



# Protecting the health of Derbyshire

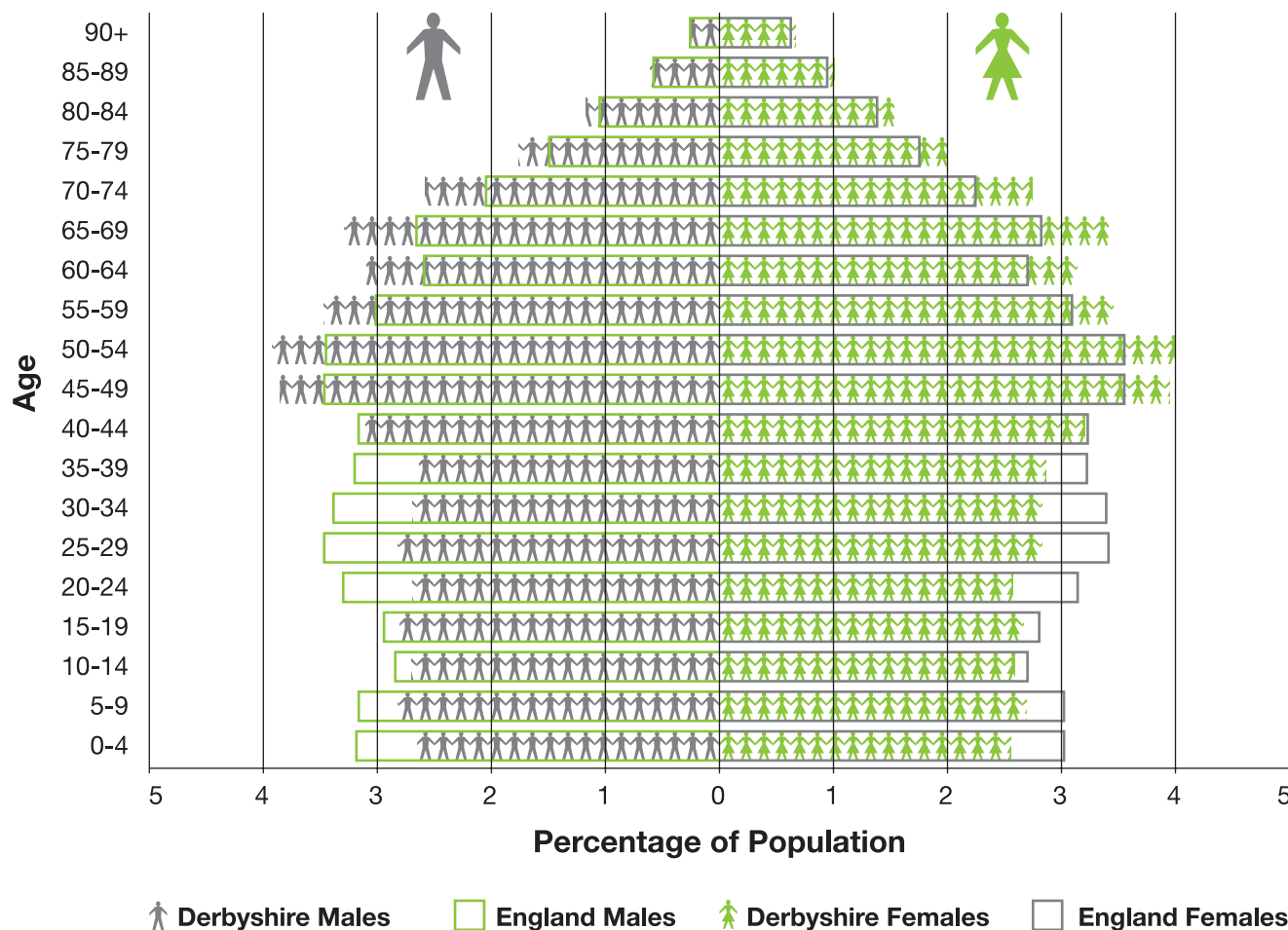
Director of Public Health  
Annual Report 2017

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# Derbyshire's population

## Population Pyramid: ONS mid-year estimates 2016

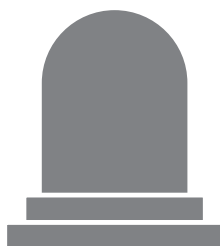


### Births



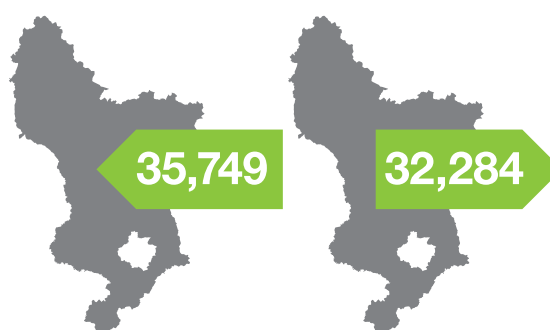
7796

### Deaths



8030

### Inward and outward migration



### Population

0.4%

Derbyshire's population has increased by 3,400 since 2015



# Introduction

**This is my second annual report on the health of the people of Derbyshire. In my role as a statutory chief officer of Derbyshire County Council, my duty is to provide leadership, expertise and advice to the authority and key partners, spanning all three domains of public health - health improvement, health protection and healthcare public health. This year I have chosen to focus on health protection, and the ongoing importance of joint working to protect the health of the Derbyshire population from communicable diseases, and other natural and man-made threats to health.**

Huge advances were made in Public Health during the 20th century. Improved housing, sanitation, water supplies, working conditions and medical advances have transformed the living standards of millions and saved countless lives in the process.

However, many threats still persist and new ones continue to emerge. Next year sees the 100th anniversary of the 1918 flu pandemic in which 500 million people were infected and approximately three percent of the world's population died. Pandemic influenza remains the top risk on the UK's National Risk Register of Civil Emergencies due the high likelihood and potential impact of a pandemic. Therefore it remains a key health protection priority for us and, as we will see later in the report, Derbyshire is working hard to prepare and plan for such emergency situations.



In this report I will show how the Derbyshire County Council health protection team and emergency planning team work together with a range of key local organisations to ensure plans are in place to protect Derbyshire residents against threats and hazards to health. This includes making sure that there are tried and tested systems in place to identify and deal with any danger to public health. This covers the management of outbreaks of infection, and systems to prevent and control infectious and environmental hazards.

The first chapter considers the risks from infectious diseases and antimicrobial resistance. It also covers the importance of infection prevention and control measures in protecting those who are most vulnerable to infection.





# Chapter 1: The challenge of infectious diseases

**Controlling the spread of infectious diseases is a mainstay of protecting the public's health. Significant advances over the last century, such as reductions in overcrowding, improved sanitation and vaccination programmes, have led to a sharp decline in the number of deaths due to infectious diseases in this country. These accounted for 32 percent of all deaths in 1901 compared with just eight percent in 2015.**

However, infectious diseases remain an important cause of morbidity and mortality. While much public health attention is now directed at the growing burden of chronic diseases, such as diabetes, cardiovascular and respiratory disease, it is important to recognise that these can make people more vulnerable to infection. In addition, new threats from infectious diseases arise from factors such as increased travel, conditions or treatments that suppress the immune system, new types of pathogens and drug resistance.

## 1.1

### Care associated infections

Protecting the health of people most susceptible to infection, particularly the very young, frail older people and those with chronic conditions, is an important health protection priority. Consistent application of standard infection prevention and control measures in all settings where susceptible people are cared for, including hospitals,

nursing and care homes and in people's own homes can help reduce infections. This not only reduces the burden of disease on individuals and their carers, but also reduces costs to the health and social care system in relation to treating and caring for people who have an acquired infection.



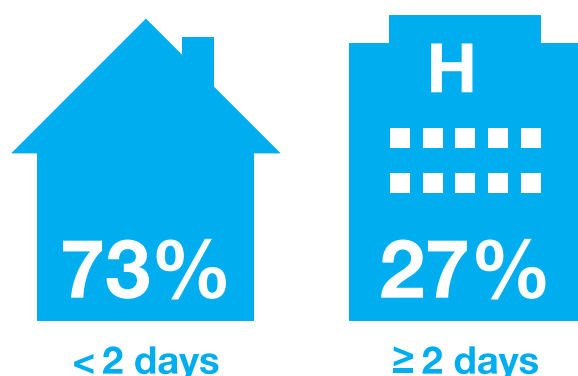
### Healthcare associated infections (HCAI)

It is estimated that 300,000 patients a year in England will get a healthcare-associated infection, such as a respiratory, urinary tract or surgical site infection, as a result of care within the NHS. This results in an estimated cost of £1 billion. Over the past two decades, significant efforts have been made to reduce the impact of healthcare-acquired infections (HCAIs), including mandatory surveillance, post infection reviews and national evidence-based guidelines for infection prevention and control.

These measures have resulted in significant progress. Since 2006 there has been an eighteen-fold decrease in meticillin resistant *Staphylococcus Aureus* (MRSA) bacteraemia and a five-fold decrease in *Clostridium difficile* infection.

While there has been a decline in many health care acquired infections, rates of *Escherichia coli* (E coli) have risen both locally and nationally, with 897 cases in Derbyshire last year. A significant proportion of care associated infections originate in community settings rather than in hospitals, and this is particularly evident in relation to E coli.

### E coli by setting



The rise in E coli infection illustrates the need to take a whole health and care economy approach to addressing care associated infections. E coli bacteraemia is associated with increased mortality, increased length of hospital stay and difficulties with treatment due to antibiotic resistant strains. This costs the Derbyshire health and social care system an estimated £2.7m each year.

Over 7,000 Derbyshire residents live in nursing and residential care homes and a further 4,500 receive care in their own home. Many of these people are vulnerable to infections because they are frail, elderly and may have multiple medical conditions, both physical and mental. Work to reduce new cases of E coli bacteraemia (blood stream infections) needs to target community settings and specifically focus on preventing urinary tract infections if substantial reductions are to be achieved.

The Derbyshire Whole Health Economy Group consisting of representatives from CCGs, Acute Trusts and Community stakeholders, are

developing a joint action plan. This will deliver NHS England's Quality Premium scheme on Reducing Gram Negative Bloodstream Infections and inappropriate antibiotic prescribing in at risk groups. The Derbyshire Joint Care Homes and Home Care Quality Group meets to share information about care services and to implement and support quality initiatives.

## Recommendation

**NHS organisations and Derbyshire County Council should strengthen existing partnership working through the Whole Health Economy Group, to ensure mechanisms for the oversight, challenge and coordination of strategic action on care acquired infections, including ensuring appropriate governance and reporting mechanisms.**

## 1.2

### Infection prevention and control

Infections are caused by pathogenic micro-organisms including bacteria, fungi, viruses and prions. They can result in a wide variety of problems including urinary tract, wound, respiratory, blood and skin infections. Not all infections are contagious and therefore do not spread from person to person. However, some infections such as scarlet fever, influenza and norovirus have the potential to spread from one person to another and can result in outbreaks of infection. Understanding how infections occur and how different microorganisms act and spread is crucial to their prevention in all settings, not just in health and social care services.

Some infections can spread easily within communities, and can impact on workplaces, for example by people staying off work because they are ill or caring for someone affected.



## Scarlet Fever

Scarlet fever is a common childhood infection caused by the bacteria, group A streptococcus. It typically causes outbreaks of infection among young children in nurseries and schools, especially in winter and spring. The symptoms of scarlet fever may include sore throat, headache, fever, nausea and vomiting. After 12 to 48 hours a red, generalised pinhead rash develops along with flushed cheeks and a swollen tongue.

Scarlet fever is very contagious and is spread via coughs and sneezes, by direct person-to-person contact or indirectly through environments contaminated with infected droplets.



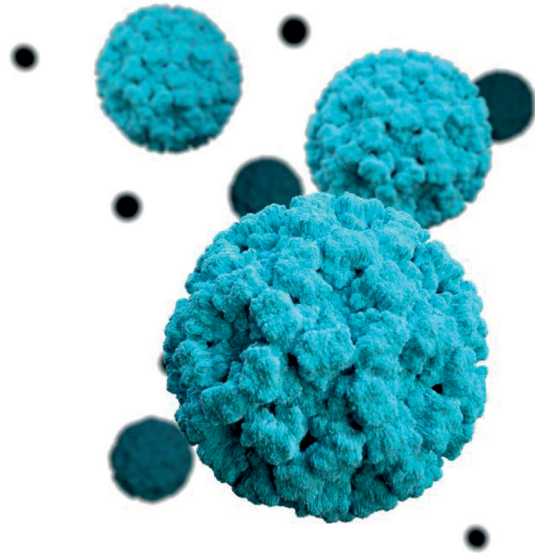
Source; NHS Choices

### Infection prevention and control

- Affected children should be kept away from nursery or school for at least 24 hours after starting antibiotic treatment and adults should stay off work for at least 24 hours after starting treatment
- Measures to reduce the spread of infection include:
  - using a tissue to cover the mouth and nose when coughing or sneezing and throwing away used tissues immediately
  - washing hands with soap and water frequently, especially after using or disposing of tissues
  - avoiding sharing items such as cups, clothes, baths, bed linen, towels and toys

## Norovirus

Norovirus is a very contagious virus that can infect anyone. It can be transmitted from an infected person, through contaminated food or water, or by touching contaminated surfaces. The virus causes symptoms including vomiting, diarrhoea, and nausea. Most people recover from norovirus within a few days. However, due to the loss of fluids through diarrhoea and vomiting, it can cause dehydration, which can pose a serious risk to the very young and frail elderly people. Outbreaks are common in communal settings such as hospitals, nursing homes, schools, restaurants and hotels.

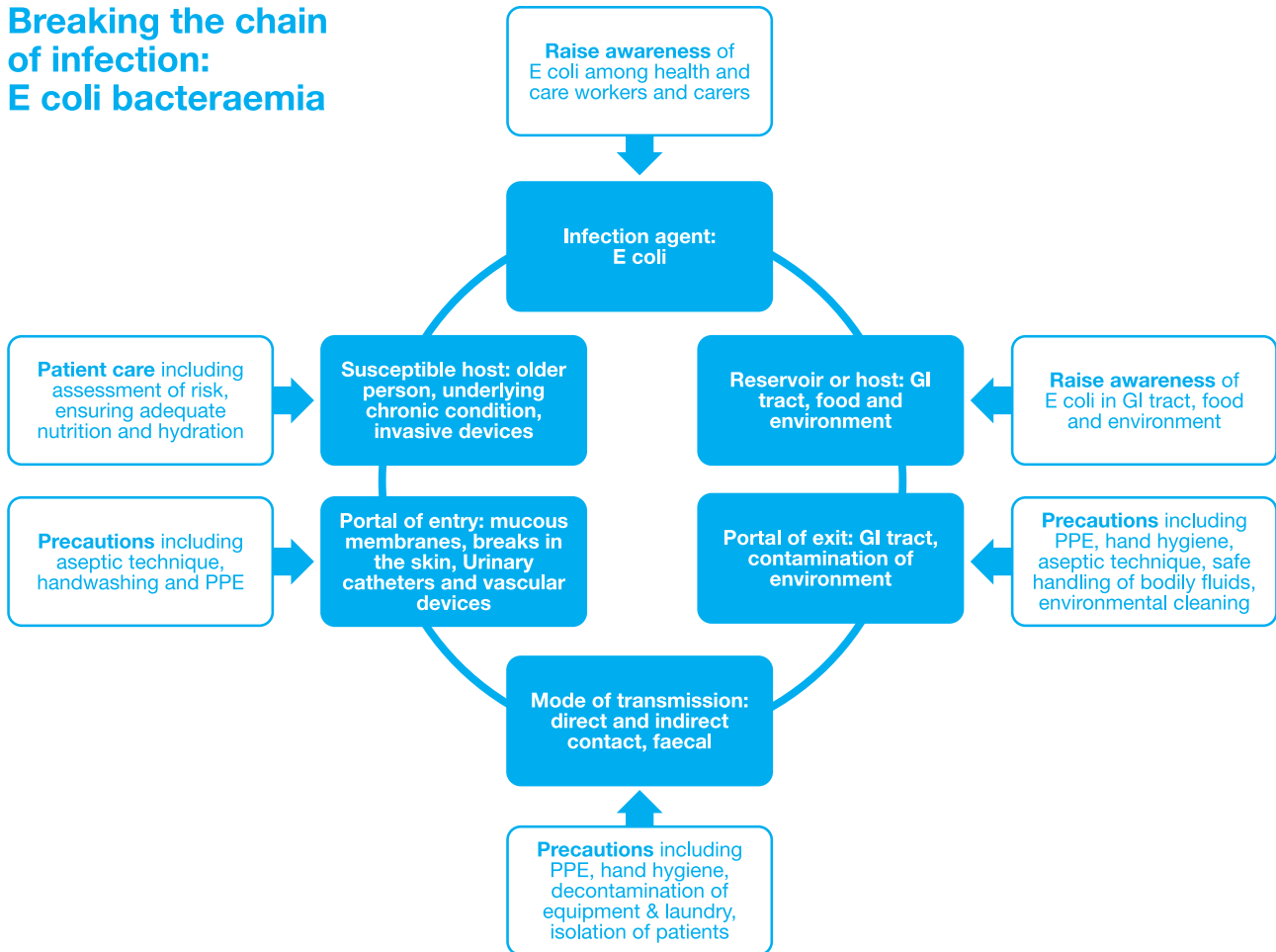


Source; Centres for Disease Control and Prevention

### Infection prevention and control

- Promptly report any suspected outbreak of Norovirus to PHE
- Exclude infected individuals from work or school until 48 hours after symptoms have stopped
- Close affected wards/ nursing or care homes to new admissions on PHE advice
- Regular handwashing
- Disinfect any surfaces or objects that could be contaminated using a bleach based disinfectant, and wash clothing and bedding on a hot setting

## Breaking the chain of infection: E coli bacteraemia



The Health and Social Care Act 2008 places a statutory duty on all providers and commissioners of health and social care services to comply with national standards of infection prevention and control. However, recent NHS and Public Health reforms have impacted on the organisation and delivery of infection prevention and control interventions and services across health and care communities. There is no statutory duty for Clinical Commissioning Groups to have an Infection Prevention and Control Team (IP&C team), although many have chosen to include an IP&C team in their quality directorate.

Tackling the challenge of rising care associated infections requires a joined up, consistent approach to infection prevention and control across the health and care community, and a community IP&C team is essential to support delivery of this priority. The diagram above

shows the opportunities to tackle rising rates of E coli bacteraemia using a systematic approach to breaking the chain of infection.

## Recommendation

**The Sustainability and Transformation Partnership provides an opportunity for NHS commissioners and Derbyshire County Council to work collaboratively on Infection Prevention and Control (IP&C).**

**Consider establishing a county wide Infection Prevention and Control Team which has oversight of all aspects of community IP&C including case follow up, audit of standards across care settings, development of policies and guidelines, training for community care staff and a single pathway for the investigation and management of infections.**

## 1.3

## Gastro-intestinal infections and food safety

Food safety measures are essential across the entire food chain to reduce and manage the risks of infection. Unsafe food causes over 200 types of infection, the most common being gastroenteritis caused by *Campylobacter* and *Salmonella*. A quarter of the UK population will experience at least one intestinal infection a year – approximately 17 million cases.

Gastrointestinal infections are unpleasant, often causing vomiting, diarrhoea and abdominal pain amongst other symptoms – those affected are usually ill for about a week and some may suffer longer term complications. Half of all people suffering from a gastrointestinal infection are absent from school or work, with 11 million working days lost each year. Most infections are managed at home, and the financial costs are mostly borne

by patients and caregivers. However, each year food poisoning leads to one million GP consultations, at an estimated cost to the NHS of £36m, as well as hospital admissions.

Most cases are preventable through food safety measures and hygiene in the home environment and tackling these illnesses remains a priority. The infographic below summarises the impact of *Campylobacter*, the most common form of food poisoning in the UK.

Cases of food poisoning have to be notified to Public Health England (PHE). The 2016 data for Derbyshire shows reporting of over 1000 cases of the most common five infections – *Campylobacter*, *Cryptosporidium*, *Salmonella*, *Giardia lamblia* and *E coli* 0157.

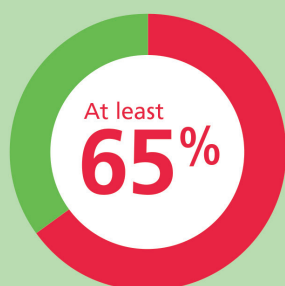
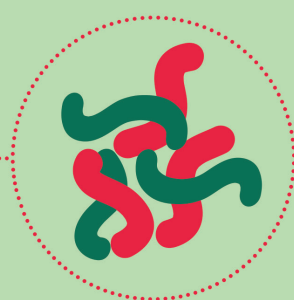
However, many cases of food poisoning are not notified to PHE. Research indicates that only about one in nine cases of *campylobacter*, and one in five cases of *salmonella*, are reported. The causative pathogen is only

## Campylobacter facts

More than

**280,000**

cases of **campylobacter poisoning** in the UK every year.\*



The amount of chicken sold in the UK that was **contaminated with campylobacter**, between May 2007 and Sept 2008.\*\*



Up to  
**4 in 5**

cases of **campylobacter poisoning** in the UK and other EU countries come from **contaminated poultry**.\*\*\*

Campylobacter is estimated to cause **more than 100 deaths a year** and costs the UK economy

**c.£900 million\***





known where samples have been sent for laboratory testing and it is likely that there are many more non-specified cases in the community. It is estimated that there were over 6000 cases of *Campylobacter* and over 700 of *Salmonella* in Derbyshire in 2016.

### Existing Control Measures

1. Legislative duties with oversight from the Food Standards Agency (FSA) and the Department of Food and Rural Affairs (DEFRA) investigate and manage practice in relation to drinking water supply standards, pasteurisation of milk, measures to reduce infection in poultry and animal farms (including vaccinations of poultry, inspections and sampling and food hygiene measures) and inspections in commercial kitchens, particularly to avoid cross-contamination
2. Notification of cases. PHE East Midlands work with Environmental Health Officers in District and Borough Councils to manage and follow up cases of notified diseases according to the pathogen involved. Outbreak investigations are conducted where appropriate, including infection prevention and control measures in specific settings e.g. hospitals and care homes. UK standards for microbiology investigations and laboratory reporting support the quality of identification and reporting.
3. Environmental Health Services carry out inspections of food premises and food sampling, respond to national food safety alerts, investigate complaints, provide advice on food safety and investigate cases of food poisoning
4. Resources for the public. NHS Live Well has good quality public information on domestic food hygiene on their website, and the FSA has an ongoing food hygiene campaign. Healthcare professionals provide tailored advice to those planning to travel and to immunocompromised people on reducing their risks.

### What more can be done?

Raising awareness of the importance of preventing and managing cases of gastrointestinal infections among the general public and the Derbyshire public sector workforce is a key priority. Opportunities for raising awareness of food hygiene messages include through local food programmes such as community cafes and food banks, and community engagement targeting key groups such as young parents and older people. Environmental Health Officers in District and Borough Councils are key partners in effective targeting of food safety messages. Derbyshire County Council and partners can provide effective signposting to advice on food hygiene through their websites.

Scrupulous food safety practices must be in place across all institutional settings including nurseries, schools, hospitals and care homes in the county, with the timely reporting of concerns. Exclusions apply to reduce the spread of infectious diseases and PHE guidance is available for specific settings. Particular measures may apply for higher risk groups depending on the specific illness, and advice should be sought in these circumstances.

### Recommendation

**Derbyshire County Council and partners should use opportunities to prevent cases of food poisoning by raising awareness of food safety through community food schemes.**

## 1.4

## Anti-microbial resistance

Antimicrobial resistance (AMR) is an increasingly serious threat to global health. AMR is the ability of a microorganism to stop an antimicrobial (e.g. antibiotics, antivirals, antimalarial drugs) from working effectively.

Resistance can occur naturally, arise through genetic mutation or by acquiring resistance from another micro-organism. As a result the antimicrobial agent loses its efficacy and fails to treat the infection.

A lack of effective antibiotics would result in major setbacks in all areas of medicine. This

includes compromising the success of major surgery and treatment of common infectious diseases. This would result in prolonged illness, disability and death, as well as rising costs to health and social care.

The current global and UK antibiotic resistance crisis is the result of six factors:

- Over-prescribing and dispensing of antibiotics by health workers
- Patients not finishing their full course of antibiotics
- The over-use of antibiotics in livestock and fish farming
- Poor infection control in health and care settings
- Lack of hygiene and poor sanitation in some settings
- Lack of new antibiotics being developed



## UK AMR Strategy

In 2013 the UK Government published a five year strategy for tackling antimicrobial resistance at a national and international level. It recognises that AMR cannot be eradicated but considers strategic priorities for limiting the risk of AMR and minimising its impact on health, now and in the future, so that:

- good infection prevention and control measures become the norm in all sectors of human and animal health,
- infections can be diagnosed quickly and the right treatment used,
- patients and those who keep animals fully understand the importance of antibiotic treatment regimens and adhere to them,
- surveillance systems quickly identify new threats or changing patterns in resistance,
- there is a sustainable supply of new, effective antimicrobials.

While the implementation of the strategy requires action at national and international level, it also suggests specific local measures that can help conserve the effectiveness of existing treatments and improve knowledge and understanding of AMR among staff and patients.

## Recommendation

Derbyshire CCGs should prioritise antimicrobial stewardship across the local NHS by rigorous oversight of the antimicrobial resistance quality premium targets.

## 1.5

### Tuberculosis in vulnerable groups

Even today in England, tuberculosis (TB) is still a disease associated with social deprivation. In 2015, the rate of TB was 20.5 per 100,000 in the most deprived areas of England compared with only 3.6 per 100,000 in the least deprived areas. There is a clear association between increasing rate of TB and increasing deprivation. Tackling TB is therefore as much about addressing health inequalities as it is about health protection.

Over 10 million people worldwide develop TB each year, but 4.3 million of these do not get the care they need and therefore continue to spread the infection to others. The majority of the 1.8 million people a year who die of TB are in this 'under-served' population group.

In the UK the groups of people considered as under-served in respect of TB treatment include:

- some migrants groups, including asylum seekers and refugees
- people in contact with the criminal justice system
- people who misuse drugs or alcohol
- people with mental health needs
- people who are homeless



Source; Public Health England Tackling Tuberculosis in Under-Served Populations: A Resource for TB Control Boards and their partners



The Enhanced TB Surveillance System collects data on TB cases on the presence and absence of four 'social risk factors' (SRF); current or history of drug misuse, current alcohol misuse, current or history of homelessness and current or history of imprisonment. In 2015, 12% of all TB cases in England had at least one social risk factor. These cases were twice as likely to have infectious TB and twice as likely to die of TB. They had poorer treatment outcomes and were more likely to have drug resistant TB.

In Derbyshire, a higher proportion of TB cases aged 15 years and above (13.1%) was reported to have at least one SRF compared with the East Midlands (8.6%) and England (9.7%), between 2010 and 2015. Analysis of TB cases in the East Midlands found that the proportion of cases with at least one SRF was 1.9 times higher in the UK born than non UK born population. The higher proportion of cases reporting social risk factors in Derbyshire may therefore be explained by 77.2% of Derbyshire TB cases being UK born compared to 27.6% in East Midlands as a whole.

TB in these under-served groups is a key priority for the National TB strategy. A comprehensive resource was launched January 2017 to support TB Control Boards and partners tackle their needs. It is called Tackling Tuberculosis in Under-Served Populations and can be found here: <https://www.gov.uk/government/publications/tackling-tuberculosis-in-under-served-populations>

The East Midland TB Control Board is carrying out a Health Needs Assessment of TB in under-served populations and will publish its report and recommendations in October 2017. Success on meeting the needs of the under-served populations will depend on bringing together all local agencies, including

third sector partners. Within this multi-agency approach, local authorities have a critical role as they are responsible for public health in their local community and also provide social services to vulnerable people offering the integrated care they often need.

## Recommendation

**Key stakeholders who support under-served populations are essential to supporting local coordination of initiatives to improve access and engagement in TB treatment services for under-served groups.**

# Chapter 2: Incident planning and response

**Over recent years the UK has experienced a range of emergency situations including extensive flooding, fires, major road accidents, infection risks and terrorist attacks. Environmental hazards, communicable disease outbreaks and other threats to the health of the public can arise at any time and we need to plan and prepare for responding to these situations.**

Not all incidents requiring a health protection response are classified as 'major incidents' however all incidents require a co-ordinated multi-agency response.

## 2.1

### Emergency preparedness

Threats to the public's health can, in certain circumstances, escalate to become a major incident in a matter of hours. A major incident is any emergency that requires implementation of special arrangements, and could include events such as severe flooding, an influenza pandemic, large scale transport accidents and terrorist attacks. When major incidents or disasters occur, the response from the emergency services, the NHS and local authorities focuses on working together to save lives and reduce harm.

It is vital to have tried and tested plans in place to help manage the threat to human health and wellbeing from such incidents. Emergency Planning helps ensure the management of major incidents to reduce its impact on organisations and communities and it has four broad aims:

- To preserve life and property
- To mitigate any harmful effects of the incident on the environment
- To facilitate a swift return to normality for communities and the environment
- To ensure all agencies and organisations are prepared for their role

The Derbyshire County Emergency Planning Division was notified of 70 incidents in 2016-17. Examples of major emergencies that required a multi-agency response across Derbyshire include the floods in 2000 and 2007, a major fire that destroyed 72 apartments in Glossop in 2008, and the 2009 swine flu pandemic.

The Derbyshire Local Resilience Forum (LRF) helps ensure effective co-ordination and planning. The LRF's Events Safety Advisory Group works with the organisers of major events to minimise risks to public safety. Recent examples include the Tour de France and the Women's Tour of Britain cycle races, as well as major agricultural events and music festivals.

Derbyshire LRF has a training and exercise programme to ensure that key responders are trained and that their plans are tested. In 2016 the LRF took part in a national counter terrorism exercise. The lessons learnt from the national flu pandemic exercise held last year will be used to inform an exercise to test local pandemic flu arrangements. In addition, exercises are regularly held for industrial sites subject to the Control of Major Accident Hazards (COMAH) Regulations.

## Strategic Resilience and Response

A range of organisations in Derbyshire work together to strengthen emergency planning arrangements. Since 2013, the Secretary of State for Health has discharged his legal duty to protect the health of the population via Public Health England as well as certain aspects through the Director of Public Health.

Under these duties Public Health England provides specialist health protection expertise to support local agencies in developing their emergency response plans.

The Director of Public Health is responsible for providing information, advice, challenge and advocacy on behalf of Derbyshire County Council, in order to promote the preparation of appropriate health protection arrangements by all relevant agencies. Figure C summarises the Derbyshire organisations involved in emergency preparedness.

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## The Civil Contingencies Act, 2004

Following a number of high profile national emergencies such as the Foot and Mouth Disease outbreak of 2001 and the fuel crisis of 2000, the Government reviewed arrangements to ensure effective co-ordination, cooperation and communication across all the agencies involved in responding to emergencies.

This resulted in the Civil Contingencies Act of 2004, which established a framework for emergency planning and response ranging from local to national level.

The Act gives guidance on setting up Local Resilience Forums in each Police Force area, which undertake risk assessments of hazards and threats that could result in a major emergency, and to develop a Community Risk Register. The Community Risk Register underpins the emergency planning process and ensures that any plans that are developed are proportionate to the risks identified.

The 2004 Act categorises local organisations depending on the extent of their involvement in civil protection work, and places a proportionate set of duties on each. Category 1 responders are organisations at the core of emergency response and are shown in the figure opposite.. These include emergency services, local authorities and NHS Trusts). Category 1 responders are required to:

- Assess the risk of emergencies occurring and use this to inform contingency planning
- Put in place emergency plans
- Put in place Business Continuity Management arrangements
- Put in place arrangements to make information available to the public about civil protection matters
- Maintain arrangements to warn, inform and advise the public in the event of an emergency
- Share information with other local responders to improve co-ordination;
- Co-operate with other local responders to enhance co-ordination and efficiency; and
- Provide advice and assistance to businesses and voluntary organisations about business continuity management (this is a Local Authority only duty).

Category 2 responders include organisations such as CCGs, utility and transport companies. These are bodies that have a duty to co-operate and share relevant information with other Category 1 and 2 responders and support the response to incidents affecting their sector.

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Key partnership arrangements to protect the public's health include the Derbyshire Local Resilience Forum and Derbyshire Local Health Resilience Partnership, in addition to oversight provided by the Derbyshire Health and Wellbeing Board.

**Local Resilience Forums (LRFs)** are multi-agency partnerships made up of representatives from local public services, including the emergency services, local



authorities, the NHS, the Environment Agency and others. The Derbyshire LRF, chaired by Derbyshire Constabulary, plans and prepares for localised incidents and emergencies. It works to identify potential risks and produce emergency plans to either prevent or mitigate the impact of any incident on the people of Derbyshire.

**Local Health Resilience Partnerships** give strategic leadership on emergency planning, preparedness and response for the health organisations and communities of the LRF area, delivering some of their duties under the Civil Contingencies Act (CCA) 2004. They are responsible for producing local health sector-wide plans to respond to emergencies. They also contribute to multi agency emergency planning and support health representatives on the LRF around health sector emergency planning issues.



## Business continuity planning

Maintaining essential services during a major incident is an important element of planning for emergency situations. Business continuity is a process that helps an organisation continue to operate essential functions in the event of a disruption and is closely linked to emergency planning.

All public sector organisations across Derbyshire are responsible for conducting assessments of the business impact of untoward events as well as developing a Business Continuity Plan that gives a documented and tested set of procedures to deliver continuity of critical functions in the event of disruption.

### The 2017 NHS cyber attack

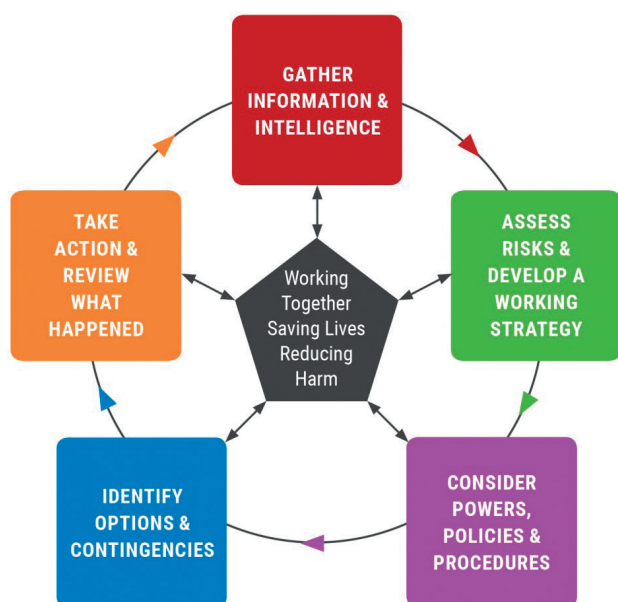
On 12th May 2017 a number of NHS organisations reported being infected by a ransomware cyber-attack. While the

attack was not targeted directly at the NHS, a number of NHS organisations were affected. The attack blocked files and resulted in operations being cancelled, ambulances being diverted and documents such as patient records made unavailable.

A national incident was declared and NHS organisations invoked business continuity plans and undertook immediate preventative measures to mitigate the impact of the attack. Across the North Midlands 47 provider organisations, 18 CCGs and 470 primary care organisations had to switch off systems to protect against attack. The incident highlighted the importance of having resilient communications during an IT failure, including paper-based 'fall-back' systems for critical activities and ensuring contractual 'Disaster Recovery' contingencies.

Public sector organisations across Derbyshire have clearly defined strategic mechanisms to support planning, preparing and responding to emergencies. It is essential to maintain and strengthen working relationships to ensure effective response to incidents, especially during periods of significant organisational change. This includes participating in joint training, exercises and planning.

Emergency response is underpinned by a framework of principles to ensure open communication and effective interoperability between the emergency services and their partners, so that shared situational awareness underpins decisions. The diagram below shows the joint decision model based on these principles.



Source; Joint Emergency Service Interoperability Principles

## Community resilience and response

Recent events have highlighted the invaluable contribution of ordinary people during emergency situations. The Grenfell Tower fire, recent terrorist attacks in Manchester and London and the widespread flooding of recent years, show how community responses can help the emergency services prioritise those in greatest need, especially when life is in danger. Individuals and communities have an important role to play particularly in supporting others after the initial stages of an incident, and also by enabling recovery.

We need to build up the resilience of towns and villages across Derbyshire to ensure that our close knit communities and their strengths can support effective responses to unexpected emergency situations. This can then complement the work of local emergency services and reduce the harmful impacts of emergency situations such as severe weather events or accidents. The Council's Emergency Planning Division works with towns and parishes to promote community resilience, especially in areas known to be prone to risks from flooding.



## Derbyshire Emergency Volunteers

In 2012 Derbyshire County Council set up Derbyshire Emergency Volunteers to help people who are evacuated from their homes during emergencies like fires, gas leaks and floods. They also help vulnerable people during severe weather and health incidents. Volunteers work alongside our emergency planning team, adult care staff and other agencies to make sure evacuees have what they need while staying in a rest centre.

In other emergencies, such as severe snow, volunteers are called upon to help support vulnerable residents by delivering prescriptions and food supplies within their local area.

Volunteers are aged 18 or over and have basic training in first aid, health and safety and safeguarding. Volunteering is a great way to give back to the community and can be excellent work experience for young people.

### Derbyshire Crisis Support Team

The Derby and Derbyshire crisis support team is a voluntary team managed by Derbyshire County and Derby City Councils through the emergency planning team. The team is made up of trained staff from appropriate responding voluntary agencies, and the county and city social care departments.

The team delivers care and support to people affected by a major incident, particularly where deaths have occurred. In these cases the service is provided in partnership with other services, specifically police family liaison officers and, where necessary, with the support and advice of specialist health services. There are currently more than 50 crisis support team members.

One way to build resilience in communities is to make sure that the public know what to do if they are caught up in an emergency situation. Emergencies can happen anywhere and at any time, and while the chance of being directly affected is low, we need to ensure Derbyshire residents have the necessary knowledge and skills to respond to a range of possible incidents.

Our Local Resilience Forum webpages include advice on being prepared for the main situations identified in the Derbyshire Community Risk Register  
[http://www.derbyshireprepared.org.uk/risks/community\\_risk\\_registers/](http://www.derbyshireprepared.org.uk/risks/community_risk_registers/)

Following recent terrorist attacks across the country, we need to raise awareness of the national Stay Safe advice - Run, Hide, Tell. The film and leaflet can be downloaded or viewed at <https://www.gov.uk/government/publications/stay-safe-film>



Source; National Counter Terrorism Security Office

## Recommendations

**Pandemic influenza remains the highest risk within the Derbyshire Community Risk Register.**

- It is recommended that the **Derbyshire Local Resilience Forum strategic Pandemic Influenza Response Plan** is fully reviewed and updated this year, and preparedness is tested through a multi-agency exercise in 2018.

**Strengthening resilience of our communities is a key priority**

- It is recommended that the LRF's **'Derbyshire Prepared' website** is updated to include more advice for the public and communities on what measures they can take to be better prepared and what they can do in the event of an emergency occurring locally.

## 2.2

### Outbreaks and incidents

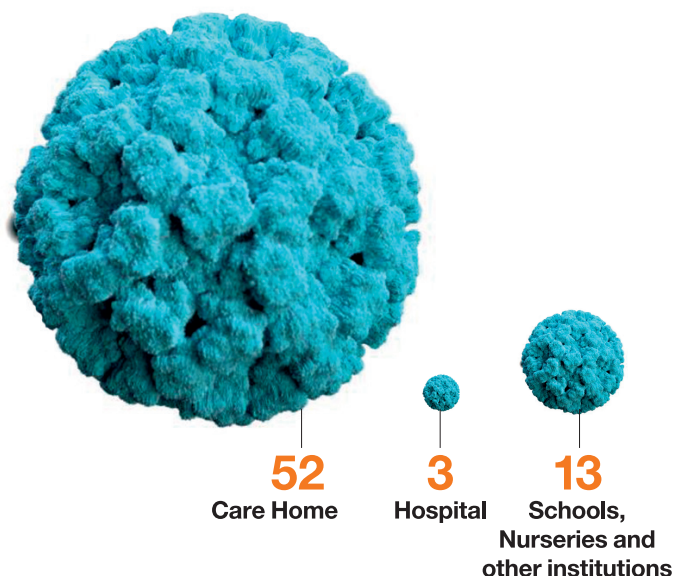
In chapter 1, we focussed on how diseases can spread within the community, causing an outbreak. This is where the rate of infection is greater than expected for the population at that time, or where the pathogen is particularly infectious or serious.

Incidents related to environmental hazards include fires and chemical spills, with the potential to cause ill health immediately or over a longer time period.

Public Health England monitors outbreaks and incidents to protect health by reducing risks of exposure, transmission and harm, and to increase understanding of communicable diseases. While many infectious disease outbreaks are preventable through vaccination and hygiene measures, where outbreaks do occur their impact can be limited by appropriate and timely responses.

The majority of outbreaks reported to PHE East Midlands are caused by the vomiting bug, Norovirus, in care/residential homes, schools and hospitals. In Derbyshire in 2016, 68 outbreaks of norovirus were reported to PHE and managed, across the settings outlined below:

#### Novovirus outbreaks



In addition, seasonal influenza causes outbreaks amongst the residential and community care population every year with deaths occurring among frail and vulnerable residents. A key intervention is to ensure good flu vaccination uptake amongst frontline health and care workers to protect vulnerable patients and clients.

Other viruses and bacteria can cause outbreaks and sometimes these have serious consequences. These situations can be averted by prompt recognition and appropriate public health management.



#### Water incident

In March 2016 an incident at a water reservoir involving high levels of chlorine added to the water system, resulted in over 3,000 homes and establishments in South Derbyshire and Leicestershire being issued with 'do not use' notices.

Following notification of the incident an incident control team was set up to ensure a co-ordinated response. This team included representatives from DCC Emergency Planning, Public Health England, the Environment Agency, the water company, the CCG and health providers.

The group worked to ensure clear and concise messaging to residents, the supply of water to vulnerable customers and to ensure supply of water for health organisations. Lessons learnt following the incident highlighted the need to ensure prompt notification of incidents and consistent information for residents, including via social media.



## Derbyshire/ National Hepatitis A Outbreak

Hepatitis A is a viral disease of the liver. It is transmitted via the faecal-oral route. The disease is generally mild, but severity tends to increase with age. Good hygiene including safe drinking water, food handling and good handwashing practice prevents infection. Cases are not very common in the UK, but it is quite infectious.

In summer of 2016 a strain of Hepatitis A not previously seen in the UK was identified in Derbyshire. A number of cases followed over the early autumn, mainly affecting men who have sex with men (MSM) and associated with travel to Europe.

Management of the incident involved PHE working with the DCC health protection team, DCHS sexual health service, employers and the voluntary sector. It included widespread vaccination at two workplaces and proactive vaccination of MSM at sexual health clinics. The strain has resulted in cases across the country and internationally.

PHE has recently issued national temporary hepatitis A adult immunisation recommendations in light of this ongoing hepatitis A outbreak which continues to primarily affect MSM.



Source: NHS choices

## Derbyshire/ National Tuberculosis Outbreak

Tuberculosis is the second most common cause of incidents in the East Midlands predominantly due to the high incidence of the disease in Leicester City. Tuberculosis is a bacterial disease that can affect any part of the body. People who have TB in their lungs can infect others. Left untreated, one person with smear positive pulmonary tuberculosis can infect 10-15 people each year. England has high rates of TB compared to most of Europe, but the incidence of TB in Derbyshire is the lowest in East Midlands.

A workplace-associated outbreak of TB was identified 2016 in Derbyshire. The regional PHE team set up a local Incident Control Team as well as co-ordinating the national outbreak management.

They worked with our DCC health protection team, employers at the affected workplace, and local tuberculosis services to arrange screening of several hundred people across Derbyshire and elsewhere in the country. Letters were sent to anyone who required screening including information about tuberculosis, background information and arrangements for access to screening.

This outbreak showed the importance of PHE at a local, regional and national level in managing an effective and proportionate response.

Public Health England is largely responsible for carrying out the local health protection regulations of the Public Health Act (2010). The PHE East Midlands Centre provides local oversight and carries out the statutory responsibilities of surveillance, and the investigation and management of outbreaks of infectious diseases and environmental hazards. As shown in these case studies, these functions are carried out with a wide range of partner organisations. Specific actions are tailored to the nature of the particular disease or incident.

### **What more can be done**

Strong organisational collaboration is essential for swift identification and appropriate response to, and management of incidents and outbreaks. Monitoring and identification of trends is supported by statutory notifications of infectious illnesses by GPs and other Registered Medical Professionals as well as by reporting by laboratories. The quality of local surveillance is highly dependent on these notifications.

One of the key ways of identifying outbreaks is through establishments such as nurseries, schools, hotels, restaurants, care homes and hospitals seeking advice from PHE when they see an increase in cases of disease or unusual patterns. This early advice-seeking allows for coordinated and proportionate action, and is an important role of front-line workers across the health and care system.

## **Recommendations**

**LHRP partners should collectively address any gaps identified in the self-assessment of health protection arrangements in Derbyshire as part of the national PHE led audit in September 2017.**

**Clinical Commissioning Groups in Derbyshire should consider developing a model to ensure joint leadership and co-ordination of their health protection responsibilities.**

# Chapter 3: Vaccination Programmes

## 3.1

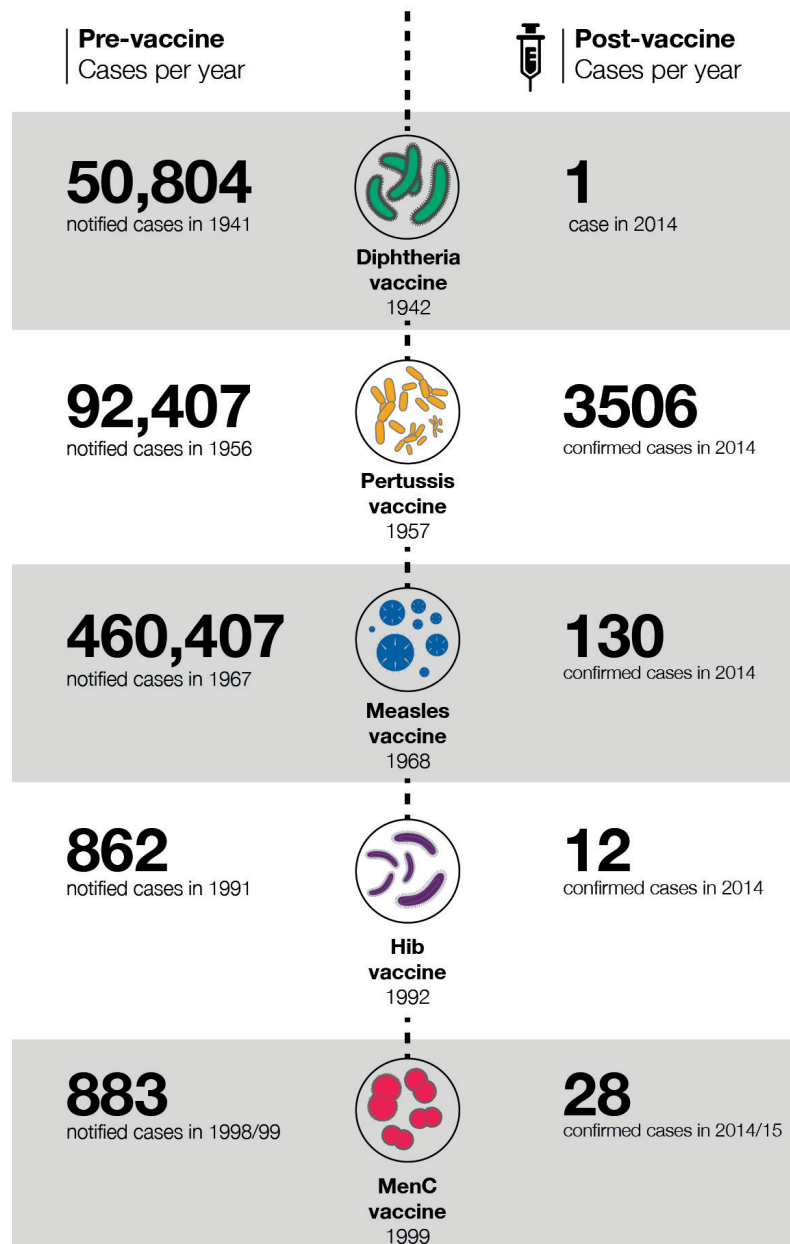
### An overview of vaccination

After clean water, vaccination is the most effective public health intervention in the world. In the past 50 years vaccination programmes have saved more lives worldwide than any other medical product or procedure. They have been instrumental in reducing, and sometimes even eradicating, devastating infections like smallpox, polio and tetanus.

Vaccination programmes have also significantly reduced the morbidity attributed to disease, providing a cost effective way of reducing complications and the associated burden on the healthcare system.

The introduction of the rotavirus vaccination is estimated to have prevented over 50,000 acute gastroenteritis admissions in the UK in 2013/2014 alone.

### How Vaccines work



Source; Public Health England

Data from the childhood flu programme shows significant reductions in both hospital attendance and primary care consultations in the vaccinated and wider population.

### Flu vaccine pilot success

In flu vaccine pilot areas (2014/15) where primary school age children were given the nasal spray vaccine we saw:



↓ 94%

**Primary school aged children:**  
GP influenza like illness consultation rates 94% lower



↓ 74%

**Primary school aged children:**  
A&E respiratory attendances 74% lower



↓ 93%

**Primary school aged children:**  
Hospital admissions due to confirmed influenza 93% lower



↓ 59%

**Adults:**  
GP influenza like illness consultation rates 59% lower

Uptake and impact of vaccinating school age children against influenza during a season with circulation of drifted influenza A and B strains, England 2014/15

The UK has one of the most advanced vaccination programmes in the world, providing protection across the whole life course for a range of serious diseases. The UK vaccination programme aims to provide both community wide protection and the potential eradication of disease through both the routinely scheduled vaccination programme and targeted vaccination of those who are at higher risk of specific infections.

National and local policy aims to achieve high levels of immunisation coverage to create 'herd immunity'. This is the level of vaccination required in order to prevent the circulation of disease.

### Vaccines protect us throughout our lives, from birth to old age

**Babies** are offered essential vaccines to protect against conditions including diphtheria, tetanus, whooping cough and polio through to meningitis, measles, mumps and rubella. The childhood vaccination programme is saving lives and preventing serious illness and disability.



**Adolescents and young adults** receive vaccines which protect against cervical cancer (girls) along with meningitis and septicaemia. Young adults who missed out on MMR as a child are encouraged to get vaccinated to protect against measles, mumps and rubella.



**Older people** are urged to protect themselves from flu every year (from age 65). We also vaccinate against serious and potentially fatal pneumococcal infections in people of 65 and over. Over 70s can avoid painful and debilitating shingles with a vaccine.



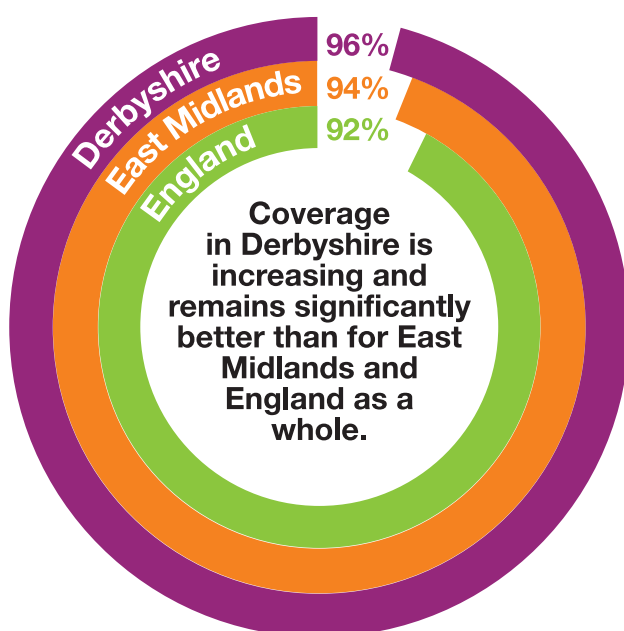


## 3.2

### Immunisation in Derbyshire

Coverage for childhood immunisation programmes in Derbyshire remains above national and regional average and largely above the recommended thresholds for herd immunity.

#### MMR at age 2 years (2016)



National data shows that some individuals or communities are less likely to take up vaccination. This creates potential pockets of lower coverage among, for example, children with physical or learning disabilities, families who do not access primary care services, children living in deprived areas, and those with lower levels of literacy.

Similarly uptake numbers in adults are generally lower than those seen in childhood. While uptake of vaccinations amongst pregnant women is similar to the national average, considerable variation exists between CCGs in Derbyshire. Uptake of influenza vaccine in pregnancy ranges from 43% in Southern Derbyshire CCG to 56.9% in North Derbyshire CCG in 2016/17.

Uptake of the shingles vaccination that is offered to 70 year olds, to reduce the incidence of shingles and post herpetic neuralgia, is also declining across the county.

NHS England is responsible for commissioning and system leadership of the national immunisation programmes. National service specifications are used to enable NHS England to commission high levels of coverage in line with national immunisation standards.

Local Programme Boards oversee the quality and performance of local immunisation programmes. The Derbyshire-wide Health Protection Board maintains oversight of programme performance providing the Director of Public Health with assurance that the health of the population is effectively protected.

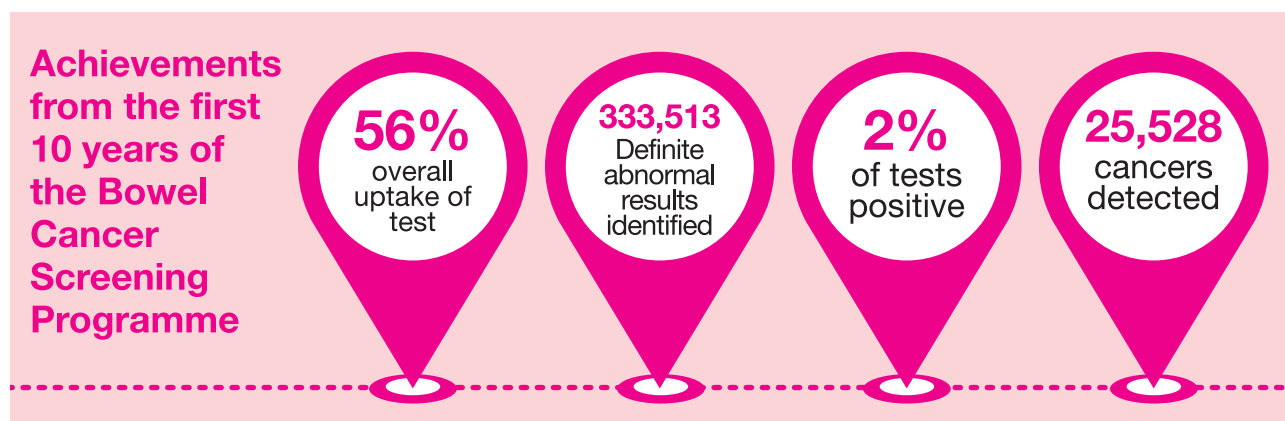
Close working between Screening and Immunisation Teams, local authority public health and Clinical Commissioning Groups has ensured local engagement to support improvements in coverage and reduce associated inequality.

### Recommendation

**Clinical Commissioning Groups should actively support the monitoring, promotion and performance management of immunisation programmes in conjunction with NHS England, in order to reduce the burden of disease and associated costs on the NHS system.**

# Chapter 4: Screening Programmes

Screening programmes save the lives of thousands of people each year. Since the introduction of the UK Cervical screening programme in the 1970s, deaths from cervical cancer have fallen by 72%. The programme is estimated to save around 2000 lives a year in the UK.

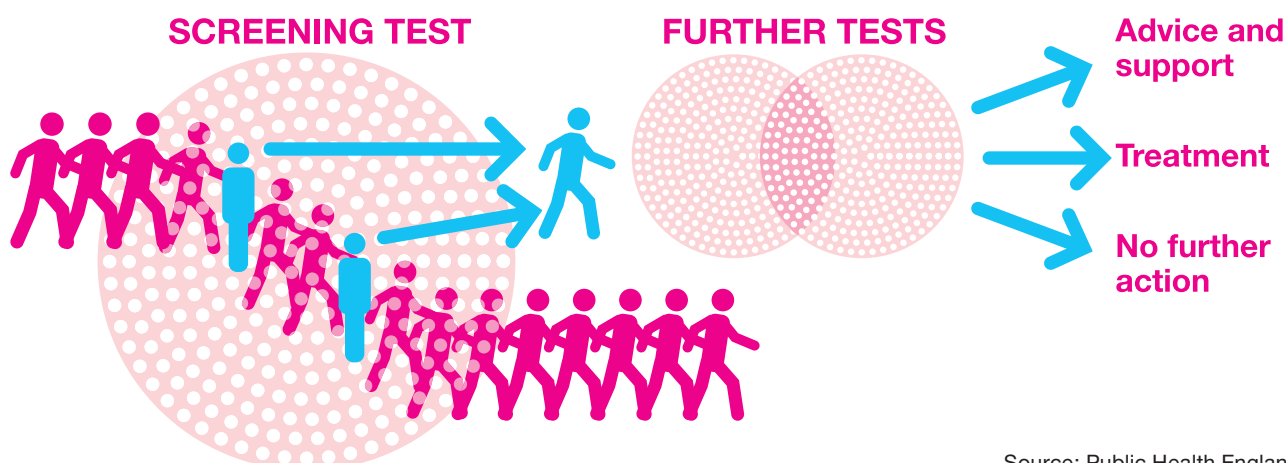


Source; Adapted from Public Health England

## What is screening?

Screening identifies people who are at higher risk of a particular health problem, so that early treatment can be offered or information given to help them make informed decisions.

Screening does not aim to identify a condition rather it determines an individual's risk of developing that condition. If an individual has a higher-risk result (a screen positive result) then further diagnostic tests are offered. Early identification of increased risk of developing a condition means better outcomes for the patient.



Source; Public Health England

The UK National Screening Committee advises the NHS on which screening programmes to offer. Screening programmes are targeted at groups of people who are most likely to benefit from them - this may be specific age groups or defined populations.

### Screening protects us throughout our lives, from birth to old age

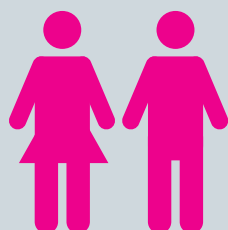
**Pregnancy:** screening for infectious diseases such as HIV, Hepatitis B and Syphilis to reduce the risk of transmission to the baby. Screening is also available to detect a baby's risk of developing inherited conditions such as Sickle Cell and Thalassaemia, and for conditions such as Down's, Patau's and Edward's Syndromes.



**Newborn screening:** to identify babies with any of 9 rare but serious conditions including cystic fibrosis and metabolic conditions, as well as physical abnormalities such as heart defects and hearing loss.



**Adulthood:** to identify people at increased risk of bowel, breast or cervical cancer, men with abnormal aortic aneurysm (AAA) and eye disease in people with diabetes.



## 4.1

### Screening services in Derbyshire

Screening programmes across Derbyshire perform well against the national standard, with coverage around five percent higher than the England average for cancer screening programmes.

Coverage for AAA across Derbyshire is one of the highest in the country with over 85% of men invited for screening attending for their scan. Similarly coverage of antenatal and new-born screening programmes is high across Derbyshire with coverage for new-born hearing screening at 99.0% and coverage for new-born blood spot screening consistently above 95%.

While coverage across programmes is generally high within Derbyshire, significant numbers of people do not take up screening when offered. Two in every five people across Derbyshire do not participate in bowel screening when invited. National data shows that some individuals or communities are less likely to access screening and they are often those with the highest risk factors. This includes people with a learning disability, individuals from black, Asian and other ethnic minority backgrounds, individuals in poorer communities and groups where English is not the first language.

Cervical and breast screening programmes have seen a declining uptake both locally and nationally. For cervical screening this is particularly noticeable amongst women aged 24 to 49 years and those aged 60 to 64 years.

Nationally evidence suggests a number of reasons for recent declines including, lack of awareness, low levels of literacy, embarrassment or fear of pain and difficulty in attending appointments.

## Barriers to participation in screening



Source; Adapted from Public Health England

## Cancer screening coverage by Local Authority (2016)

	Derbyshire	Standard	England
Breast cancer screening coverage	79.6% ↓	70%	75.5% ↑
Cervical screening coverage	79.1% ↓	80%	72.7% ↓
Bowel screening coverage	62.1% ↔	N/A	57.9% ↑

Source: Health and Social Care Information Centre/ Public Health England

Local antenatal screening data shows that a small number of women are missing the offer of first trimester antenatal screening for conditions such as sickle cell and thalassaemia and chromosomal conditions, due to delayed referral into maternity services.

Local processes to ensure timely referrals are crucial and include the need for greater awareness of the screening pathway for women from black, Asian or other ethnic minority backgrounds as well as women in second and subsequent pregnancies.



Quality assurance is an important part of screening programmes. Given the scale of screening programmes any potential incidents could impact large numbers of people, involve several organisations or geographical areas, and impact public confidence.

NHS screening programmes use a range of internal and external quality assurance processes including national service specifications, defined programme standards, failsafe mechanisms, key performance indicators, standardised incident management, and quality assurance assessment.

Local NHS England Screening Programme boards oversee the quality and performance of screening programmes and report to the Derbyshire-wide Health Protection Board, to provide assurance to the Director of Public Health and the Health and Wellbeing Board.

Screening providers, commissioners and stakeholders work together on a range of projects across Derbyshire to improve the coverage and equity of screening for the local population. These include;

- A Bowel Screening Working Group which aims to increase the uptake of Bowel Cancer Screening to at least 75% by 2020.
- The undertaking of a bowel health equity audit to reduce inequalities in access and uptake of the programme.
- A Learning Disability Project which aims to increase the uptake of Cancer and AAA screening for adults with learning disabilities, by embedding processes in GP practice.

## Recommendations

- **All public sector organisations in Derbyshire should lead the way for workplaces by having flexible policies that enable employees to attend screening appointments in work time and support the promotion of screening programmes.**
- **Clinical commissioning groups and NHS providers should work in together with Screening and Immunisation Teams to address inequity of access within local screening programmes.**

# Chapter 5: Environmental impacts

**Our environment plays a key role in health and wellbeing and can contribute to ill health. There is substantial evidence that climate change is affecting many aspects of where we live. This is likely to have a range of effects that may impact on health including: more frequent and severe weather events, such as heatwaves and floods; changing patterns of air pollution; and changing patterns of diseases caused by microorganisms.**

In 2007 flooding across the UK led to 13 deaths and more than £3 billion pounds worth of damage, similarly the heatwave of 2003 resulted in 2,000 excess deaths across England and Wales.

While extreme weather events cannot be directly linked to climate change, they provide a view of the events likely to become more common place. Therefore planning for climate related changes and adapting to their likely effects forms a crucial element of health protection.

## 5.1

### Air pollution

Scientific understanding of the effects of everyday air pollution has grown in recent years including links to an increased risk of serious illnesses such as lung cancer, stroke and heart disease, worsening of respiratory diseases such as asthma and chronic bronchitis and possible associations with dementia and diabetes.



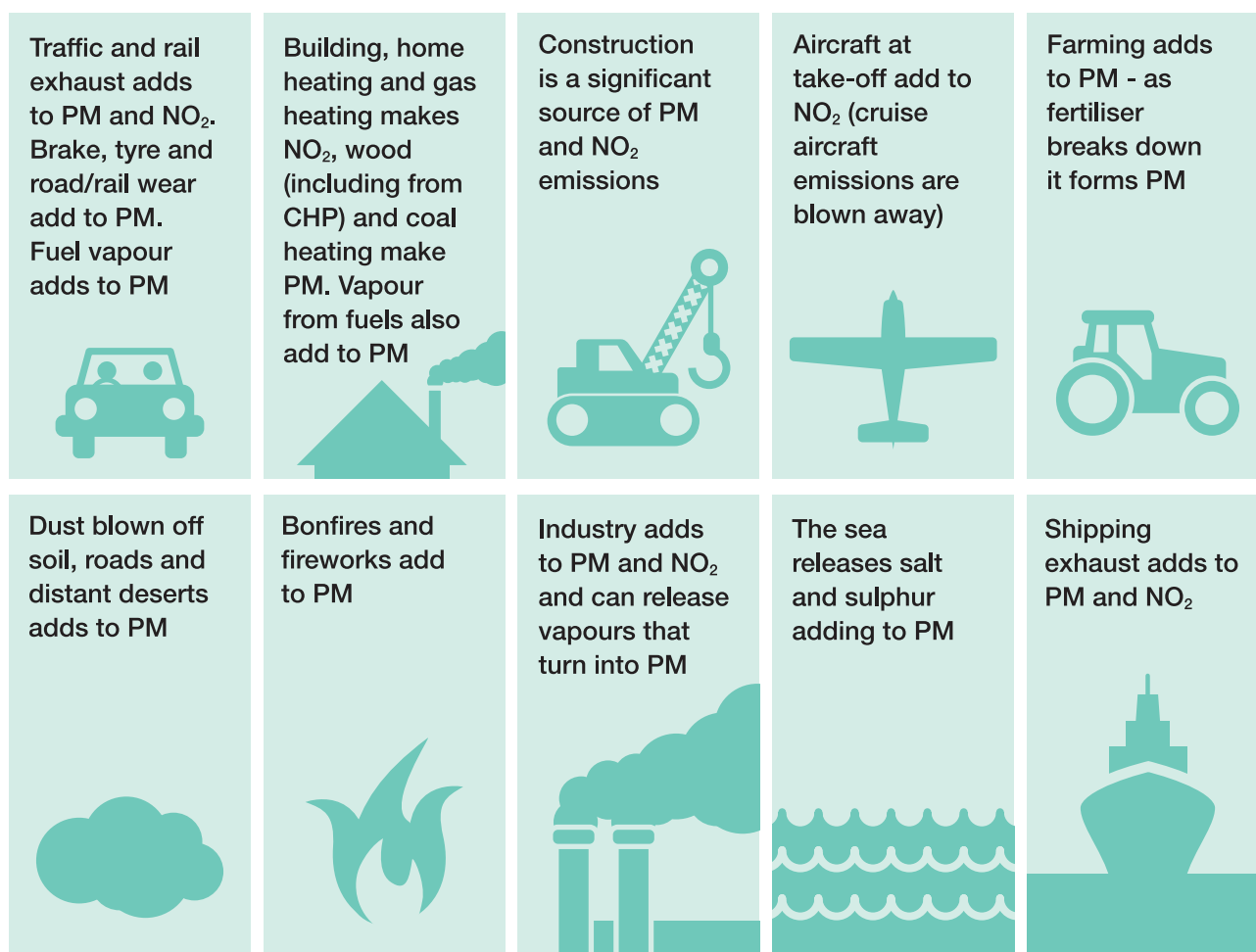
Source; National Clean Air Day

Children's developing organs and immune systems and smaller airways make them especially vulnerable. Air pollution is linked to low birth weight in babies, reduced lung function development and worsening of respiratory conditions such as asthma.

Unlike the visible smogs of the 1950s, modern day outdoor air pollution is largely invisible. Changes in the way we live and travel including increased use of diesel engines, increased car use and people walking less have led to increases in small particulate and nitrogen dioxide (NO<sub>2</sub>) pollution, which have the greatest impact on our health.

Road vehicles are the main pollution source in urban environments. Combustion from heating, wood burning stoves, coal fires and certain farming and industrial activities can

Source: DEFRA



also contribute to background air pollution, particularly in more rural areas.

In Derbyshire it is estimated that around 5.4% of all deaths are linked to long term exposure to small particulate air pollution (PM2.5). That is equivalent to around 402 deaths and 4041 life years. National data suggests the effects of PM2.5 could account for over 16,000 respiratory and cardiac hospital admissions, over a million asthma symptom days in children and more than six million lost working days.

Air pollution levels vary across the county: this is particularly due to proximity to sources of pollution such as road networks. Air quality is monitored by boroughs and districts at a range of sites across Derbyshire. This information alongside traffic modelling data provides an important mechanism for monitoring the effects and trends in local air pollution.

Air Quality Management Areas (AQMAS) are geographical areas where the annual average concentration of NO<sub>2</sub> has been found to exceed health based EU Air Quality Objectives. AQMAS are currently found in the following areas

- Chesterfield, on Church Street, Brimington;
- Erewash, two AQMAS next to the M1;
- Bolsover, next to the M1;
- High Peak, along part of the A628.

While there have been improvements in air quality levels within the last five years across the majority of monitoring sites in Derbyshire, within air quality management areas, less improvement has been seen.

The recently formed Derbyshire Air Quality working group aims to support the strategic oversight, planning and response required to address air quality across the geographical area and protect the public's health.

The group has representatives from local authorities, voluntary, commercial and health organisations, bringing together a range of disciplines including planning, transport, highways, public health, environmental health and communications.

Key challenges include increasing infrastructure and opportunities for walking, cycling, public transport and low emission vehicles in the county. Interventions which provide even modest decreases in air pollution have been shown to be cost effective and can contribute to other local priorities, such as active travel, health inequalities, sustainability and regeneration.

### Community action: National Clean Air Day



Source; with thanks to Lons Infant School; Ripley

June 2017 marked the first ever National Clean Air Day supported by Global Action. The event aimed to raise awareness around the impacts of air pollution and encouraged organisations and communities to come together and take practical steps to improve the quality of the air that we all breathe.

It saw schools, businesses, workplaces and health professionals make pledges and hold events to support improvements in air quality.

- Top tips were shared in the local press on social media, and across a range of organisations and community groups.

- Derbyshire County Council staff events were held to promote alternative fuelled vehicles and electric bikes, with over 400 leaflets distributed about air pollution.
- Health providers across the county held no idling events, took part in training around the impacts of air pollution and held car free days.
- A number of schools held walk and scoot to school days, took Clean Air Day pledges and designed posters about how to improve local air quality.

## Recommendations

**Harnessing collective action by all public sector organisations in Derbyshire can provide the scale required to achieve real change.**

- All public sector organisations in Derbyshire should lead the way to ensure their policies encourage active sustainable travel amongst the workforce: home working, cycle to work schemes, car sharing and public transport discount schemes
- All public sector organisations in Derbyshire should lead the way to reduce emissions from fleets by making choices to replace fleet vehicles with low emission options, reducing workplace mileage and implementing no idling policies
- NHS provider organisations should include air pollution advice in care pathways and consider ways to encourage sustainable patient travel to healthcare venues.



## 5.2



### Severe Weather

Climate change is likely to have a range of environmental effects that may impact on health including more frequent and severe weather events, such as heatwaves and flooding. The probability of a worst case severe weather event such as cold, heatwave or heavy snow is assessed as between 1 in 2 and 1 in 20.

While the health impacts of cold weather are significantly lower than for events such as pandemic influenza, even in years of moderate cold weather a significant rise in deaths and increased levels of illness are experienced.

Following a steady decline since the 1950s, the number of excess winter deaths in England has levelled out in recent years to an average of around 25,000. Higher rates of morbidity and mortality related to cold weather are seen in older people. This is due to factors such as circulating influenza, impacts on respiratory and cardiovascular disease and fuel poverty.

The mortality burden from cold weather starts at relatively moderate outdoor average temperatures, around 4oC to 8oC, and increases as temperatures fall.

Similarly a trend in hotter UK summers has been experienced and it is estimated that by 2040, heatwaves similar to the 2003 heatwave which led to 2,000 excess deaths, are expected to become the norm. The main causes of death and illness during heatwaves are respiratory and cardiovascular diseases.

## Recommendation

**Health and social care organisations and the voluntary sector should work together to maintain and improve arrangements for the planning and response to cold weather and heatwaves.**

**Initiatives should also consider using infrastructure to protect people from the effects of the cold and heat. This might include improving building design, provision of adequate housing, and initiatives to tackle fuel poverty.**

# Chapter 6: Injuries and Violence

Every year in Derbyshire there are deaths and serious injuries from a range of causes such as road accidents, falls and violence - both assault and self-inflicted. This chapter focuses on a number of different issues and how we can protect the people of Derbyshire from death and injury.

## 6.1

### Falls

Falls are one of the largest causes of emergency hospital admissions for older people in Derbyshire. People aged over 65 years have a 30% risk of falling at least once a year and this increases to 50% in those aged over 80 years.

Falls are a symptom of underlying issues. They may mark onset of frailty or a new or worsening health problem. Falls often represent a tipping point in a person's life triggering a decline in independence. Alongside hospital admissions, falls create significant demand for ambulance services, social care support and increase long-term admissions to residential care. Many falls are preventable.



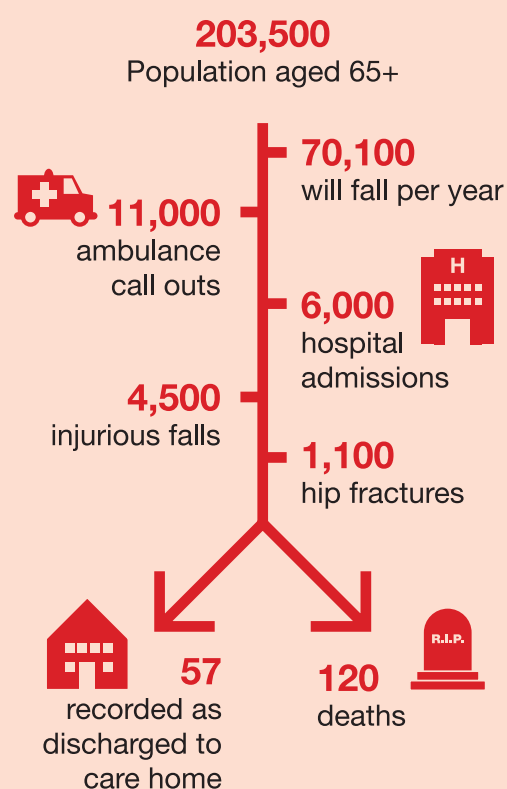
**1 in 3** over 65 year olds will fall each year



Estimated cost to Derbyshire each year  
**49m**



**75%** of hip fractures in over 65s are women





### Strictly No Falling

The Strictly No Falling service provides community exercise classes to improve strength and balance amongst older people.

Esther had a history of recurrent falls, used two walking sticks and a scooter and relied on her husband for most things. She attended SNF classes regularly with her friend, improving her strength, balance, co-ordination and after three months saw a 70% improvement in her general mobility.

When her husband unfortunately passed away Esther was able to maintain her independence. She no longer uses a scooter and continues with classes to maintain her fitness plus socialise with others in her local community.

A joined-up approach to falls prevention, response and management is underway in Derbyshire. A Derbyshire-wide, integrated falls pathway was agreed in June 2017 and this will be put in place over the coming months.

The challenge will be to engage the wider public workforce, as well as older people, in order to raise awareness and deliver long term behaviour change. We need to make better use of existing falls prevention services and evaluate them rigorously.

We also need to make sure those at higher risk are identified and promptly referred to appropriate, high-quality, evidence-based services. Successful falls prevention work can lead to system-wide benefits in health and wellbeing, maintaining independence, reducing hospital admissions and delaying the need for long-term care.

## Recommendation

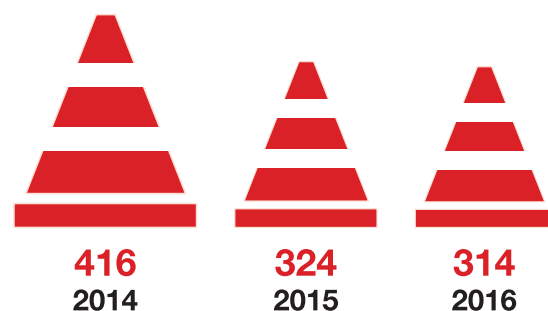
**All provider organisations working with older people should ensure frontline staff are aware of the impact of falls and importance of preventing them, can identify those at risk and know how to refer into local falls preventative services.**

## 6.2

### Road traffic collisions

Traffic collisions are a major cause of preventable deaths and injuries in Derbyshire. Between 2013 and 2015 1,042 people were killed or seriously injured on Derbyshire's roads, including 24 children in 2015. Casualty rates are higher than in the country as a whole, and this rate is not reflecting the downward trend seen elsewhere.

#### Killed and seriously injured



In 2015, 45% of people killed or seriously injured on Derbyshire's roads were car users. A further 27% were motor cyclists, despite only representing around two percent of all traffic.

Although the number of road traffic collisions is falling overall, in Derbyshire there are increasing numbers of casualties among drivers aged 65 and over, and among adult pedal cyclists.

This is likely to reflect the increasingly ageing population and popularity of cycling, rather than an increase in risk to individuals in these groups. Indeed, older drivers have a lower risk of casualties and fatal or serious injury as a proportion of their age group. Younger drivers, aged 25 and younger, are involved in more casualties and are more likely to be killed and seriously injured.

The vast majority of road traffic collisions are preventable and can be avoided through education, awareness, improved road infrastructure and vehicle safety.

## Influencing factors



**Travelling distances** partly affected by economic externalities



**Weather:** Good weather tends to increase casualties, whereas bad weather tends to decrease them



**Behaviour and attitude** of drivers, riders and pedestrians



**Mode of transport**

A number of initiatives are in place in Derbyshire to help minimise casualties and work is directed at people who are at highest risk and with the greatest need:

- Education and training work in schools and colleges with children and young adults
- Child car seat checks to advise members of the public.
- The Smartrider scheme provides bicycle training for Year 6 pupils.
- As part of Public Health's Five 60 programme, every child at Key Stage 2 receives training in safe use of the road.
- County Rider, an adult cycle training programme was launched countywide in July 2016.
- Engineering Casualty Reduction Schemes.
- Training of older car drivers was launched countywide in 2016.

### What more can be done?

The key to success lies in building strong partnership working, making maximum use of available resources and identifying innovative ways of securing new funding. The Derbyshire Road Safety Partnership [www.saferroadsderbyshire.org.uk](http://www.saferroadsderbyshire.org.uk) has a good track record of effective action to improve road safety and reduce road traffic collisions.

## Recommendation

**Derbyshire County Council should evaluate the effectiveness of current driver education work and focus investment on schemes that show the greatest benefits.**



## 6.3



Source: Derbyshire County Council

### Needle and Syringe Programme

Our needle and syringe programme aims to protect the health of a key vulnerable group - injecting drug users. People who inject drugs are subject to a number of serious health risks. Repeated injecting damages veins, which may lead to deep vein thrombosis and other complications. Poor hygiene during injecting may cause bacterial infection, which can be life-threatening.

The sharing or re-use of injecting equipment previously used by someone else may transmit blood-borne viruses, such as hepatitis C and HIV. People who inject heroin risk overdosing, which can be fatal.

It is estimated that around 1400 people in Derbyshire inject heroin and/or crack cocaine, and in 2016, there were 23 drug-related deaths in Derbyshire. It is estimated that about half of people who inject psychoactive drugs have been infected with hepatitis C.

Needle and syringe programmes give people who inject drugs access to sterile injecting equipment, harm reduction advice and a place to return used equipment for safe disposal.

In order to ensure easy access to the service, the majority of needle and syringe programmes in Derbyshire are provided by community pharmacies. Currently there are 48 pharmacies delivering this service. However, there are still some areas of Derbyshire with insufficient coverage and so efforts are currently being made to recruit pharmacies in these areas.

Derbyshire Recovery Partnership - the adult substance misuse treatment service - also provides a specialist needle and syringe programme at four bases in Chesterfield, Ripley, Ilkeston and Swadlincote. This service provides injecting-specific harm reduction advice and services such as blood-borne virus testing.

Under 18s can access a needle and syringe programme offered by the young people's specialist substance misuse service Change, Grow, Live.

Nationally there is concern that there is not enough injecting equipment issued to allow every person who injects drugs to use a new needle and syringe for every injection. Efforts are required in Derbyshire to ensure that enough equipment is issued.

There is scope to improve the quality of the harm reduction interventions delivered by pharmacy staff through further training.

### Recommendation

**Staff from DCC and partner agencies, who work with people who inject drugs, should encourage access to needle and syringe programmes and seek advice on reducing the harm associated with injecting.**

## 6.4

### Domestic abuse

Domestic abuse is often associated with physical violence, but it can take many different forms, including psychological, financial and sexual abuse, coercion and controlling behaviour. Often these occur in combination. The majority of victims of domestic abuse are women in heterosexual relationships, but males, people in same-sex relationships, children, and older people can all be victims of abuse.

Victims and witnesses of abuse can experience significant impacts on their health – including physical harm, worsening of chronic conditions and mental health, substance misuse, relationship breakdown and isolation, unemployment, financial difficulties and homelessness.

Women experiencing abuse are also more likely to have a low birth weight baby, premature birth

or miscarriage. Abuse is often witnessed by children. Identifying and helping people who have experienced or witnessed abuse will improve the health of this vulnerable group of people.

Domestic abuse is widely under-reported. The best available evidence suggests that in England one in four women and one in seven men experience domestic abuse within their adult lives. Repeat incidents account for over half of domestic abuse incidents.

In 2016/17 there were more than 11,000 domestic abuse incidents recorded by Derbyshire Constabulary, and over 4,000 domestic abuse crimes. This was a three percent increase on the previous year. Comparisons over time and with other areas are difficult due to variance in levels of reporting and recording by the police.

On average, in England, seven women and two men are killed by their partner or ex-partner every month. Cases where the victim has been identified as being at high risk of serious harm or homicide are reviewed by Multi Agency Risk Assessment Conferences (MARACs). In 2016/17, MARACs in Derbyshire reviewed 799 cases. In the three years from 2014/15 to 2016/17 there were seven domestic homicides in Derbyshire.

Certain factors are known to increase the risk of abuse. These include being female, being a younger adult, living in socio-economic deprivation, having a long term illness or disability, having a mental illness, pregnant and post-natal women, history of experiencing or witnessing abuse and transgender people. Male victims, and victims from Lesbian, Gay, Bisexual and Transgender (LGBT) communities are less likely to report abuse or engage with services.

The Derbyshire Domestic Violence and Abuse and Sexual Violence Strategy sets out the shared ambitions for how domestic abuse is tackled across the county. The strategy focusses on prevention of abuse, protecting victims and ensuring perpetrators are held to account as well as providing high quality services.

**TIRED OF WALKING ON EGG SHELLS?**

THE DERBYSHIRE DOMESTIC ABUSE SUPPORT LINE  
**08000 198 668**  
 IN AN EMERGENCY CALL 999

If you're experiencing domestic abuse or know someone who is contact our specialist services for free and confidential advice and support.

Text: 07557 800313  
 Email: derbyshireDAHeline@actionorg.uk

ONE PHONE CALL - ONE PLACE FOR SUPPORT

core Supporting victims of crime in Derbyshire to regain & maintain

Deaf or hearing impaired?  
 - Emergency SMS, Text 999

DERBYSHIRE County Council

Currently the services commissioned by Derbyshire County Council to support victims of abuse include an Independent Domestic Violence Advisor for people at high risk, medium risk outreach services, children's domestic abuse support services, accommodation and housing related support services, and a domestic abuse helpline. There is also a perpetrator programme to reduce the risk of re-offending.

### Derbyshire's Domestic Abuse Strategy

The Domestic Abuse strategy identifies the following as current priorities:

- increase diversity of referring agencies to MARAC
- more organisations and communities involved in raising awareness of abuse
- increased confidence in front-line workers in dealing with a disclosure through attendance on training
- increased confidence in victims in reporting abuse and reduction in retractions and withdrawals of witness statements
- reduction in serial and repeat offenders
- make access to support services consistent and equitable to all communities in Derbyshire.

## Recommendations

**Organisations should ensure frontline workers are trained to identify and respond appropriately to disclosed or suspected instances of domestic abuse**

**Organisations should put in place policies that include a zero tolerance pledge towards domestic abuse and outline the support available for employees and service-users who are victims of domestic abuse.**

## 6.5



### Suicide prevention

The effects of suicide can be devastating – with the impact felt by family, friends, professionals, colleagues, neighbours and communities. Being bereaved or affected by suicide not only has a significant psychological effect, but there is also a financial cost, with the average cost of a death from suicide estimated to be £1.7m.

The reasons that lead someone to take their own life can be extremely complex, but suicides are preventable if the warning signs are recognised and responded to appropriately.

However, no single organisation can address all of the factors that contribute towards someone deciding to take their own life, and for this reason suicide prevention should be everybody's business.

Between 2013 and 2015, an average of 72 people each year died from suicide in Derbyshire, with more than 80% of these deaths being amongst men.

Just under one percent of all deaths are due to suicide. However, it accounts for four percent of deaths in the under 75s, and among men aged under 40 years one third of all deaths are due to suicide.

Suicide also disproportionately affects our most disadvantaged communities with suicide rates being three times higher in the most deprived areas.



### **The Derbyshire Suicide Prevention**

**Partnership Forum** brings together service-users and representatives from a range of statutory, voluntary and community organisations, and businesses to co-ordinate work to reduce the number deaths from suicide. Recent achievements include:

- a community-focussed response following a number of suicides within a particular community. This included promotion of suicide safety messages and resources, and providing suicide awareness training to staff and volunteers in local organisations and businesses
- outreach work with Derby County and Newcastle United fans on World Suicide Prevention Day to raise awareness of positive mental health, and promote actions that fans could take if they were concerned about their own or someone else's mental health
- improving data collection processes to be able to respond in a more timely manner to causes for concern
- delivery of Suicide Prevention Training sessions to over 500 professionals and community leaders
- developing resources to support professionals and members of the public in identifying and supporting people experiencing suicidal thoughts

Stakeholder Engagement event and a suicide prevention network that complements the work of the forum provide opportunities for partners to engage and contribute to the suicide prevention agenda locally.

## **Recommendation**

**Organisations should ensure their policies and working practices are “suicide aware” and consider developing a workplace suicide prevention programme, as outlined in ‘Reducing the risk of suicide: a toolkit for employers’**

### **What more can be done?**

Helping people who are experiencing emotional distress to talk openly and honestly about their feelings, and to be treated with compassion and empathy would have a significant impact on reducing the number, and subsequent impact, of suicides.

As suicide prevention is everybody's business, individuals and organisations should identify the contribution they can make to suicide prevention work in Derbyshire. An annual

# Chapter 7: Update on Derbyshire – A Healthy Place

**My annual report last year focused on the role of ‘place’ in the health and wellbeing of our local communities, and how the circumstances of people’s lives is key to finding solutions to improving the health of local people.**

I outlined what is known about how where we live influences the quality of our lives. A good place to live is characterised by access to jobs, green space, transport, safe and secure homes as well as services such as healthcare, schools and leisure activities.

I made recommendations about how creating and maintaining healthy and resilient communities requires a co-ordinated, ‘place-based’ approach. This takes into consideration the unique characteristics of our communities in terms of the people, the local services and physical assets such as housing, community buildings, parks and open spaces. Achieving sustainable change often requires long term commitment, but in reviewing the progress made on my recommendations from last year, it’s clear we have made a good start.

I recommended the implementation of a ‘Healthy Settings’ approach in schools and workplaces. The Healthy Workplaces Derbyshire Programme is supporting an additional 40 workplaces to put in place support related to mental health and wellbeing, with physical activity, weight management, smoking cessation and alcohol and substance misuse featuring regularly. In addition, 24

Derbyshire schools have achieved Healthy School Community Award status, and a further 9 schools are working towards the award.



‘The Award status is being recognised as contributing to good OFSTED reports in schools. Wirksworth CoFE Ofsted report stated that ‘You and your staff promote the welfare and safety of pupils well in the school, through links with the Derbyshire Healthy Schools Community Award programme. You receive valuable guidance from the programme that supports you to target key welfare and safety messages. You organise ‘staying safe days’ that teach pupils about keeping cyber-safe, and water, sun and road safety.’

Local partnerships continue to actively support health and wellbeing within communities. DCC is an active member of the UK Healthy Cities (UKHC) Network - six districts and boroughs having achieved affiliate member status and the remaining two are currently working towards membership.



**Shirebrook Forward NG20** has successfully secured £1.3m funding from DCLG to take forward the Building Resilience Programme. The funding will be used to address the increased pressure on services such as community safety, health and housing by providing additional resources.

It will also be used to enhance the physical characteristics of local places, improving community assets and raising community/civic pride. The Building Resilience initiative has developed links with the work of One Public Estate and further opportunities to review community assets to enhance shared use of public sector facilities are being explored.

We continue to make progress on tapping into Derbyshire's special natural assets. A Derbyshire Greenspace and Health conference is planned for the autumn, with the aim of raising awareness of the health benefits of greenspace, promoting good practice and strengthening future partnership working.

Work is underway to map the amount and accessibility of greenspace in Derbyshire, and to link with health outcome data such as childhood obesity rates. This will improve our understanding of which communities are not well served with accessible greenspace and what this means in terms of health impacts on the local population. This will provide a useful planning and monitoring tool for all partners and should guide future action to improve access to green open spaces.

Chapter 5 of this year's report leads on from the recommendations made around air quality in last year's report. Following a successful multi-agency Air Quality Event in June 2016, a Derbyshire working group was set up to build on collective commitment to address air quality across Derbyshire County and City.

The group has secured wide representation, produced an annual report for the Health and Wellbeing Board, begun mapping of current air pollution levels to identify areas of priority, mapped current strategic action to address air quality, supported the National Clean Air Day and is working to develop a joint Air Quality strategy.

Alongside this there have been key achievements in increasing active travel and our sustainable travel team has supported lots of Derbyshire schools and workplaces to promote active travel. For example, in May this year, over 48,000 pupils in 281 schools participated in Travel Smart week, and 32 schools achieved Modeshift Stars awards.

The Derbyshire Cycle Network now includes 244 miles of off-road cycling trails, otherwise known as greenways. In 2017 Derbyshire hosted Stage 4 of the OVO Energy Women's Tour 2017 and also the Eroica Britannia 2017. Both events focussed on encouraging more women and girls to cycle more regularly which is a key objective in the Derbyshire Cycle Plan.

### **Derbyshire County Council Staff Travel Plan - 'Miles Better'**

A great example of 'practising what we preach'. Our own staff travel plan offers a range of incentives including a Cycle to Work Scheme, discounted public transport tickets, discounted annual public transport tickets, a car share scheme and the provision of shower and changing facilities for cyclists and walkers.

Biennial staff travel surveys, carried out since the launch of the travel plan back in 2010, reveal a four percent reduction in single occupancy car use so far.

While more work is needed on Ultra Low Emission Vehicles and electric charging infrastructure, some action has begun on

reducing air pollution from DCC's fleet of vehicles. Core fleet vehicle replacement specifications now include:

- Automatic engine stop start to reduce engine idling and therefore fuel consumption and exhaust emissions
- Auxiliary cab heaters to reduce engine idling
- Speed limiters applied to reduce fuel consumption and prevent vehicles travelling over the maximum speed limit
- Acceleration control to restrict the power of the vehicle when it is empty or has a light load to help reduce fuel consumption.

### Derbyshire Connect

This 'Demand Responsive Transport' bus service was launched in February in the Ashbourne and Wirksworth area.

The fully accessible minibus service is run by Ashbourne Community Transport and connects 47 villages with the two market towns. It replaces a conventional local bus service.

Passengers can book to travel any time from a week before their journey or up to two hours beforehand. A standard bus fare is charged, but child fares are available and Gold Card holders can travel for free after 9.30am during the week.

Initial analysis shows that passenger numbers have increased month by month. The performance of Derbyshire Connect will be evaluated in the coming months and, if successful, could provide the authority with a new way to provide passenger transport services in different parts of the county.

A key aspect of 'place' is where we live, and since my last report I have set up a multi-agency Housing Systems Group. The group aims to provide strategic leadership for housing issues in Derbyshire. This includes attracting funding for housing and health related interventions, taking an evidence-based approach to preventing housing related health problems, reviewing housing-related services to identify opportunities for improving effective delivery and exploring how we can improve the impact of the private housing rental sector on health outcomes.

The **Healthy Home project** funded through the integrated Better Care Fund delivers free, home-based, affordable warmth services to vulnerable people on very low incomes who have long term health conditions made worse by the cold.

This project follows NICE guidance on preventing excess winter deaths, has a very high satisfaction rate and attracts external grants for work such as new boilers, insulation and heating controls.

Derbyshire residents benefit from warmer homes, bespoke energy saving advice and making the warmth affordable – the financial benefits are estimated at over £200,000 per annum, as well as benefiting residents' health.

The savings come at no cost to households, as the Local Authority Energy Partnership has attracted over £300,000 of funding from Government departments, charities, energy companies, energy distribution companies and other sources.

We are working with a range of partners to develop an Older People's Housing and Accommodation Strategy. This will set out how we plan to meet the housing needs of Derbyshire's older population into the future.



A more strategic approach is needed as our population ages and the deficit in appropriate housing grows. This limited stock of housing suited to the needs of older people has a detrimental impact on lifestyle choices, communities and health and wellbeing levels. The strategy will set out how we plan to make better use of the county's housing and accommodation and offer solutions that can help older people live independently for longer.

I also recommended that we should take measures to maximise the impact of place based approaches to health and care services. The Better Care Fund is supporting joint working between the NHS, social care and other partners. Quarterly monitoring of outcomes recognised to be 'barometers' of care system pressure are reported nationally and to the H&WB board.

The Derbyshire Sustainability and Transformation Plan provides opportunities to build on community assets and develop current relationships between members of the community and voluntary and statutory organisations to support a 'prevention at place' approach. Our Public Health Locality teams are well placed to support these developments through established partnership arrangements.

It is important to ensure that existing and new interventions are rigorously evaluated to help us demonstrate what works in 'place-based' health and social care provision. An action research approach is being used to monitor an intensive, care home pilot, which aims to improve the quality of care for residents while at the same time saving money for the system.

In addition, Wellbeing Erewash, as part of the Vanguard programme, is evaluating new approaches to personal and community resilience and delivery of integrated primary and community services. The evidence from these evaluations will help inform our future progress in developing place-based approaches to integrated health and social care in Derbyshire.

# Protecting the Health of Derbyshire – Feedback

Thank you for choosing to complete our short questionnaire about this year's annual report. Your comments and feedback will help us to make decisions about improvements for future reports. **Please note all responses are confidential.**

## 1. Which sector do you currently work for?

- ☐ Private
 ☐ Voluntary/Community  
☐ Public
 ☐ N/A - I do not work for any organisation  
☐ Other (please specify)

## 2. If you work in the public sector, which organisation do you work for?

- ☐ Clinical Commissioning Group
 ☐ NHS Trust  
☐ County Council
 ☐ Police  
☐ District/Borough Council
 ☐ Fire and Rescue  
☐ Other (please specify)

## 3. Did you find the report:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to read	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate in length	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 4. After reading the annual report, do you have a better understanding of the health protection issues in Derbyshire?

- ☐ Yes
 ☐ No
 ☐ Don't know

**5. After reading the annual report, do you have a better understanding of how your organisation can contribute to health protection?**

☐ Yes      ☐ No      ☐ Don't know

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**6. If relevant to you/your organisation, do you intend on following any of the recommendations?**

☐ Yes      ☐ No      ☐ Don't know

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**7. If yes, which recommendation/s will you act on?**

**8. How do you prefer to receive the annual report?**

☐ Printed copy      ☐ Online      ☐ Other (please specify)

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**9. Please provide any additional comments regarding the annual report.**

**Please return this feedback form to:**

Dean Wallace, Director of Public Health, Derbyshire County Council,  
County Hall, Smedley Street, Derbyshire DE4 3AG

Or by email to my PA, Janice Kennedy at [janice.kennedy@derbyshire.gov.uk](mailto:janice.kennedy@derbyshire.gov.uk)



## Acknowledgements

I would like to thank those who have contributed to the annual report this year including:

Jane Careless, Senior Public Health Manager, Derbyshire County Council  
James Creaghan, Senior Public Health Manager, Derbyshire County Council  
Rosie Cooper, Specialty Registrar in Public Health, Derbyshire County Council  
Linda Drew, Public Health Manager, Derbyshire County Council  
Laura French, Specialty Registrar in Public Health, Derbyshire County Council  
Dr Lucy Gavens, Specialty Registrar in Public Health, Derby City Council  
Jane Hicken, Public Health Manager, Derbyshire County Council  
Nik Howes, Public Health Manager, Derbyshire County Council  
Helen Johnston, Specialty Registrar in Public Health, Derbyshire County Council  
Iain Little, Consultant in Public Health, Derbyshire County Council  
Dr Sophia Makki, Consultant in Communicable Disease, Public Health England East Midlands Centre  
Colleen Marples, Public Health Communications Officer, Derbyshire County Council  
Chris McManus, Principal Public Health Analyst, Derbyshire County Council  
Paul Miles, Public Health Manager, Derbyshire County Council  
Elizabeth Partington, Emergency Planning Manager, Derbyshire County Council  
Alison Pritchard, Consultant in Public Health, Derbyshire County Council  
Dr Eleanor Rutter, Consultant in Public Health, Derbyshire County Council  
Darran West, Senior Public Health Manager, Derbyshire County Council  
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