

Introduction

Health protection aims to protect individuals, communities and populations from infectious disease and environmental hazards through expert advice and effective collaboration. There are many aspects of health protection including:

- Infection prevention and control (IPC) arrangements within health and social care settings.
- Tackling antimicrobial resistance.
- Reducing vaccine-preventable diseases through immunisation.
- Assurance of national screening programmes.
- Emergency preparedness, resilience and response (EPRR) across all hazards.

Infectious diseases and environmental hazards contribute to ill health and mortality in Derby and Derbyshire. We know that some communities are disproportionately impacted, such as older people, and those living in more deprived communities. Having an effective local health protection system is key to improving health and wellbeing and reducing inequalities. It is also important for protecting the local economy and NHS. For example, effective infection prevention and control measures can reduce the spread of infection through care home settings, protecting vulnerable residents from hospital admission.

This strategy sets out our health protection priorities in Derby and Derbyshire and clarifies and drives the work of the Health Protection Board. It also sets out how we are going to ensure delivery the strategy and measure success.

Strategy Development

This strategy was developed in response to the formation of the Derby and Derbyshire Integrated Care Strategy and wishes of the local Health Protection Board. It has been developed with partners across Derby and Derbyshire including colleagues from Derby City and Derbyshire County Council Public Health teams, the NHS Derby and Derbyshire Integrated Care Board (ICB), UK Health Security Agency (UKHSA), and Environmental Health and Emergency Planning colleagues. Feedback from the Health Protection Board has been key to the development. The strategy has been informed by local and national strategy and local data on infectious disease and environmental hazards.

Audience

- System partners including local authorities, local authority public health teams, the United Kingdom Health Security Agency (UKHSA) and the NHS have specific mandated health protection responsibilities (as outlined on page 21).
- However, the COVID-19 pandemic emphasised the importance of collaboration across the health protection system and beyond including the importance of harnessing our community assets. The pandemic also showed how existing health inequalities impact on health protection outcomes and the need for strong links with health improvement work.
- We therefore believe that health protection is a **system wide responsibility**, and that health protection is everybody's business everyone has a part to play. Examples include:

- Residents' response to the COVID-19 pandemic through increased infection prevention and control measures such as wearing masks and increased hand washing.
- Voluntary, community and social enterprise sector support to local residents during the COVID-19 pandemic such as the Community Champions Scheme, where the latest information, updates and advice about COVID-19 and vaccination were shared amongst communities.
- Local Authority Environmental Health teams' work in the private rented sector, protecting residents from risk to health from poor quality housing.
- Primary care in their delivery of vaccination programmes.
- We can build on lessons learned from the COVID-19 pandemic as a whole system to respond to current, and prepare for future, health protection hazards.

Links to other strategies

- Several other strategies in the local health and care system have important links to this Health Protection Strategy.
- The Derby and Derbyshire Integrated Care Strategy 2023. There is an opportunity to link health protection priorities and actions to the three key areas of focus in the Integrated Care Strategy. The three key areas of focus are:
 - **Start Well**: To improve outcomes and reduce inequalities in health, social, emotional, and physical development of children in the early years (0-5) via school readiness.
 - Stay well: To improve prevention and early intervention of the three main clinical causes of ill health and early death in the JUCD population - circulatory disease, respiratory disease, and cancer.
 - Age well/die well: To enable older people to live healthy, independent lives at their normal place of residence for as long as possible. Integrated and strength-based services will prioritise health and wellbeing, help people in a crisis to remain at home where possible, and maximise a return to independence following escalations.
 - Details of how this Health Protection Strategy contributes to delivering the key areas of focus are given in this document.
- This strategy also aligns with the vision and objectives of the Derby City Council Health and Wellbeing Strategy and Derbyshire County Council Health and Wellbeing Strategy. Aspects particularly relevant to health protection in these strategies include:
 - o A focus on air quality and vulnerable populations in Derbyshire.
 - A focus on communities and the wider determinants of health including the environment in Derby City.
- Other key local strategies and reports in the health protection system include:
 - Derbyshire County and Derby City Air Quality Strategy 2020-2030
 (https://democracy.derbyshire.gov.uk/documents/s2722/Item%2012%20Joint%20Air%20Quality%20Strategy.pdf)
 - Derby and Derbyshire Sexual Health Strategy (currently in development)
 - Infection prevention and control (IPC) Needs Assessment
 - Vaccine Inequalities Strategy
- The UKHSA Strategic Plan 2023 to 2026 outlines UKHSA's goals and strategic priorities for the next 3 years.

Vision

Working in partnership we will protect people in Derby and Derbyshire from infectious diseases and environmental hazards and minimise any impact on health.

Objective

Through health protection activities improve health and wellbeing and achieve more equitable outcomes so that all people in Derby and Derbyshire can:

- Start well
- Stay well
- Age well and die well

How are we going to achieve this?



Assure

Across a broad range of Health Protection areas:

- Infection and prevention control/control of infection across the population, including tackling antimicrobial resistance
- Communicable disease control, including TB
- Vaccination and immunisation
- Screening
- Emergency preparedness, resilience, and response (EPRR)
- Environmental hazards including air quality and climate change
- Sexual health

Improve health and wellbeing
Achieve more equitable outcomes



6 areas of focus identified for this Strategy

Enablers: What will ensure the delivery of this strategy?

There are several enablers that will help us to deliver our strategy and achieve our vision. Many of these enablers echo with the enabling functions and approaches outlined in **the Derby and Derbyshire Integrated Care Strategy 2023.**

These enablers themselves (outlined below) require strengthening over the next 5 years to develop the health protection system across Derby and Derbyshire. In addition, this strategy identifies two enablers which require a specific focus over the next 5 years and therefore form two of the six areas of focus for this strategy.

Enablers

Communication and coordination

• Assurance of a coordinated response with strong communication across the health protection system.

Roles and responsibilities

•Clear understanding of system roles and responsibilities across health protection system partners.

Workforce

•Workforce development of both the health protection workforce as well as the wider workforce in health protection knowledge and skills. Making health protection everyone's business.

Data, surveillance and intelligence

- Strengthen systems for the sharing of data, surveillance and intelligence across Derby and Derbyshire.
- •Ensure we have the appropriate technology to collect, store and analyse health protection data.

Governance

•Strong accountability and governance in place.

Joint working

•A system of joint working with all partners in Derby and Derbyshire including the voluntary, community and social enterprise (VCSE) sector and community engagement.

Strengths based approaches

•Use of strength based approaches and community assets.

6 areas of focus: Where are we going to have a specific focus?

Health Protection has a broad scope and core activities and functions will continue to be strengthened over the coming five years. As a local system we will **prevent**, **prepare**, **and respond** to health protection issues and seek **assurance** that these functions are of high quality and respond to local need. In addition, **six areas of focus have been identified – these are high priority areas where we can focus efforts to add value.**

Two of these areas focus on strengthening our enablers and four of these areas focus on what we can do in specific delivery areas of health protection. They are outlined below.

Areas of focus: Enablers

- 1. Ensure we have in place strong communication and coordination between partners across the health protection system
- 2. Develop a clear understanding of roles and responsibilities across health protection system partners

Areas of focus: Delivery

- 3. Strengthen community infection prevention across settings and prioritise proactive control of infection
- 4. Increase vaccination uptake amongst children and adults and reduce vaccine inequalities
- 5. Develop specific consideration and support for risk and vulnerable groups such as migrant groups and care home residents
- 6. Strengthen preparation and response to environmental hazards and emergency events such as pandemics and extreme weather events

Area of focus 1:

Ensure we have in place strong communication and coordination between partners across the health protection system

Why is this important?

- This is a key enabler to ensure a high-quality health protection system. There are multiple
 partners in the system with varying roles and responsibilities and they must work
 collaboratively to carry out their health protection functions. Health Protection is everyone's
 business so we must ensure all partners are able to communicate effectively and work
 together.
- Strong communication and coordination are particularly important due to current changes and developments in the health protection system. These include the formation of the UK Health Security Agency and changes to Section 7a commissioning arrangement for vaccination and screening programmes.
- Links with ICS Strategy: Joint working and communication are identified as key issues that need to be addressed across all three key areas of focus in the ICS Strategy. They are important aspects in providing integrated care and developing the Joined Up Care Derbyshire Integrated Care System.

What do we want to achieve?

- We want to achieve strong and effective communication and coordination between partners in the health protection system. This will ensure that information is shared in a timely way and action is coordinated between partners to achieve the best health protection outcomes possible.
- This applies to both short term work, such as responding to acute outbreaks as well as longer term work such as ensuring oversight of screening programmes.

What are we doing currently? (Example work)

- The Derby and Derbyshire Health Protection Board, chaired by the Derby City Director of Public Health, meets bimonthly to provide updates and share best practice. Assurance of the Derby and Derbyshire health protection system is sought.
- The Derbyshire Resilience Partnership enables coordination of emergency planning in Derby and Derbyshire and provides strategic oversight.
- Use of Resilience Direct, an online secure platform enabling practitioners to collaborate across geographical and organisational boundaries during the preparation, response and recovery phases of an event or emergency. For example, multi-agency emergency plans are stored and assessed via this platform.
- Regular communication between senior leaders in health protection.
- Collaborative working between organisations in response to health protection hazards and outbreaks.

How can we add value and go further? (Strategic actions)

- Develop communication mechanisms beyond the most senior level and improve the cascade of information between and within organisations in a timely way.
- Clarify data and intelligence sharing arrangements between organisations as we continue to recover from the COVID-19 pandemic.

- Harness technology to support communication between and within organisations.
- Ensure connection with existing and developing strategies in health protection e.g., Derby City and Derbyshire County Air Quality Strategy and Sexual Health Strategy. Opportunities for collaboration should be identified.
- Increase awareness and ownership of the health protection agenda e.g., through presentation of this strategy and discussion about others' roles in it.

What will success look like?	Example process and outcome measures
Effective governance arrangements to enable strong communication between health protection partners.	 Appropriate membership, attendance and updates provided at the Health Protection Board from all key partners to ensure accountability. Appropriate and timely escalation of issues to the Health Protection Board from other associated health protection groups and onwards escalation from the Health Protection Board where required. Appropriate membership, attendance, and updates at other associated health protection groups (e.g., IPC implementation group, air quality working group) from all key partners to ensure accountability.
Strong coordination between health protection partners to deliver the health protection agenda.	 - Health Protection Board Action Log with tracking of progress of actions. - Health Protection Board Risk Log with review of ongoing issues and appropriate routes of escalation. - Shared delivery of the Health Protection Strategy with all relevant partners, including the development of action plans. - Connection of the Health Protection Strategy with other relevant strategies
Working in partnership to achieve timely and effective management of acute health protection hazards e.g., during outbreaks and incidents.	- Number and quality (assessed against a framework) of debriefs after outbreaks or incidents, including reflections on communication.

Area of focus 2:

Develop a clear understanding of roles and responsibilities across health protection system partners

Why is this important?

- This is another important enabler to ensure residents of Derby and Derbyshire are protected from infectious disease and environmental hazards. It helps to ensure that the health protection system is efficient and well-coordinated, and partners work together in the best way possible.
- The health protection system in Derby and Derbyshire continues to develop after the COVID-19 pandemic. New organisations have formed, and roles and responsibilities have developed and so it is timely to focus on this enabler.
- Links with ICS Strategy: Organisations working collaboratively to support and protect residents in an integrated way is a key element of the ICS Strategy. Having a clear understanding of the roles and responsibilities of each organisation across the system is key for this.

What do we want to achieve?

- A health protection system where roles and responsibilities are clearly defined and enacted both during business-as-usual activities and during emergency or outbreak responses.
- Additionally, we want to be assured of and support a successful and safe transfer of the
 responsibility (through the transfer of section 7a responsibilities) to commission vaccination
 and screening programme services from NHS England to NHS Derby and Derbyshire
 Integrated Care Board.

What are we doing currently? (Example work)

- Regional work taking place by members of the East Midlands Community of Improvement to develop an assurance framework, an Outbreak Management Plan, and Memorandums of Understandings to define roles and responsibilities from a regional perspective.
- Directors of Public Health regional work looking at approaches to IPC across the East Midlands.
- Proactive work to prepare for the transfer of Section 7a commissioning arrangements including:
 - The development of new governance arrangements in place to oversee vaccination programmes across JUCD in collaboration with the NHSE teams that currently commission services.
 - Upskilling of the ICB team to increase knowledge of wider vaccination programmes.
 - System partners working together for example to develop the measles elimination plan.

How can we add value and go further? (Strategic actions)

- Define and clarify local roles and responsibilities for health protection functions across partners in Derby and Derbyshire.
- Ensure a clear understanding of the skill set and resources needed for a safe, effective, and well-resourced transfer of Section 7a commissioning arrangements to the ICB.

- Ensure oversight of vaccination and screening programmes is appropriately linked to the ICS, and continues to be reported to the Health Protection Board, especially as Section 7a commissioning arrangements change.
- Ensure responsibility and accountability for actions are specified in action/implementation plans developed in response to this strategy.

What will success look like? How will we continue to measure success and track progress?

	Example process and outcome measures
Clearly defined roles and responsibilities of health system partners.	 Roles and responsibilities of partners assigned to action plans and action cards with accurate local system roles detailed. Accountability specified for actions relating to action plans developed in response to this strategy.
Safe and successful transfer of Section 7a commissioning responsibilities.	 Reporting of Section 7a commissioning responsibility transfer to Health Protection Board. Development, review, and updates to the Health Protection Board Risk Register.

Area of focus 3:

Strengthen community infection prevention across settings and prioritise proactive control of infection

Why is this important?

- Infection prevention and control (IPC) measures play a significant role in reducing the spread
 of infectious disease and reducing the risk of outbreaks. Preventing the spread of infectious
 disease has an impact on antibiotic use and helps to reduce antimicrobial resistance.
- Healthcare associated infections (HCAI) alone result in ill health, increased mortality, and increased healthcare costs. It is estimated that the inpatient costs of managing HCAI in the UK each year is £774 millionⁱ. Effective IPC measures can help to prevent this.
- IPC is not only important for healthcare settings but for care homes, schools and other community services and settings in reducing the spread of infection.
- There are current inconsistencies in IPC coverage, capacity, and governance for community settings across Derby and Derbyshire. Therefore, there is an opportunity to strengthen prevention and control of infection across the system.
- Links with ICS Strategy: Infection prevention and control are important across the life course in many different settings from nurseries in the early years, to hospitals and care homes in adult and later life. Reducing infectious disease contributes to improved health outcomes in the early years, helps prevent respiratory disease in adult life and can enable older people to live healthier and more independent lives.

What do we want to achieve?

 Ensure a comprehensive, consistent, and robust IPC approach across all community settings. This includes organisations delivering health and social care services and other community services such as schools. This requires considering need and vulnerability across all settings.

What are we doing currently? (Example work)

- An IPC Needs Assessment has recently been completed by Derby City and Derbyshire County Public Health teams and identified recommendations to strengthen IPC across non-healthcare community settings.
- IPC implementation group has been established to take forwards the recommendations from the IPC Needs Assessment.
- Joined Up Care Derbyshire Antimicrobial Resistance and IPC committee is in place.
- Re-commissioning of specialist community IPC provision by Derby and Derbyshire Integrated Care Board.
- Partnership working with Derby City Council and NHS Community IPC Team. IPC Nurses are
 conducting in-depth IPC audits with care homes, with a view to expanding to other care
 settings soon. Audit data is collected for evidence of current IPC status and bespoke training
 delivered. Care homes are re-audited after 6 months to monitor changes.

How can we add value and go further? (Strategic actions)

- Increase awareness of the importance of IPC in community settings. For example, this should include the consideration of indicators relating to social care services alongside health care service indicators at Joined Up Care Derbyshire IPC committees.
- Support community settings to develop robust and sustainable IPC processes.
- Sharing of findings from the IPC Needs Assessment and the consideration of recommendations by commissioners and providers for implementation e.g., an extension to the IPC audit work.
- Increase workforce capability and confidence in IPC e.g., through IPC awareness training and development of IPC Champions.

What will success look like?	Example process and outcome measures
Upskilling of the workforce in community settings in IPC knowledge and skills.	 IPC training completed, and qualifications gained. Training and awareness raising sessions in schools. Audit programme in settings, e.g., care homes and demonstrable improvement in scores through re-audit.
Reduction in HCAI (community and hospital onset) in Derby and Derbyshire.	- HCAI reported by the Office for Health Improvement & Disparities e.g., C. difficile, Klebsiella.
Reduction in cases and outbreaks of other community acquired infections.	- Rates of norovirus and influenza in Derby and Derbyshire through HPZone.

Rapid and thorough outbreak response with a focus on IPC.	- Measured by outbreak debriefs, outbreak reports and learning.
Improvements in antimicrobial resistance measures.	 Reduction in broad spectrum antibiotic prescribing in primary care. Reduction in total antibiotic prescribing: 12-month rolling total of number of prescribed antibiotic items, as per STAR-PU, by ICB in England. STAR-PU is a value calculated to reflect not only the number of patients in a GP practice, but also the age and sex mix of that group. Reduced proportion of antibiotic resistant E-coli samples. (AMR local indicators - produced by the UKHSA - Data - OHID (phe.org.uk))

Area of focus 4:

Increase vaccination uptake amongst children and adults and reduce vaccine inequalities.

Why is this important?

- Vaccinations are the most effective way to prevent infectious disease and prevent up to 3 million deaths worldwide every yearⁱⁱ.
- In the UK the national immunisation schedule protects against infections such as measles, polio, and meningococcal disease. Most vaccinations are offered in childhood but some such as shingles are available for older adults. Other vaccinations such as seasonal influenza and COVID-19 are offered to groups at risk of more severe disease.
- Inequalities in vaccination uptake exist, for example there are differences in uptake depending on where people live and socioeconomic statusⁱⁱⁱ.
- The uptake of certain vaccinations is below target across the UK and this is no exception in Derby and Derbyshire. For example, the Measles, Mumps and Rubella vaccination has a population coverage target of 95% for two doses as set out by the World Health Organization (WHO) to achieve and maintain elimination^{iv}. In Derby City the population coverage for two doses of MMR is 80.9%, significantly worse than England average of 86.7%. In Derbyshire the population coverage is 93.4%, and although is higher than national average, still lower than the WHO target.
- Links with ICS Strategy: This links with all 3 key areas of focus from the ICS Strategy.
 Vaccination is important throughout the life course preventing disease in the early years, as adults, and helping older people to stay healthy and independent for longer.

What do we want to achieve?

- Increase vaccination uptake with the aim of reaching national vaccination coverage targets.
- Reduce inequalities in vaccination coverage.

What are we doing currently? (Example work)

- Working together across the system on the immunisation agenda with good governance and oversight.
- Established work focussing on COVID-19 and Influenza vaccine programmes e.g., the Vaccine Inequalities Group.

- Working with specific communities and groups of individuals, supported by task and finish
 groups, to better understand decision making around vaccination e.g., Black communities
 in Derby City, People with Serious Mental Illness (SMI), Pregnant women, Bolsover
 communities, children's influenza.
- Ongoing work focussing on MMR in Derby City. This includes completing a risk assessment
 of the population and identifying those that are partially or unvaccinated as well as
 working with migrant groups to ensure they know how to access vaccinations offered in
 the UK.
- Completed an options appraisal exploring availability of quality vaccination advice in Derby City.
- System quality improvement work to make health information easier to read (Health Literacy).

How can we add value and go further? (Strategic actions)

- Enable informed decision making with regards to vaccination and immunisations. This can be achieved by:
 - Improving population knowledge of vaccine preventable disease and the role of vaccination, and dispelling myths about vaccination.
 - Communication in line with health literacy principles.
- Build on the learning from the Vaccine Inequalities Group to inform approaches to reducing inequalities in other vaccination programmes.
- Ensure that inequalities data is collected and reviewed across all vaccination programmes and that this data is used routinely in planning. This includes improving data collection of vaccination status by demographic characteristics.
- Continue to work with specific communities with lower uptake to support ease of access to
 vaccination and enable informed decision making. Utilise our community assets and the
 strengths of local partners involved with vaccination such as the voluntary and community
 sector, primary care, and the Integrated Care Board.
- Ensure that vaccination programme commissioning and provision profiles investment adequately to enable a tailored approach to be taken where necessary to reach communities and individuals at risk of vaccine inequalities.
- Develop a comprehensive programme of training around disease presentation, vaccination and decision making that considers clinicians, non-clinician workforce and community members.
- Increase focus on disease that may resurge if vaccination is not increased e.g., measles.
- Ensure that vaccination uptake and reducing inequalities is in scope for the Integrated Care Strategy 'Start Well' Key Area of Focus on school readiness.

What will success look like?	Example process and outcome measures
Upskilling of the clinical and non- clinical workforce in knowledge and skills around vaccination and supporting informed decision making.	- Numbers of people trained around disease presentation, vaccination and enabling informed decision making.

Enable informed decision making, for example by improving population knowledge of vaccination.	- Numbers of people attending community events, evidence of co-production with communities.
Increased population vaccination coverage in Derby and Derbyshire to reach national aspirational targets.	 Increased offer of vaccination Monitoring of vaccination coverage for vaccinations such as MMR, influenza, HPV. (<u>Public Health Outcomes</u> <u>Framework - Data - OHID (phe.org.uk)</u>)
Reduction in vaccine inequalities.	 Increased vaccination uptake in groups/communities with lower uptake rates. Indicators could include influenza vaccination coverage in children aged 2 to 3, by ethnicity. Reduction in inequalities in vaccine coverage as reviewed by Index of Multiple Deprivation, geography, ethnicity, and gender as well as population groups such as asylum seekers, traveller communities and people in prison.
Reduction in cases of vaccine preventable disease in Derby and Derbyshire.	- Monitoring of vaccine preventative disease e.g., Measles, seasonal influenza.

Area of focus 5:

Develop specific consideration and support for risk and vulnerable groups such as migrant groups and care home residents

Why is this important?

- Specific groups of individuals are at a higher risk of infectious disease and environmental hazards. The impact of health protection issues may also be greater on vulnerable groups.
- For example, migrants and refugees are potentially at a higher risk of developing infectious disease. This can be due to an increased exposure to infection, lack of vaccination programmes within their home countries, poor living conditions and lack of access to, or interrupted, medical care during the migration process*.
- Care home residents are likely to be at higher risk of developing infectious disease such as seasonal influenza, as well as being at higher risk of developing complications and having poor health outcomes.
- Links with ICS Strategy: Across the life course there are groups of people who are more at risk of, or vulnerable to, health protection hazards. Providing specific focussed support to these individuals will contribute to preventing ill health and improving health outcomes across all three ICS strategy key areas of focus. It is also key to helping reduce health inequalities across Derby and Derbyshire.

What do we want to achieve?

• Improve health outcomes for individuals in risk and vulnerable groups by providing specific and tailored health protection support in response to the needs of these groups.

What are we doing currently? (Example work)

- Health & Asylum group chaired by Derby DPH. Developed protocols on outbreak management of scabies and diphtheria. Currently developing a measles vaccination programme working across the system to deliver MMR vaccines on-site.
- Midlands Migrant Health Network established.
- IPC Project in care homes in Derby City.
- Establishment of a vulnerable settings cell across Derby and Derbyshire.

How can we add value and go further? (Strategic actions)

- Increased focus on migrant communities due to a high communicable disease risk. They are a vulnerable population with low vaccination rates and lack access to health services.
- Develop pathway improvements for individuals with complex health protection needs e.g., those with TB who have no recourse to public funds.
- Ensure that prevention programme commissioning and provision e.g., vaccinations and screening, profiles investment adequately to enable a tailored approach to be taken to reach communities and individuals at risk of health inequalities.
- Develop plans to support vulnerable groups with a wide range of health protection hazards beyond infectious disease, such as air quality and screening.
- Support proactive prevention activities in risk or vulnerable settings such as in prisons.

What will success look like?	Example process and outcome measures
Timely, coordinated, and effective reporting and response to health protection hazards in risk and vulnerable settings.	 Appropriate reporting of outbreaks or health protection issues to health protection partners from settings where vulnerable/risk groups may live or work. Reporting of vulnerability characteristics in settings during outbreak management, this could be measured using audit.
Increased rates of prevention activities in risk/vulnerable settings such as vaccination and screening.	 Recording of preventive activities/events supported. Increased rates of vaccination and screening coverage in risk/vulnerable groups and settings Reduced rates of vaccine preventable disease and other infectious diseases in risk/vulnerable groups and settings
Ensure that those with complex health protection needs have access to appropriate management and support.	- An appropriate pathway is developed for people with TB who have no recourse to public funds.

Area of focus 6:

Strengthen preparation and response to environmental hazards and emergency events such as pandemics and extreme weather events

Why is this important?

- The COVID-19 pandemic highlighted the importance of effective preparation to emergency
 events. Preparation is needed to understand our potential local threats, and how different
 groups of people may be impacted, so we can prevent and respond effectively. We
 recognise a need to build on the experiences of the pandemic and work together as partners
 to plan, prepare and respond to future emergency events.
- Climate change also poses a significant public health threat and could result in more extreme weather events such as flooding and heatwaves.
- Beyond emergency events, preparing and responding to environmental hazards such as poor air quality and poor food safety that may impact individuals' day to day are vitally important to protect Derby and Derbyshire residents.
- Links with ICS Strategy: Preparing, preventing, and responding to environmental hazards and emergency events is important for all three key areas of focus in the ICS Strategy. Not only as these activities have a direct impact on preventing ill health across the life course, but also ensure that other health care services, communities and businesses can continue to function to protect the health and wellbeing of Derby and Derbyshire residents.

What do we want to achieve?

• Be prepared and ready to respond to environmental hazards and emergency events so that any harmful impacts to health can be minimised and communities protected.

What are we doing currently? (Example work)

- Proactive work with Environmental Health partners including work on food safety, contaminated land, and emergency response to flooding and fires.
- Development and refresh of the Air Quality Strategy for Derby City and Derbyshire County (https://democracy.derbyshire.gov.uk/documents/s2722/Item%2012%20Joint%20Air%20Quality%20Strategy.pdf)
- Development of the local risk register via the Risk Assessment working group. This work enables an assessment of local risks, reflecting the National Risk Register (https://www.gov.uk/government/publications/national-risk-register-2023).
- Embedding the Adverse Weather and Health Plan into the local Derby and Derbyshire system.
- Partnership working within the Derbyshire Resilience Partnership (DRP) including representation from Local Authorities, UKHSA, NHS England, local NHS Trusts, the Emergency Services, and the ICB. This forum is responsible for the overall direction and policies for emergency planning and preparation in Derbyshire. Additionally, Local Health Resilience Partnerships (LHRPs) facilitate health sector planning and preparedness for emergencies. Public Health partners bring an inequalities perspective to this forum.

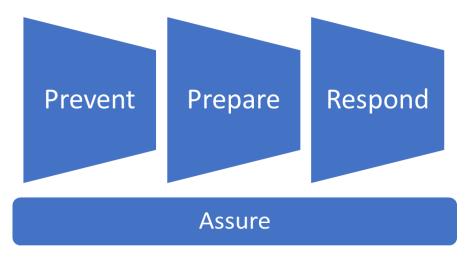
How can we add value and go further? (Strategic actions)

- Increase the capability of the workforce to respond to environmental hazards and emergency events e.g., through increased utilisation of emergency planning exercises.
- Support an increase in community resilience so our local communities have the ability to cope with, adapt to, and recover from emergency events. Utilising our community assets is key to this.
- Ensure the continued development of support for vulnerable people in our communities in relation to emergency situations. For example, the promotion of utility priority lists in the event of national power outages.
- Ensure that environmental hazards in the local area are understood by partners, for example by keeping the local risk register up to date with appropriate hazards.
- Develop emergency plans in response to risks identified by the local risk register work and update current emergency plans with learning from the COVID-19 pandemic.
- Continue to work towards carbon reduction across Derby and Derbyshire to help prevent the impacts of climate change.
- Further characterise the climate risk across Derby and Derbyshire to enable accurate planning and preparedness e.g., for wildfires and flooding.
- Strengthen preparedness for infectious disease emergencies e.g., large outbreaks that require mass vaccination.

What will success look like?	Example process and outcome measures
Increased understanding of environmental hazards including climate change in Derby and Derbyshire across all partners.	 Completion and regular update of the local risk register. Completion and regular update of emergency plans. UKHSA Centre for Climate and Health Security's climate health metrics and indicators including a local authority risk assessment toolkit (currently in development this year). These will help to measure the health impacts of climate change.
Increased preparedness for emergency events.	 Recording and analysis of emergency planning exercises including number of attendees, organisations represented, scope of exercise, learning, and implementation of this learning in future exercises. Completion and regular update of emergency plans. Increased promotion of utility priority lists for vulnerable people.
Improved air quality in Derby and Derbyshire.	- Monitor indicators outlined in the Air Quality Strategy including nitrous oxide and particulate matter (link above).

Wider health protection work and functions

We recognise there are many health protection activities that are not explored in the six areas of focus in this strategy. Over the next five years we will continue to carry out and develop many health protection functions beyond the six areas of focus. A summary of some of those activities are given below and show the breadth of health protection functions.



Screening

- Commissioning of national popualtion screening programmes i.e. cancer and non-cancer programmes
- Exploration of inequalities in screening uptake

Emergency Preparedness, Resilience and Response (EPRR)

- Local Health Resilience Partnerships and Derbyshire Resilience Partnership
- Emergency planning exercises
- Development of emergency plans and policies

Environmental health (and trading standards) Food safety

- Private sector housing
- Air quality and carbon reduction
- Envrionmental hazards e.g. contaminated land, noise
- Cosmetic treatments and procedures e.g. piercing, tattoos

Sexual health

- Development of the Sexual Health Strategy for Derby and Derbyshire
- •Specific focus areas include cervical screening, HIV, chalamydia, HPV and inclusivitiy and prevention

Infection Prevention & Control (IPC)

- Infection Prevention and Control Needs Assessment implementation
- Community IPC
- Antimicobial resistance workstreams

Communicable disease control

- Outbreak response and management
- Preventative activities to reduce spread of communicable disease

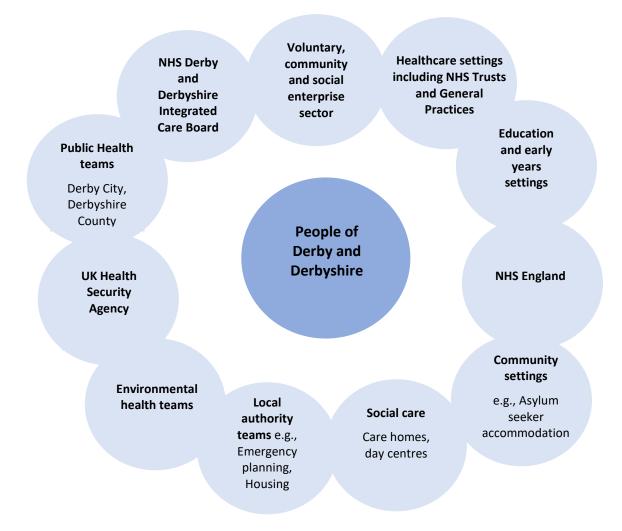
Vaccination

- Improving population knowledge of vaccine preventable disease and the role of vaccination
- Working with communities in areas of low vaccination coverage

How will we deliver this strategy?

- The Derby and Derbyshire Health Protection Board will establish a working group to lead on the implementation of this strategy. Member organisations/teams of the board include:
 - o Health Protection teams, Derby City Council and Derbyshire County Council
 - UK Health Security Agency
 - Clinical Quality, Primary Care, Derby and Derbyshire Integrated Care Board
 - Screening and Immunisations team, NHS England Midlands
 - o Vaccination Operations Cell at Derby and Derbyshire Integrated Care Board
 - Infection Prevention and Control team, University Hospital of Derby & Burton NHS
 Foundation Trust
 - Representative from Derbyshire Chief Regulators Group (Environmental Health and Trading Standards)
- Action and implementation plans will be developed in response to this strategy.
- During implementation of the strategy Population Health Management approaches such as the plan, do, study, act (PDSA) cycle will be used to make change, build on learning, and support improvement.
- Climate change poses a significant public health threat, and we understand the importance
 of collaborative action on environmental sustainability. Therefore, during the
 implementation of this strategy, we will consider how we can mitigate and adapt to climate
 change across health protection activities.
- We recognise health protection is a system wide responsibility and therefore a wide range of partners will be involved in the delivery of this strategy.

Partners we anticipate will be engaged and involved in the delivery of this strategy include:



Measuring progress– Process and outcome measures will be collated by the working group and be reported to and monitored by the Health Protection Board.

Specific roles and responsibilities: an outline

- Several organisations in the health protection system have specific, mandated roles and responsibilities. These are summarised below.
- Regional UK Health Security Agency (UKHSA) teams are responsible for providing specialist
 health protection input alongside health protection partners, to prevent and reduce the
 impact of infectious diseases, environmental hazards, and major emergencies. This includes
 responding to cases, incidents and outbreaks, surveillance activities, providing technical
 scientific support and contributing to emergency planning, resilience, and response.
- The **Directors of Public Health** (DsPH) have the duty, under the Health and Social Care Act (2012), to be assured that the local health protection system is working effectively, responding to local need, and to ensure that the health of the population is protected.

 Locally, this is sought through the Derby and Derbyshire Health Protection Board, chaired by the Derby City DPH, and reporting to the Health and Wellbeing Boards.

• Local Authority Health Protection Teams:

- Derbyshire County Council and Derby City Council operate differently in terms of the delivery of Health Protection functions. The Derby City Health protection function operates under a service level agreement with Derbyshire County Council.
- Local authorities, through the Directors of Public Health and their teams, provide public health system leadership within their local authority area. They work collaboratively with partners and provide information and advice to relevant local organisations to ensure partners can effectively carry out their roles for the protection of the local population.
- NHS England currently directly commissions some public health services as set out in the
 annual public health functions agreement (section 7a). These include vaccination services
 and screening programmes. NHS England has set out plans to delegate the responsibility for
 these services to NHS Integrated Care Boards.
- The Derbyshire Resilience Partnership (DRP) is a multi-agency partnership that
 provides strategic oversight and coordination of emergency planning in accordance with the
 requirements of the Civil Contingencies Act 2004. The DRP members include the emergency
 services, local authorities, the NHS, and the Environment Agency. Local Health Resilience
 Partnerships (LHRPs) facilitate health sector planning and preparedness for emergencies.
- To deliver an effective health protection response locally, collaboration and coordination is needed between health protection partners.

References

¹ Manoukian S, Stewart S, Graves N, Mason H, Robertson C, Kennedy S, Pan J, Kavanagh K, Haahr L, Adil M, Dancer SJ. Bed-days and costs associated with the inpatient burden of healthcare-associated infection in the UK. Journal of Hospital Infection. 2021 Aug 1;114:43-50. Available from: https://www.sciencedirect.com/science/article/pii/S0195670121001900

ii NHS. Why vaccination is important and the safest way to protect yourself. July 2022. Available from: Why vaccination is safe and important - NHS (www.nhs.uk)

Public Health England. National Immunisation Programme: health equity audit. February 2021. Available from: National Immunisation Programme: health equity audit (publishing.service.gov.uk)

^{iv} GOV.UK. Parents urged to check children's MMR vaccine records following rise in measles cases. May 2023. Available from: Parents urged to check children's MMR vaccine records following rise in measles cases - GOV.UK (www.gov.uk)

^v World Health Organization. Migrants and refugees at higher risk of developing ill health than host populations, reveals first-ever WHO report on the health of displaced people in Europe. January 2019. Available from: Migrants and refugees at higher risk of developing ill health than host populations, reveals first-ever WHO report on the health of displaced people in Europe

Appendix 1: Derby and Derbyshire Health Protection Population Health Outcomes

Sources:

<u>Public Health Outcomes Framework - OHID (phe.org.uk)</u>

<u>Local Health Protection Profiles- OHID (phe.org.uk)</u>

Health Protection Indictors

Environmental and EPRR	Year	Derby	Derbyshire	England
Rate of complaints about noise (per 1,000)	2020/21	7.6	5.7	12.0
Percentage of the population exposed to road, rail and air transport noise of 55db at night	2016	6.4%	6.4%	8.5%
Fraction of mortality attributable to particulate air pollution	2021	5.7%	5.3%	5.5%

Screening	Year	Derby	Derbyshire	England
Cancer screening coverage: breast cancer	2022	68.4%	71.4%	65.2%
Cancer screening coverage: bowel cancer	2022	68.4%	74.0%	70.3%
Cancer screening coverage: cervical cancer (25-49 years old)	2022	66.8%	77.6%	67.6%
Cancer screening coverage: cervical cancer (50 to 64 years old)	2022	74.3%	78.7%	74.6%
Abdominal Aortic Aneurysm screening coverage	2021/22	80.8%	84.9%	70.3%

Immunisation	Year	Derby	Derbyshire	England
Population vaccination coverage: Hepatitis B (1 year old)	2021/22	92.3%	100%	-
Population vaccination coverage: Dtap IPV Hib (1 year old)	2021/22	93.1%	96.7%	91.8%
Population vaccination coverage: MenB (1 year)	2021/22	92.8%	96.6%	91.5%
Population vaccination coverage: Rotavirus (Rota) (1 year)	2021/22	90.9%	95.4%	89.9%
Population vaccination coverage: PCV	2019/20	92.5%	96.0%	93.2%
Population vaccination coverage: Hepatitis B (2 years old)	2021/22	75.0%	100%	-
Population vaccination coverage: Dtap IPV Hib (2 years old)	2021/22	93.4%	97.3%	93.0%
Population vaccination coverage: MenB booster (2 years)	2021/22	86.3%	95.5%	88.0%
Population vaccination coverage: MMR for one dose (2 years old)	2021/22	88.6%	95.7%	89.2%

Population vaccination coverage: PCV booster	2021/22	88.0%	95.8%	89.3%
Population vaccination coverage: Hib and MenC booster (2 years old)	2021/22	88.1%	95.8%	89.0%
Population vaccination coverage: DTaP and IPV booster (5 years)	2021/22	80.0%	92.4%	84.2%
Population vaccination coverage: MMR for one dose (5 years old)	2021/22	93.2%	97.3%	93.4%
Population vaccination coverage: MMR for two doses (5 years old)	2021/22	80.9%	93.4%	85.7%
Population vaccination coverage: HPV vaccination coverage for one dose (12 to 13 year old) (Female)	2021/22	63.8%	77.9%	69.9%
Population vaccination coverage: HPV vaccination coverage for one dose (12 to 13 year old) (Male)	2021/22	53.5%	70.1%	62.4%
Population vaccination coverage: HPV vaccination coverage for two doses (13 to 14 years old) (Female)	2021/22	64.2%	78.5%	67.3%
Population vaccination coverage: HPV vaccination coverage for two doses (13 to 14 years old) (Male)	2021/22	59.6%	73.8%	62.4%
Population vaccination coverage: Meningococcal ACWY conjugate vaccine (MenACWY) (14 to 15 years)	2021/22	73.5%	89.7%	79.6%
Population vaccination coverage: Flu (2 to 3 years old)	2021/22	51.6%	63.5%	50.1%
Population vaccination coverage: Flu (primary school aged children)	2021	46.2%	67.5%	57.4%
Population vaccination coverage: Flu (at risk individuals)	2021/22	53.7%	61.9%	52.9%
Population vaccination coverage: Flu (aged 65 and over)	2021/22	83.4%	87.2%	82.3%
Population vaccination coverage: PPV	2020/21	72.2%	73.7%	70.6%
Population vaccination coverage: Shingles vaccination coverage (71 years)	2021/22	49.6%	52.1%	44.0%

Sexual Health	Year	Derby	Derbyshire	England
New STI diagnoses rate per 100,000 (excluding chlamydia under 25 years)	2022	538	313	496
Syphilis diagnostic rate per 100,000	2022	13.4	6.5	15.4
Gonorrhoea diagnostic rate per 100,000	2022	158	90	146
Chlamydia detection rate per 100,000 aged 15 to 24	2022	2065	1681	1680
Chlamydia proportion aged 15 to 24 screened	2022	16.0%	14.7%	15.2%
Chlamydia diagnostic rate per 100,000	2022	445	263	352
Genital herpes diagnosis rate per 100,00	2022	47.8	40.9	44.1
Genital warts diagnostic rate per 100,000	2022	64.0	36.5	46.1
HIV diagnosed prevalence rate per 1,000 aged 15 to 59	2021	2.65	0.83	2.34
HIV late diagnosis in people first diagnosed with HIV in the UK	2019-21	34.8%	47.6%	43.4%

HIV testing coverage, total	2021	48.9%	33.8%	45.8%
Acute hepatitis B incidence rate/100,000	2018	0.39	0	0.69

Communicable diseases and IPC	Year	Derby	Derbyshire	England
Adjusted antibiotic prescribing in primary care by	2021	0.64	0.77	0.74
the NHS				
TB incidence (three year average)	2019-	12.7	1.4	7.8
	2021			
Proportion of drug sensitive TB cases who had	2020	66.7%	100%	84.2%
completed a full course of treatment by 12				
months				
Legionnaires' disease confirmed incidence	2020	1.56	1.36	0.56
rate/100,000				
Invasive Meningococcal Disease (IMD) confirmed	2020-21	0.0	0.5	0.1
cases rate/100,000				
Measles incidence rate/100,000	2021	0.0	0.0	0.0
Mumps incidence rate/100,000	2018	1.9	2.3	1.9
Pertussis incidence rate/100,000	2021	0.4	0.0	0.1
Mortality rate from a range of specified	2021	9.7	9.9	9.4
communicable diseases, including influenza				

Key

Green = Value better than England value

Yellow = Similar to England value

Red = Value worse than England value