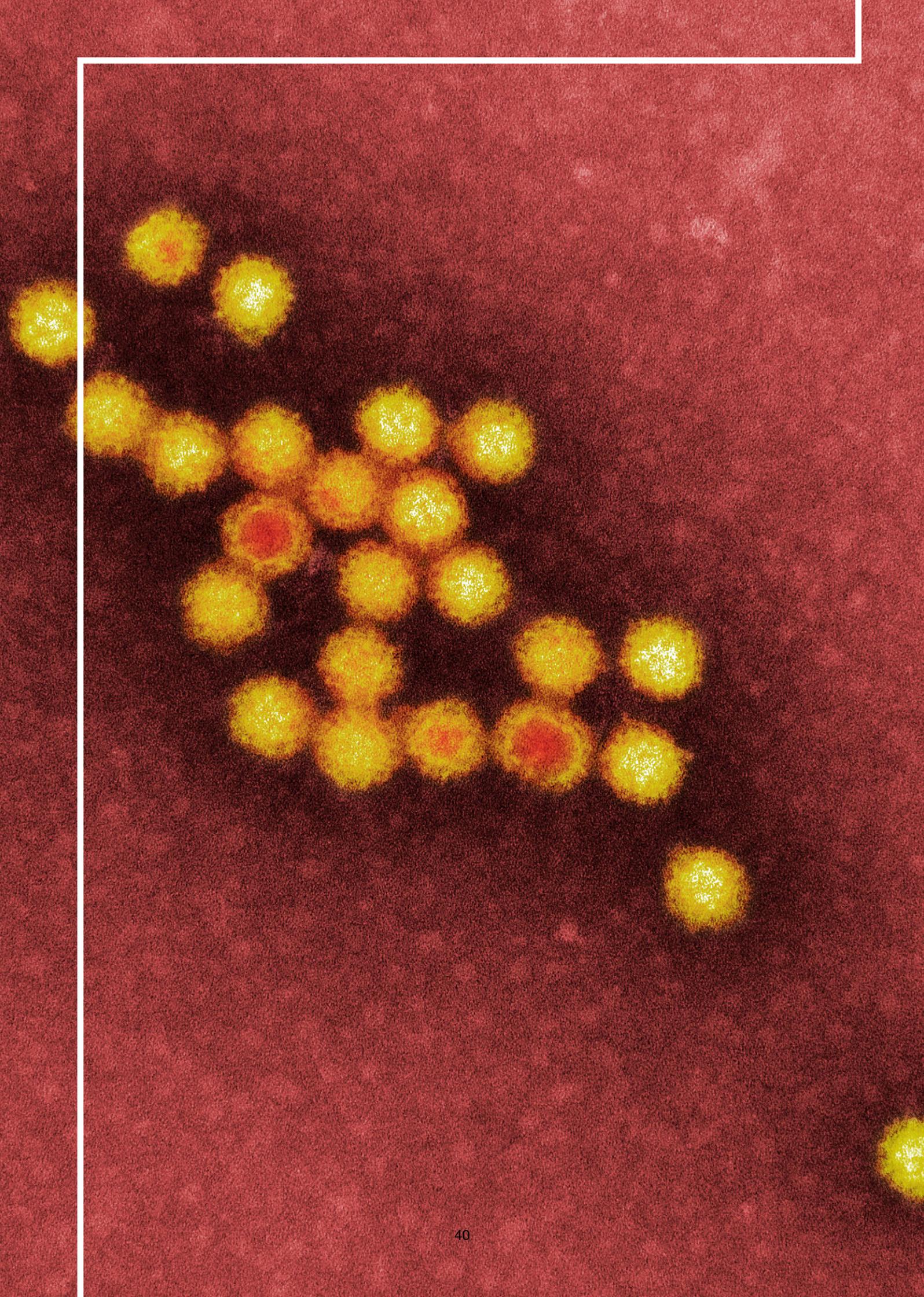
UKHSA initiated and led a UK-wide multi-agency, multi-disciplinary Incident Management Team to investigate. We notified the international community of the outbreak in the UK and shared the details of the salmonella outbreak strain for comparison. Matching cases were quickly detected in at least 4 other countries, confirming an international outbreak.

Analysis of the data gathered during the investigation, including interviews with the families of the cases, indicated a strong association between consumption of Kinder-branded chocolate products and cases of salmonella infection¹⁵. UKHSA worked closely with public health and food standards agencies in the UK and Republic of Ireland to link the cases to a production facility in Belgium. The chocolate products were first recalled in the UK and Ireland, and UKHSA worked alongside the Food Standards Agency (FSA) to communicate this to the public. UKHSA provided advice for consumers on symptoms of infection, selfcare and when to access healthcare services.

The UKHSA data and analysis, and discovery of the association with Kinder-branded products, were used by other European countries in their epidemiological investigations and were key to informing the multi-country response.

This was the largest and most widely disseminated chocolate-related outbreak on record with 455 cases identified in 17 countries across the world, 113 of which were reported in the UK. Our ability to undertake this high-resolution typing of salmonella in the UK using WGS as part of routine surveillance enabled rapid detection and resolution of this outbreak, critically in the run-up to Easter, when chocolate consumption would increase considerably, thereby preventing further cases of a serious disease.

The UKHSA response to this outbreak shows how we can use our capabilities of genomic sequencing and proactive robust surveillance to work with partners. The result is the delivery of effective national and international outbreak response and rapid interventions to ensure outbreaks are stopped quickly and to prevent the spread of disease.



Strategic priority 6: Develop UKHSA as a high-performing agency

UKHSA's aim is to provide high quality and trusted, scientific, and operational leadership domestically and internationally for health security hazards. Being an effective and efficient organisation is key to achieving high-performance success. To this end, we will invest in 4 key areas: our people and culture; data, science and research; operational excellence; and partnerships and relationships.

People and culture are key, as our people are our greatest asset. We want to build a skilled and flexible workforce ready to prepare for and respond to the health security challenges that lie ahead. To do this, we endeavour to attract, develop and retain high calibre people cross all our fields of expertise by providing an ambitious and supportive environment.

Data, science and research underpins all of UKHSA's work, ensuring our interventions are evidence-based and that our institutional knowledge is managed well and shared in a timely manner wherever possible.

Operational excellence is essential to achieving our priorities in the most efficient and effective way, providing value for money.

We know we cannot accomplish our ambitious priorities alone. Our strong partnerships and relationships across health and other sectors, sharing information and supporting innovation, increase the impact of our contributions and further strengthen the wider systems in which we work.

What UKHSA will achieve:

People and culture

- **we will invest in our people, facilities, technology, scientific, commercial capability and in our relationships with stakeholders**, as well as build a supportive and ambitious work culture. Our science and data capabilities and expertise will underpin all of our work and, as outlined in UKHSA's science strategy, we will be making the most of the people, facilities and technology at our disposal to further advance our ambitions for health security
- **we will attract, recruit, develop and retain great people**, with a blend of strengths and experience and we will work hard to make UKHSA a place where everyone is proud to work. Our people are our strongest asset, and we will ensure they are empowered to make a difference, feel valued, build their careers and act as advocates for UKHSA's work
- **we are committed to attracting a workforce that reflects the diversity of the UK population**. This will ensure UKHSA is better informed, makes better decisions and is better equipped to address the diverse needs of the population we serve, ultimately achieving more equitable health outcomes

Data, science and research

- **we will invest in our laboratories and science estate**, maintaining current infrastructure and develop new, scalable capabilities to respond to current and future threats and to deliver on the UKHSA Science Strategy
- **we will develop our data platforms and expertise** to generate public health insights and secure better health outcomes, working with partners from academia and industry to support innovation and best practice
- **we will build strong research consortia to develop the evidence base to tackle health security threats**, working with the leading scientific experts nationally and internationally to secure the best health outcomes and building on the success of the NIHR Health Protection Research Units

Operational excellence

- **we will improve the scalability of health protection operations and response**, including through better automation, self-service and digital offers and a cutting-edge case incident management system for infection prevention. These advancements will also reduce the time spent on routine administration freeing up resources to better support UKHSA's core role
- **we will develop innovative commercial approaches** to deliver UKHSA's strategic goals, learning lessons from the COVID-19 pandemic to combine flexibility with value for money
- **we will ensure our communications are effective and powerful**, to protect the public's health and enhance UKHSA's reputation as a trusted source of advice and response. UKHSA will be transparent and accessible and work to publish our science, advice and guidance to achieve health security aims. We will explain how people and organisations can adopt behaviours and habits that support them to build resilience to infectious disease and other hazards
- **we will establish robust financial management and governance systems** within UKHSA, to optimise the spend of taxpayer funds, prioritise best value for money, deliver safe, effective and responsive clinical services, and ensure transparency to the public
- **we will ensure sustainable development in all of UKHSA's activities** by implementing the UKHSA sustainable development management plan and acting in accordance with the UKHSA's environmental policy. These activities will support our commitment to be operationally net zero by 2035

Partnerships and relationships

- **we will enhance our collaboration with industry, academia, scientific expert groups and the voluntary sector and build on our critical relationships with the NHS and local government** to deliver better health outcomes across the range of health security hazards
- **we will strengthen business development partnerships** to help drive innovation and generate income from our capabilities and assets in support of UKHSA's core mission

- **we will maximise UKHSA's international contribution as leaders in health security**, in addition to supporting the delivery of programmes alongside the devolved administrations of Wales, Scotland and Northern Ireland, WHO and other international partners

Case study: Supporting worldwide efforts to address health disparities through sharing our experience of health security in prisons

Prisons and places of detention are communal with a dynamic staffing pool that moves between the community and the prison. This creates settings where outbreaks and transmission of infectious disease are difficult to manage, with an increased risk of importation, and exportation, of infection from and to the community. The infrastructure of these settings means that their populations are more likely to be impacted by other hazards to health, such as extreme heat. Providing health security for this population across all 4 nations in the UK is critical to reduce avoidable harm and to improve equity health security outcomes. Supporting international partners to improve infectious disease resilience in prisons will also strengthen global health security.

UKHSA provides advice, guidance and evidence for health security in prisons and places of detention in England and shares this expertise with national and global partners. We support the WHO Health in Prisons Programme in the development of surveillance, educational and guidance tools and to support knowledge exchange in this area in the aim of improving the health of people in prisons and places of detention. This includes co-organising, and hosting, an international conference on increasing the resilience of prisons and places of detention to infectious diseases.

Over 240 attendees from 30 countries joined the 2-day conference (with over 160 in person), to share learning across a range of themes, including preparedness, response, and system connectedness. This included representation from many stakeholders in prison health, including NHSE, HM Prison and Probation Service, non-governmental organisations and former prisoners. Key-note speakers included our Chief Executive, the Chief Medical Officer and the WHO Regional Director for Europe. A set of principles for addressing health security threats in prisons and places of detention was generated from discussion at the conference. These principles will be published by WHO and available to all member states.

Providing opportunities to build partnership and agree shared principles has supported change which will better enable the targeting of people and places most at risk of hazards to health in order to achieve more equitable outcomes for all.

Who we are and how we work

Our structure

UKHSA is an executive agency of DHSC, providing specialist and expert policy advice as part of delivering the Secretary of State for Health and Social Care's statutory duty to protect the nation's health, and working closely with the Chief Medical Officer. The agency is accountable to the public through ministers and Parliament. UKHSA's framework document sets out the governance framework within which UKHSA and DHSC operate¹⁶.

UKHSA is led by our Chief Executive Officer, supported by a senior leadership team and an advisory board. The advisory board, made up of non-executive members, provides advice, challenge and support to the Chief Executive and executive team on the running of UKHSA, assuring the effectiveness of UKHSA's corporate governance arrangements.

Our organisation is structured into several groups, each of which contributes to the delivery of our mission and goals.

UKHSA Our structure



Our people

UKHSA's achievements are made possible by our talented and hard-working staff. We draw from the strength of our multi-disciplinary workforce – a unique and varied range of capabilities and strengths. We employ just over 5,300 full-time equivalent members of staff, with experts across several public health, clinical, data and scientific disciplines, as well as having strengths in delivery, communications, and cross-cutting functions. Our staff include microbiologists, epidemiologists, immunologists, toxicologists, data scientists, health economists, logisticians, commercial specialists, policy advisors and many other specialties.

We strive to be an outstanding place to work, developing clear career pathways and continuous development for our staff to ensure we attract and retain talent and the skills we need to ensure health security.

We will continue to grow our diverse workforce of individuals from an array of different backgrounds, aiming to reflect the society we serve, attracting people to work for us based on merit and potential as well as technical, scientific, analytical and research brilliance. Attracting colleagues with a broad range of perspectives will enable us to solve problems in different ways to meet the demands of the modern and rapidly changing world, with different tools and talent, as we focus on how we ensure we can prepare, respond and build for the future.

We want our people to be proud, purposeful and able to achieve their potential, delivering effectively and efficiently.

Our values

Living our values and embedding them into everything we do enables UKHSA to deliver on our strategy and our ambition.

- we are **impactful** – mission driven, delivering better health outcomes for individuals and society whilst ensuring value for money
- we are **insightful** – we connect the right technology, data, information, and people through collaboration and partnership to create insight and make evidence-based decisions
- we are **inclusive** – we empower employees to be themselves and do their best, valuing them as our greatest asset and investing in developing the next generation of world-class skills

Our values help us to deliver our mission; feel pride in our agency; have confidence in supporting each other and enable us to work together towards our vision and shaping our future. They help us set direction, engage our people and deliver results. We want to enable everyone who works for UKHSA to thrive. We will work towards achieving our vision and delivering on our mission by embedding our values through developing our culture, building our capability and ensuring opportunity and equity for our people and communities.

Diversity, inclusion and the freedom to speak up are critical to our capability. We promote inclusive behaviours and use feedback from and data about our people to drive workplace improvements.

Our partnerships

Health security is complex and multidimensional, affecting many parts of everyday life. Many organisations play an important role in protecting the public's health. UKHSA plays a crucial role in leading on preparedness and response but cannot deliver its mission alone. We work across government, and in partnership with the devolved governments, local government, the NHS and wider health system, academia and industry to make sure we have the greatest impact possible.

While UKHSA has some UK-wide responsibilities, health protection in the UK is largely a devolved issue, meaning responsibility for the majority of health protection matters in Scotland, Wales and Northern Ireland rests with the devolved governments. UKHSA is responsible for the corresponding issues in England and works in partnership with the devolved governments across a wide range of issues, fostering collaboration and information sharing on common challenges, and recognising the cross-border nature of health threats. UKHSA also has a remit for the whole of the UK for some reserved matters, such as preparing for and responding to the effects of radiation and nuclear hazards on public health. UKHSA also supports the public health agencies of the devolved governments with regards to chemical hazards.

Global partnerships: UKHSA works with global partners to strengthen global health security and protect the health of the UK.



Global Initiatives

for example
100 days mission

With partner countries

for example
International Health
Regulation
Strengthening Project

Deploying our expertise

for example
UK Public Health
Rapid Support Team

National partnerships: UKHSA is England's lead on health security, advises on a number of expert scientific committees, and works with a range of partners to protect health including:



UK government departments
to support better policy and action, informed by UKHSA's scientific expertise and insight for example DEFRA on the harm to health from air pollution

Devolved Governments
on UK-wide issues such as tackling anti-microbial resistance and pandemic preparedness

Academia
to support innovative science to better understand hazards to health and develop practical ways to prevent and control them

Industry
to support innovation in addressing hazards to health, for example our work with pharmaceutical companies on vaccine research

Professional bodies
to share expertise and experience, learn from colleagues and support our staff



Local partnerships: UKHSA provides leadership, coordination, expertise and support for preparedness and response at a regional and sub-regional level. UKHSA's regional teams respond to thousands of cases and incidents each year, as well as proactively working with partners to protect the public. This includes:



NHS and community partners
to deliver interventions and case/contact management, provide advice on infectious disease and support ongoing and emergency response for example, working with prisons and sexual health services

Social care providers
to address infectious disease outbreaks and control, supporting the reduction of hospital admissions

Local authorities
to provide advice and intelligence to support local public health teams and collaborate on responses for example, on health protection at the border

Integrated Care Systems
to support local planning and preparation for health security hazards

Local Resilience Fora
to provide data and expertise to inform development of local emergency plans and responses

Commercial partnerships: A significant portion of UKHSA's budget is delivered through contracts and relationships with partners across the private, not-for-profit and public sectors. This gives us access to far greater capability, resources and innovation, enabling us to respond at pace and scale to the full range of health security challenges. We will continue to strengthen our commercial partnerships to deliver UKHSA's strategic priorities.

The public: UKHSA works with individuals and communities to protect them from threats to their health. Our public health campaigns raise awareness and provide up-to-date information to the public, to enable them to make informed decisions. Our local response teams work directly with people impacted by health threats. When responding to outbreaks, we work with communities who are most at risk, and their local leaders and public health responders, to ensure our messaging is appropriate and targeted.

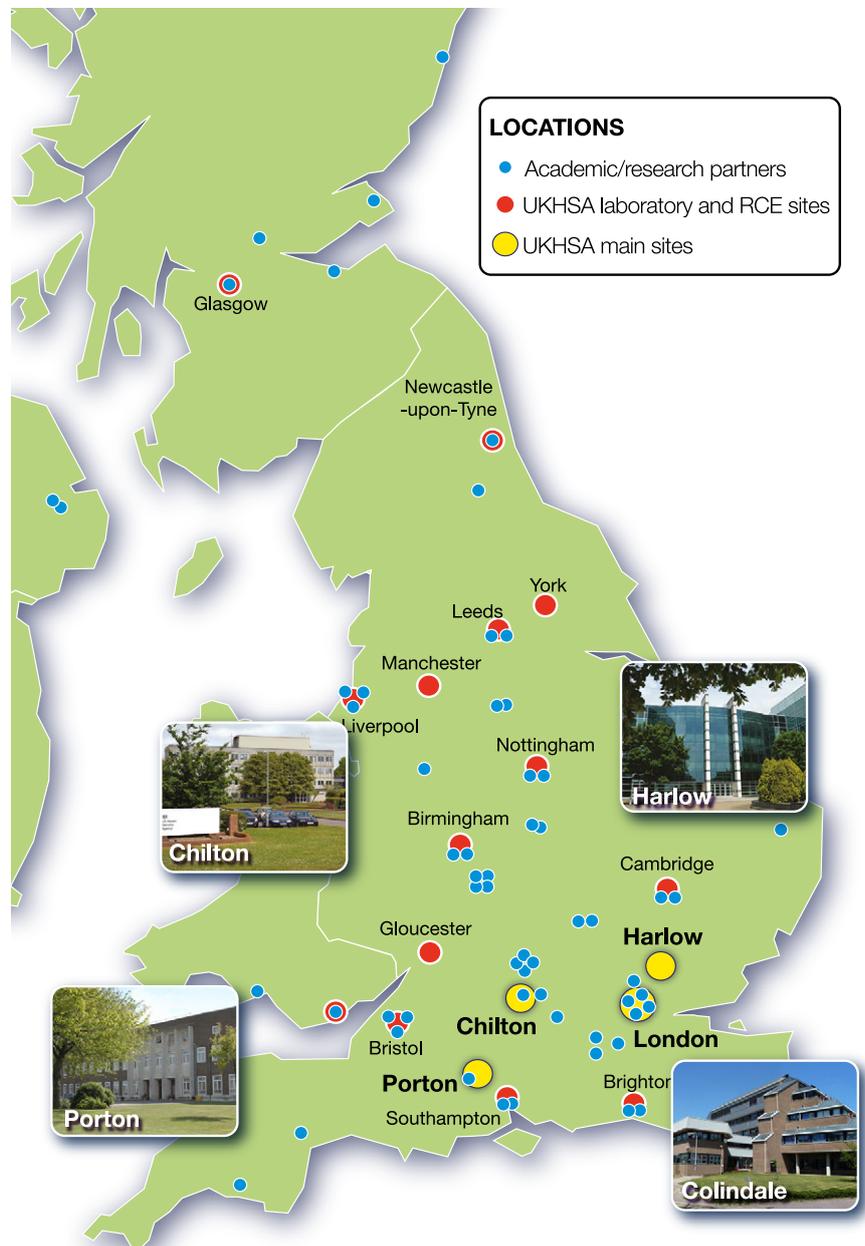
Our local, national and global footprint

Our headquarters are in London, and we have laboratories and science campuses around the country, as well as 9 regionally based teams.

Our regional teams perform a crucial role, taking a strategic view of the wider local public health system in partnership with local authorities and the NHS; and providing local health protection services, expertise, response and advice to local authorities, the local NHS and other partners. This includes local disease surveillance, investigating and managing health protection incidents and outbreaks, and providing specialist support to prevent and reduce the effect of infectious diseases, chemicals and radiation.

Our network of scientific campuses include Colindale in London, Chilton in Oxfordshire, Porton Down in Wiltshire, Public Health microbiology laboratories and specialist radiation and chemicals teams across the country. These form an ecosystem that ensures our work is based on the best scientific evidence and makes an important contribution to life sciences and the ambitions for the UK to be a leader in science and innovation.

We also have public health experts working globally including working with the Foreign, Commonwealth and Development Office and providing support to the WHO. At present, we have staff based in Ethiopia, Nigeria, Pakistan and Zambia as well as a presence in the UK Overseas Territories, strengthening public health leadership and compliance with the International Health Regulations (2005), building technical capability and developing sustainable public health systems. We also regularly deploy staff to health emergencies around the world through the UK Public Health Rapid Support Team.



Case study: Work of UKHSA's regional teams – Measles in London

Measles virus is highly infectious, causing an infection spread by respiratory transmission. Most of those infected will recover quickly, but the virus can cause complications leading to hospital admission and very rarely a serious brain infection. The MMR vaccine provides an effective vaccine, with 2 doses giving 99% protection. Unvaccinated individuals and those who have had only one dose of vaccine remain vulnerable to the infection.

London has a lower MMR vaccine uptake rate despite the efforts of all those involved in the immunisation programme. Uptake fell further during the pandemic and there are now significant numbers of children and young adults who are not fully protected. Since the start of 2023, measles cases are increasing in London, with a significant number of individuals needing hospital care.

The UKHSA London regional team is actively addressing this situation, working closely with UKHSA microbiologists, NHSE colleagues including regional and local teams, Integrated Care Boards and primary care, and local authorities. UKHSA clinicians investigate cases to identify the source and manage the contacts, which reduces harm by minimising further transmission.

UKHSA London also promotes vaccine uptake. The regional team is supporting the NHS with a proactive summer 2023 MMR and polio immunisation catch-up campaign for all 1 to 9 year-olds. The London team is working closely with the national UKHSA teams to review and develop a community-based approach to increase vaccination uptake across the nation, in order to prevent widespread transmission of the infection.

Implementing this strategic plan

UKHSA's 3-year strategic plan sets out our ambition and vision for what we aim to achieve over the 2023 to 2026 period.

Further detail on our specific deliverables within each year of the strategy can be found in UKHSA's annual business plans.

We will monitor and track our progress towards achieving the priorities set out in this strategic plan and the deliverables set out in our business plans. This will be done via monthly reporting to UKHSA's executive team and quarterly reporting to our sponsor department, DHSC. We will also publish an annual report and accounts to outline our progress and achievements against our strategic priorities across the year.

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About the UK Health Security Agency

UK Health Security Agency (UKHSA) prevents, prepares for and responds to infectious diseases and environmental, radiological and chemical hazards, to keep all our communities safe, save lives and protect livelihoods.

We provide scientific and operational leadership, working with local, national and international partners to protect the public's health and build the nation's health security capability.

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