



Health protection

Annual Public Health Report
2016

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Foreword

This year's annual report is on the theme of health protection. Health protection focuses particularly on how the public is protected from the threat of both infectious diseases and environmental hazards such as chemicals, radiation and extreme weather.

In Cumbria we also consider screening for non-communicable diseases such as cancer to be part of the health protection function. It is a complex area of work, with many different organisations playing different roles. Planning for and ensuring that there is an adequate response to such threats is a statutory function of the County Council, and as Director of Public Health I have a duty to lead the Council's response to incidents that present a threat to the health of the public. Much of the specialist expertise and capacity to respond to such incidents sits elsewhere however, as do most of the budgets for purchasing health protection services. The County Council's role is therefore mainly to provide local leadership to the health protection function. Other important agencies in the health protection system include:

- Public Health England (PHE), which holds the vast majority of specialists in communicable disease. PHE is the main source of advice around planning for the prevention of infectious disease, and when there is an outbreak of any sort they take the lead on investigating and responding to it. PHE is also a key source of advice and support about the health impacts of chemical and radiation exposure, and oversees quality control in screening programmes.
- Environmental Health teams within our six District Councils. Environmental health teams play a critical role in preventing infectious disease (for example by enforcing food hygiene and water safety regulations) and responding to outbreaks by supporting local investigations and putting in place measures to control the outbreak.
- NHS England, which purchases local vaccination and screening services, is responsible for ensuring that NHS organisations have appropriate plans in place in the event of emergencies, and for co-ordinating the NHS response to major incidents.
- Local health services, in particular primary care teams and Cumbria Partnership Foundation Trust, which provide the vaccination services, and local hospital trusts, which provide most of the screening services.

As I covered the issue of planning for emergencies in last year's annual report, I am not going to do so again this year despite it being such an important part of the health protection function. Instead this year's report considers the other two main strands of health protection: infectious disease and screening services.

Chapter one focuses on the front line of defence against infectious disease – vaccination services. It looks at the importance of vaccinations, and at how well Cumbria is doing in ensuring that as many people as possible are protected in this way.

Chapter two considers other ways in which we try to prevent outbreaks of infectious disease, and how we respond to them when they do happen.

Chapter three looks ahead to one of the most significant emerging public health threats – the rise of antimicrobial resistance. Of all the long term risks to public health, not just locally but at a global level, this is possibly the most frightening. Widespread antimicrobial resistance could wipe out many of the health gains of the last 100 years and see a return to people dying from infections that we've come to think of as easily treatable – and still not enough is being done to tackle it.

Finally, chapter four considers screening services in Cumbria. Screening seeks to protect health by the early identification of non-infectious diseases, so that treatment can be started sooner, resulting in better outcomes.

Public health can be a very broad topic, covering everything from tackling the wider socioeconomic determinants of health and wellbeing, to supporting individual lifestyle change. Health protection, however, is very much at the sharp end of public health, often seeking to intervene directly on an immediate threat to health, whether that be an infectious disease or an environmental hazard. Even so it's something where everyone can play their part:

- Get vaccinated and, in particular, if you have children, ensure that they get vaccinated;
- Follow good basic hygiene rules, in particular good hand washing;
- Don't pressurise your doctor or nurse for antibiotics;
- Take up screening opportunities when they're offered.

In many ways these are the foundations of public health.



Colin Cox
Director of Public Health, Cumbria.

Vaccinations

Vaccination (or immunisation) programmes are one of the most successful achievements of the last 100 years and have had an enormous impact on health across the world.



Before vaccines were available many people in Cumbria died from diseases such as smallpox, diphtheria, whooping cough, measles and polio. This chapter explains why vaccinations are still important today, demonstrates the current success of Cumbria's immunisation programmes, describes the people and organisations working together to promote these programmes and gives examples of vaccination work currently happening in the county.

Why is this work being done?

Based on the success of the smallpox programme, the World Health Organisation launched the Expanded Programme on Immunisations in the 1970s¹. The goal of this programme was for every child to receive protection against six childhood diseases: tuberculosis, polio, diphtheria, pertussis (or whooping cough), tetanus and measles. By 1990 vaccines were protecting 80 percent of the world's children. Since the programme was started, more vaccinations have become available, such as those for hepatitis B, rotavirus and haemophilus influenza, and new ones are continually being developed. Vaccinations are not just for children however. The pneumococcal vaccine is given at 65, shingles at 70 and the flu vaccine is offered to a wide range of age-groups.

Vaccines help healthy people to stay that way. They also protect those in society who are especially at risk of getting seriously ill from infectious diseases, such as people with long-term heart or lung problems. If enough people in Cumbria are immunised, it is less likely that those who have not been, perhaps due to illness or to being very young, will catch vaccine-preventable diseases. This effect is known as population (or herd) immunity. For example, babies under the age of two months are too young to be immunised against whooping cough. However, if their older siblings and parents have been immunised this infection is very unlikely to arise in their household. Such young babies are protected because enough of those around them have had a vaccination. This is one of the reasons why it is so important that vaccination rates in Cumbria remain high.

The current full vaccination schedule in England is available online and is summarised below. Certain immunisations reserved for special groups (such as pregnant women) and travel vaccinations are not shown in the table.



Figure 1: Current routine immunisation schedule for England

Age	Immunisations
8 weeks	'5 in 1' vaccine (diphtheria, tetanus, whooping cough, polio, haemophilus influenza type B) Pneumococcal vaccine Rotavirus vaccine Meningitis B vaccine
12 weeks	5 in 1' vaccine Rotavirus vaccine
16 weeks	'5 in 1' vaccine Rotavirus vaccine Meningitis B vaccine
1 year	Combined meningitis C and haemophilus influenza type B vaccine Measles, mumps and rubella vaccine Pneumococcal vaccine Meningitis B vaccine
2-7 years (including children in school years 1,2 and 3)	Children's flu vaccine (annual)
3 years and 4 months	Measles, mumps and rubella vaccine '4 in 1 pre-school booster' (diphtheria, tetanus, whooping cough, polio)
12-13 years (girls only)	Human papilloma virus vaccine (2 doses 6 months apart)
14 years	'3 in 1 teenage booster' (diphtheria, tetanus, polio) Meningitis ACWY vaccine
First time students up to age 25	Offered Meningitis ACWY vaccine
65 years	Pneumococcal vaccine
65 and over	Flu vaccine (annual)
70 years (and 78 and 79 year-olds as a catch up)	Shingles vaccine

How does vaccination protect the health of the people of Cumbria?

In Cumbria current immunisation coverage is very encouraging. We are achieving top targets, (reaching more than 95 percent of those in Cumbria who should be vaccinated), in the majority of childhood immunisations.

Table 1: Coverage rates for child immunisations: Cumbria and England, 2015/16

Immunisation/vaccination	95% target	
	Cumbria	England
Diphtheria/Tetanus/Pertussis/Polio/Haemophilus influenza type B (12 months old)	95.9%	97.3%
Diphtheria/Tetanus/Pertussis/Polio/Haemophilus influenza type (24 months old)	96.9%	96.0%
Diphtheria/Tetanus/Pertussis/Polio booster(5years old)	93.3%	86.2%
Meningitis C (12 months old)	97.3%	95.7%
Meningitis C booster (24 months old)	94.9%	95.1%
Haemophilus influenza type B/Meningitis C booster (5 years old)	96.1%	91.7%
Measles/Mumps/Rubella (24 months old)	95.3%	95.3%
Measles/Mumps/Rubella dose one (5 years old)	96.6%	93.4%
Measles/Mumps/Rubella dose two (5 years old)	92.6%	87.0%
Pneumococcus (12 months)	95.8%	97.3%
Pneumococcus booster (24 months)	95.2%	94.1%
Pneumococcus booster (5 years old)	94.6%	-

Source: NHS England, 2015-16

There is also good coverage with pneumococcal and shingles vaccination. The most recent figures on pneumococcal immunisation for Cumbria (to March 2015) show an uptake rate of 71 percent, similar to the England average of 70 percent. The national target however is 75 percent. Shingles vaccination coverage in Cumbria, at 61 percent, is above both the national target (60 percent) and the England average.

Importantly however there are some large differences in immunisation coverage in different part of the county. For childhood immunisation this is illustrated in Table 2 below.

Table 2: Average GP practice child immunisation coverage rates 2015/16 by district

District	Average percentage of eligible children immunised by a GP practice Diphtheria/Tetanus/Pertussis/Polio/ Haemophilus influenza type B (12 months old)	Average percentage of eligible children immunised by a GP practice Meningitis C Booster (24 months)
Allerdale	98.7%	96.3%
Barrow-in-Furness	98.1%	95.9%
Carlisle	95.4%	93.5%
Copeland	97.2%	97.1%
Eden	97.2%	94.2%
South Lakeland	93.7%	92.6%

Source: NHS England, Child Immunisation at Practice Level, 2015/16 (averages calculated by CCC)

It is recognised that certain groups of children and young people are at particular risk of not being fully immunised. These include looked after children, however Cumbria performs highly in terms of reaching this particular group with vaccinations. Other risk groups include those with physical or learning disabilities, children of teenage or lone parents, those not registered with a GP, younger children from large families, children with long-term illnesses, children from non-English speaking families and those from the travelling, asylum seeking and homeless populations².



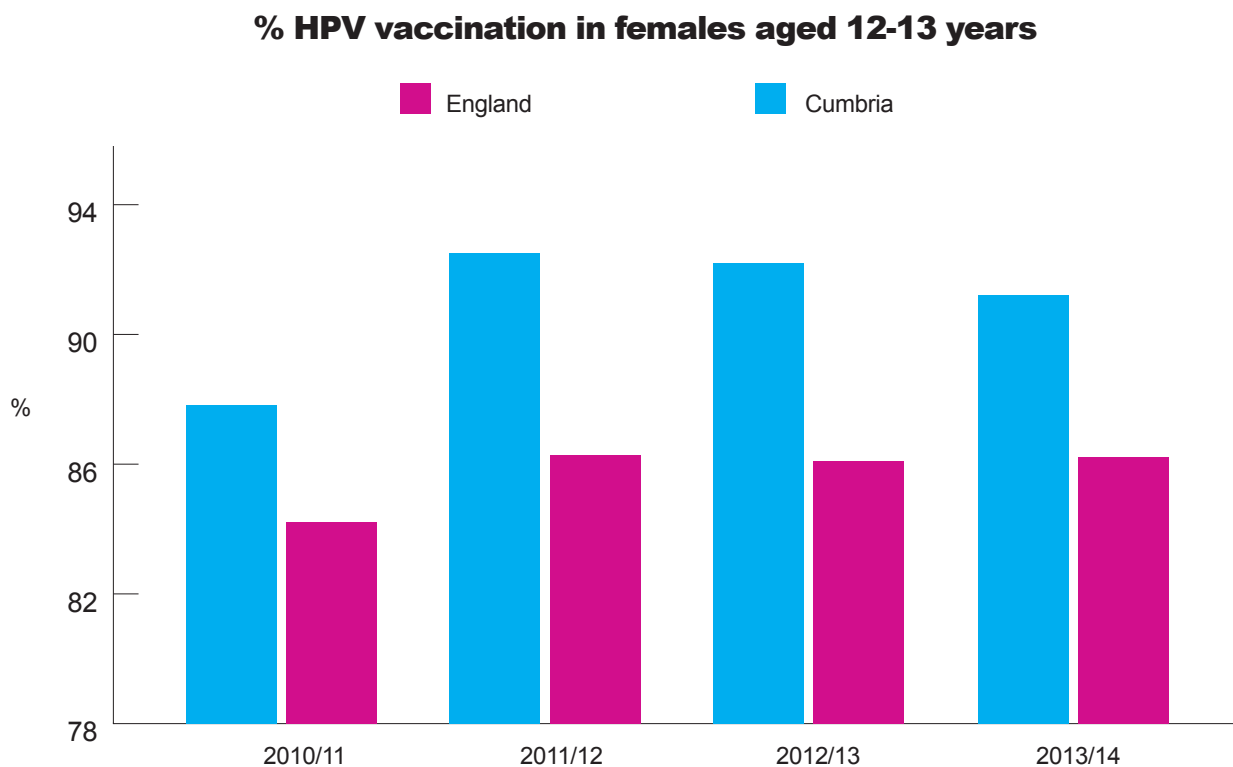
With regards to variation in adult immunisation, coverage of the pneumococcal vaccination in people aged over 65 varies from around one in three eligible people in areas of Copeland, to almost all eligible older people in areas of Furness. Coverage of the shingles vaccination in people aged 70 years also varies across different areas of the county.

A newer vaccination: Human Papilloma Virus (HPV)

HPV vaccine was introduced in England in 2008 in order to protect girls from two strains of the virus known to cause cervical cancer. In Cumbria, as well as nationally, the uptake of this vaccination was slow at the start, partly due to public concern about the safety of the vaccine. In addition the course had to be given by three separate injections over a six month period, meaning that it was difficult to make sure girls completed it. Cumbria's school nurses became aware of these issues and responded by providing catch-up sessions in schools. They also started to educate the girls about the vaccination in assemblies so that they themselves could discuss the immunisation and consent with their parents. This, along with the vaccine brand changing and reducing to a two injection course, has led to an uptake rate of over 90 percent locally. The new vaccination also protects against a further two strains of HPV that cause genital warts.



Figure 2: Rates of Human Papilloma Virus Vaccination in Cumbria and England 2010/11 to 2013/14



Source: Public Health Outcomes Framework/Department of Health

Focus on flu

When we look at Cumbria's performance for the flu vaccination, in line with the rest of the country targets are not currently being achieved. Flu is common, and can lead on to serious conditions like pneumonia or meningitis (some of the **complications of flu**) and even death in vulnerable people such as the elderly and pregnant women. This is why it is so important to reduce the levels of flu as much as possible. In Cumbria this is particularly important as there are higher than average numbers of people over the age of 65. In 2015 there were 283 deaths in the county due to flu or flu-related pneumonia, an increase of 54 on the previous year.

Figure 3: People eligible for a free flu vaccination in England 2016

Children eligible for the 2016 nasal flu vaccine	Adults eligible for the 2016 flu vaccine
<ul style="list-style-type: none"> ● children over the age of six months with a long-term health condition ● children born between 1 September 2011 and 31 August 2014 ● children in school years one, two and three. 	<ul style="list-style-type: none"> ● those 65 years of age or over ● pregnant women ● those with certain medical conditions ● those living in a long-stay residential care home or other long-stay care facility ● those receiving a carer's allowance, or acting as the main carer for an elderly or disabled person whose welfare may be at risk if they fall ill ● front-line health and social care workers

Table 3 shows how Cumbria's performance in flu vaccination is not as good as for other immunisations. In particular the rate of flu immunisation in children is low. Only 1 in 3 children aged 2 to 4 years receive the flu vaccination in Cumbria. This is below the England average and well below the top national target of 65%.

Table 3: Flu vaccination coverage in Cumbria

Period	At-risk individuals % coverage	Individuals aged 65+ % coverage	Children aged 2-4 y % coverage
2010/11	52.7	73.9	-
2011/12	60.3	75.5	-
2012/13	60.2	76.1	-
2013/14	59.1	75.4	-
2014/15	57.0	75.3	39.9
2015/16	51.7	73.6	33.2

Source: Public Health Outcomes Framework



There are a number of reasons why people are not vaccinated for flu. One is a belief that the vaccine itself can cause flu. Some vaccines need to be 'live' (contain a small amount of the disease that is being immunised against) in order to stimulate an immune response. However, the flu injection for adults is not live, and therefore cannot actually cause flu. Symptoms of flu may not appear for several days after someone has caught the virus. If someone has already caught flu when they have the vaccine but hasn't yet developed symptoms, it is possible for them to become unwell in the days following vaccination. This is one reason that some people think that the vaccine itself has given them the illness. Another reason why people choose not to be immunised may be over-optimism about having a low risk of getting flu.

It is important to have the new flu vaccination each year as strains of the virus change constantly. This change is monitored by the World Health Organisation so that a new vaccine can be developed each year to be as effective as possible.

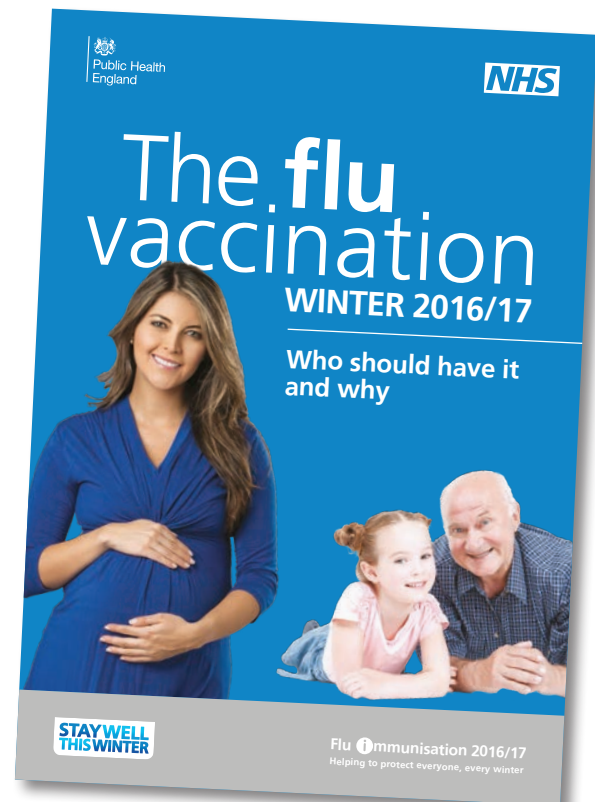
Who is involved in vaccination programmes?

Vaccination as a public health role is set out in the national Public Health Outcomes Framework 2016-2019. This includes key indicators relevant to health protection including:

- population vaccination coverage
- numbers of people living with preventable ill health and people dying prematurely
- mortality rates from causes considered preventable
- mortality rates from a range of communicable diseases including flu

At present NHS England commissions (plans and authorises) vaccination programmes. These are delivered to adults in Cumbria by GP practice teams within the Cumbria Clinical Commissioning Group. Children's immunisations are delivered by Cumbria Partnership Foundation Trust.

Cumbria County Council, through the Director of Public Health, has responsibility for ensuring the sufficient uptake of vaccines and for monitoring uptake across the different age groups as well as ensuring the quality of vaccine programmes is monitored. Where it is identified that there are low levels of uptake in a specific area or within a particular population group, Cumbria County Council will play an active role with NHS England and Public Health England to raise awareness of the importance of the vaccination programme. This is important to reduce inequalities in the health of our local population.



What is happening in Cumbria at the moment?

Cumbria County Council's Public Health team and other partner agencies are involved in a number of initiatives to improve the uptake of vaccination.

Protecting staff

Cumbria Care staff and County Council staff considered as critical service providers are supplied annually with a voucher so they can receive the flu immunisation at a local pharmacy. In some areas pharmacists are supporting increased uptake by going into care homes to immunise staff. Items are put into newsletters to staff explaining the benefits of the vaccine to themselves, their families, their colleagues and most importantly their service users.



Outreach to children and young people

Approximately 350 children and young people in Cumbria are currently registered as being educated at home. Around another 200 are educated in pupil referral units due to exclusion from mainstream school for a variety of reasons. Lists of these children and young people are provided to school nurses, to enable them to improve access to vaccination, through for example school nurse visits to the pupil referral units.



School liaison



Primary school Head Teachers in Cumbria are sent **Public Health England information about the benefits of the flu vaccination programme** by the Cumbria County Council schools portal. This is to support the schools nasal flu programme in years 1, 2 and 3.

This year, the flu vaccination worked very smoothly and involved the minimal amount of extra administration for school staff. We received information for parents and staff well in advance. We felt well informed about the reasons for the programme and were happy to agree a mutually convenient timetable with nursing staff. We were provided with individual named envelopes containing consent forms for each of our eligible children, these were then distributed across the school and parents returned the forms to the school.

The nursing team took full responsibility for any further administration, including contacting parents if required. The immunisation worked smoothly, the children were calm and happy, due to the caring approach of the nursing staff and they loved receiving their stickers! The vast majority of our parents took advantage of this vaccination.

Chris Marsh - Headteacher, St Michael's C.E. Primary School, Dalston



Preparing for pandemic flu

Pandemic flu occurs when a new strain of flu emerges which is significantly different to previous circulating flu viruses. Because it is new the population has no immunity to it, therefore it spreads more easily and results in more serious illness. Because of the risk it poses to the population, essential services and the economy, pandemic flu is regarded as the biggest risk to England's population and is therefore ranked number one on the national risk register.

Cumbria's Local Resilience Forum is a partnership between a wide range of agencies which includes the county and district councils and the police, fire and health services. The forum comes together regularly to plan for, respond to and recover from emergencies such as pandemic flu. The county's pandemic flu plan puts in place a range of measures to reduce the impact if it occurs, and to protect the population, services and the local economy of such an emergency.

Improving immunisation for people with learning disabilities

The Learning Disability Health Team, part of Cumbria Partnership Foundation Trust, has been working to raise awareness amongst local GPs that when adults with a learning disability are too anxious to cope with having the flu vaccine as an injection, they can be offered the nasal vaccine instead. This is known as a 'reasonable adjustment' (as defined in the Equality Act 2010) and is a way of ensuring that services remove barriers which prevent disabled people accessing the healthcare that they are entitled to.

Links to further information

General vaccination information

What to expect after a vaccination in babies and children up to the age of 5

Immunisations and gelatine

Immunisation in special groups

Vaccinations in pregnancy

Vaccinations for young people

Vaccinations from 2 to 5 years of age

Vaccinations in babies up to 13 months

Vaccination for premature babies

Information on specific vaccines

Guide to the HPV vaccine

The MMR vaccination

Easy read information on children and the nasal flu immunisation

Winter 2016 flu vaccination information

Flu vaccination for people with learning disability



Infection Prevention and Control

From childhood people are taught to wash their hands before meals and after using the toilet. It is common knowledge that those with illnesses that can spread, such as diarrhoea and vomiting, should stay away from school or work until they can no longer pass the infection on.



These everyday practices are ways of preventing infections from happening in the first place and of controlling their spread when they do. Infection prevention and control is the term given to more formal work going on across the communities, schools and health and social care settings of Cumbria to ensure that the impact of infections on our population is kept to a minimum. This chapter looks at the importance of this work, the size of the problem in Cumbria, who is working to prevent and control infection in the county and gives examples of current activities in this area.

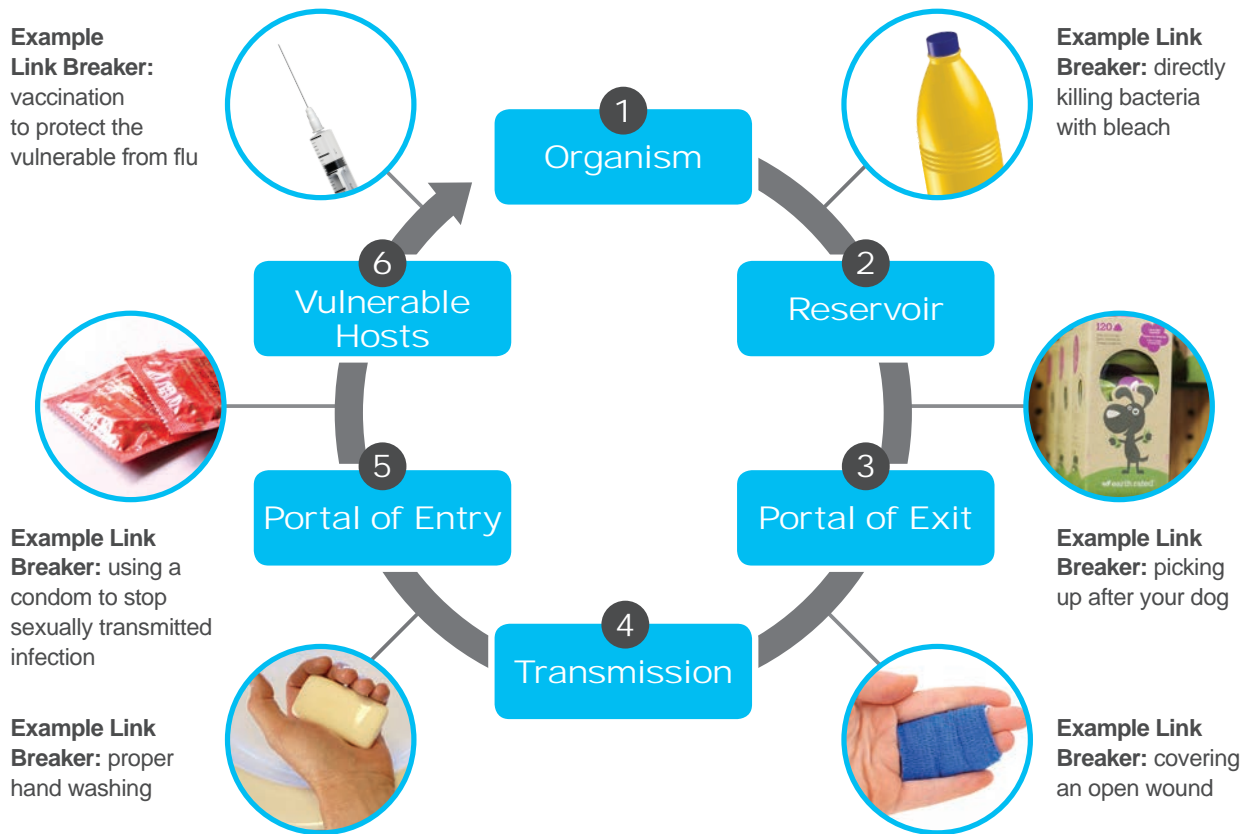


Why is this work being done?

An infection happens when one living organism gets onto or into the body of another and then causes harm. For an infection to spread certain conditions must be met. This is illustrated by the "Chain of Infection". There are six links in this chain (Figure 4). For an infectious disease to be passed from one person to another each link of the chain must be connected, so infection prevention and control aims to break one or more of these links.



Figure 4: The Chain of Infection

**1/ The Organism**

This is the living thing that causes the infection. There are a number of different types of infectious organisms. Examples are bacteria, viruses, parasites, fungi and prions.

2/ The Reservoir

This is the object, person or animal where the infectious organism lives and reproduces. Examples of reservoirs of infection are food, water, humans, animals, blood, faeces or a contaminated toilet seat.

3/ The Portal of Exit

This is the place where the organism leaves the reservoir. Examples are the anus (or back passage), mouth or an open wound.

4/ The Route of Transmission

This is the way the infectious organism is transferred from the portal of exit to a new host. It can be by direct contact, for example between an infected person and person who has not yet had the infection. It can also be 'indirect' and involve a carrier surface, for example a door-handle or a toilet seat from where an organism can be picked up by someone not yet infected. Transmission of some infections occurs through droplets in the air when someone sneezes or coughs.

5/ The Portal of Entry

This is the route by which the infectious organism enters the body of a host. Some examples are the mouth, the nose and throat, the genitals or an open wound.

6/ The Vulnerable Host

We are all vulnerable to infections, but some of us more so than others. The elderly, babies, people with long-term diseases such as asthma and diabetes, and those who have weak immune systems are more likely to pick up infections.

Breaking any link in the chain can stop the spread of an infection. Examples of how this could be done are shown in figure 4. Infection prevention and control practices based on breaking these links are effective for all types of infection.

How does infection prevention and control protect the people of Cumbria?

Protection from gastroenteritis

Last year there was a particularly severe outbreak of viral gastroenteritis (diarrhoea and vomiting) in the county which had a major impact on our health and social care services. Many hospital beds were closed to admissions as affected wards were unable to admit or transfer patients. Non-urgent operations were postponed, resulting in a backlog of patients needing to be treated. In addition patients attending the emergency department experienced long delays. Following this, the county's health and social care organisations came together to share what they had learnt from the outbreak and to develop a plan to be used in any future similar situation. The plan identifies four levels of response, depending on the seriousness of an outbreak. Each organisation has pledged to put in place a range of measures to help all of the county's essential services to continue to function effectively should such an event occur again. The plan has been endorsed by the Local Health Resilience Partnership. This partnership is chaired jointly by NHS England and Cumbria's Director of Public Health, and includes representatives of both acute hospital trusts in Cumbria, the Cumbria Partnership Foundation Trust, the Critical Care Networks, Public Health England and the North West Ambulance Service.

Healthcare associated infection (HCAI)

These infections arise as a result of receiving treatment in a healthcare setting. They may be due to medical or surgical treatment itself, or just due to being in a healthcare environment where certain infections are more common. The prevention of HCAIs is high on the government agenda, as well as being important to patients, who rightly expect safe and high quality health services.

Clostridium difficile

This infection affects the bowel and can spread very easily within a healthcare setting such as a hospital ward. It most commonly affects people who have been recently treated with antibiotics. Antibiotics can reduce the amount of normal bacteria in the digestive system. This allows *Clostridium difficile* bacteria to take over and rapidly multiply. They produce toxins which cause diarrhoea and sometimes dangerous (or even fatal) inflammation of the bowel.

In 2015/16, there were 220 patients in Cumbria with a *Clostridium difficile* infection. The rate of this infection in the county has been significantly worse than average for England since 2009/10 (Table 4). Since 2010/11 Cumbria has been in the worst fifth of counties in England for rates of this infection.

Table 4: *Clostridium difficile* in Cumbria Clinical Commissioning Group and England 2009-16

Year	Cumbria (Crude rate per 100,000)	England (Crude rate per 100,000)
2009/10	92.5	49.0
2010/11	51.2	41.1
2011/12	46.0	33.8
2012/13	44.1	27.5
2013/14	36.3	24.7
2014/15	45.4	26.1
2015/16	43.6	26.0

Source: Public Health Outcomes Framework (HCAI Mandatory Surveillance Data)

Organisations are encouraged to assess each case of *Clostridium difficile* infection in order to establish if there were any lapses in the quality of care provided in each case, such as unnecessary prescribing of antibiotics, and if so to take appropriate steps to address any problems identified.





Methicillin resistant *Staphylococcus aureus* (MRSA).

About one third of the population have MRSA bacteria living on their skin, nose and throat¹. The bacteria don't do any harm in these sites and these people are therefore not infected. However, if MRSA enters the body through, for example, a wound, an infection can develop. These infections can be severe particularly if the MRSA enters the bloodstream. The worst problem with MRSA infection is that it is resistant to a number of antibiotics making it difficult to treat.

In 2015/16, there were four cases of MRSA bloodstream infection in Cumbria. Although this sounds like a small number, the county rate is high compared to all other Clinical Commissioning Groups in England. It puts Cumbria within the worst 40 percent of all counties in England. Compared to previous years, the number and rate of MRSA infection has increased.

For each case of MRSA bloodstream infection, a post-infection review is undertaken. The purpose of this is to identify if there were any lapses in the care of the patient and to identify which organisation is best placed to ensure that improvements are made.

Who is involved in infection prevention and control work in Cumbria?

In the community setting, the prevention and control of infections depends on agencies and individuals working together across the health and social care system and the wider community. As many people as possible in Cumbria must have the knowledge and means to prevent infections occurring and to stop them spreading if they do occur. A number of organisations work in partnership to promote this agenda across the county. The organisations working together to tackle this important issue are outlined below.

- Cumbria County Council Public Health Team
- Public Health England
- Cumbria County Council Adult Social Care
- Cumbria Clinical Commissioning Group
- North Cumbria University Hospitals Trust
- University Hospitals of Morecambe Bay Foundation Trust
- Cumbria Partnership Foundation Trust
- District Council Environmental Health teams
- North West Ambulance Service
- NHS England
- North East Commissioning Support Unit

Cumbria County Council's Public Health Team also provides advice and support to schools and other organisations in the event of an outbreak of infectious disease, working closely with Public Health England to manage these outbreaks.



What is happening in Cumbria at the moment?

Infection prevention and control in Residential Care Homes

National statutory guidance containing infection prevention and control regulations applies to all registered providers of health and adult social care in England. Care homes in England are regulated by the Care Quality Commission, which judges registered providers on how well they comply with this national guidance. Cumbria County Council Public Health team provides a wide range of infection prevention and control services to help residential care homes in Cumbria provide high-quality care. These include:

- Infection prevention and control advice to commissioners and contract monitoring officers for social care.
- Infection prevention and control audits of care homes
- Training and development of social care providers
- Responding to outbreaks of infectious diseases
- Expert infection prevention and control advice to providers of social care.

District environmental health teams

Environmental Health Teams are employed by local authorities to cover a number of health protection functions. Some of the work they do includes the inspection of establishments where people eat and where food is produced such as hotels, cafes, schools and hospitals. They also have legislative powers to serve improvement notices on premises identified as being in breach of the law and in serious cases may recommend a prosecution. Where they identify an imminent risk to the public, inspectors can serve an emergency prohibition notice which forbids the use of certain processes, premises or equipment. The notice must be confirmed by the court.

Among their other roles Environmental Health Officers follow up complaints about food sold or manufactured in the area and investigate cases of food poisoning.

Outbreak control teams

Despite the best efforts of all the organisations described above, sometimes outbreaks of infectious diseases do occur. Examples from the county in 2016 include an outbreak of diarrhoea and vomiting in a wedding party and an outbreak of *Clostridium difficile* in a care home. When such an episode does occur, an outbreak control team is set up by Public Health England. This team is led by a health protection consultant and will include local professionals relevant to the situation. This team manages the incident and tries to break the chain of infection and bring the incident to an end as quickly as possible.

Links to further information

Preventing the spread of germs

Clostridium difficile

MRSA prevention

Government guidance on infection prevention and control in care homes

Government guidance on investigation of MRSA bloodstream infections



Antimicrobial Resistance

The introduction of sulphonamide antibiotics in the 1930s and the subsequent development of others is widely recognised as one of the most significant advances ever in reducing ill health and death from infectious diseases. However, resistance to antibiotics and other antimicrobial agents is a growing threat to the successful treatment of infections. There is increasing anxiety about the impact that this is having on human health.



Some reports advise that around half of all deaths in Europe from bacterial infections are now associated with organisms resistant to (or not able to be treated with) antibiotics¹.

This chapter describes why Cumbria needs to tackle the emerging problem of antimicrobial resistance, what we know about the size of the problem in Cumbria, who is involved in working on antimicrobial resistance in the county and gives examples of what is currently being done.



Why is this work being done?

Antibiotic resistance is one of the biggest threats to our health today. Unless action is taken to effectively manage the problem, common infectious diseases may no longer be treatable. This could mean a return to the pre-antibiotic era, when people often died from things such as urine and skin infections, something that is hard for us to imagine today.

Figure 5 – How antimicrobial resistance happens²

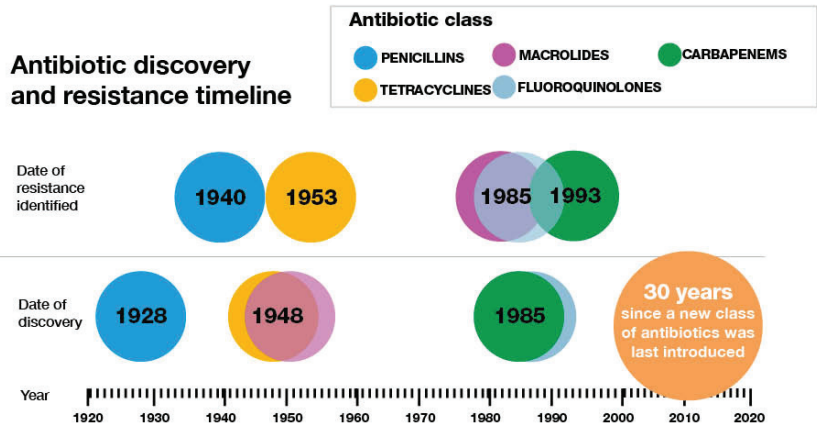


The more that an antibiotic is used the more bacteria change to become resistant to it. The misuse and over use of antibiotics is therefore a major cause of antimicrobial resistance (Figure 5). Health professionals have a major role to play in reducing inappropriate prescribing of antibiotics, (giving them when they are not needed). Three quarters of antibiotic prescribing in England takes place in primary care (GP services)². NHS England has introduced an incentive scheme for both hospital and primary care in which they monitor the amount of antibiotics being prescribed. The aim is to ensure that prescriptions are only being given when needed, and thereby to limit the development of antimicrobial resistance.

Figures show that already as many as one in three people in England take at least one course of antibiotics each year, and the annual amount of antibiotics consumed in this country is rising³. Many people expect to be treated with antibiotics when they have a cold or the flu. However, antibiotics are totally ineffective against the viruses that cause these illnesses, and using them means that resistance will develop more quickly. Figure 6 shows that resistance to antibiotics can develop soon after they start to be used. This is very worrying, as there are currently few new antibiotics being developed.



Figure 6: The speed of development of antibiotic resistance⁴



Alongside healthcare workers, vets and farmers have a role to play in the responsible use of antibiotics in animals. Just as in humans, antibiotics can be a valuable treatment for sick animals and can contribute significantly to their health and welfare. Also as in humans however, they can be significantly misused. The routine use of antibiotics as a growth promoter or to prevent illness, particularly in intensive farming, is a contributory factor to increasing antimicrobial resistance and must be more widely challenged. Good farm management, bio-security and animal husbandry systems are the best way to keep animals healthy and avoid unnecessary antibiotic use in farming⁵.

How does antimicrobial resistance affect the health of the people of Cumbria?

There are wide variations in the rates of resistance to antibiotics across England. An example of this is the antibiotic trimethoprim, commonly used to treat urine infections. Figure 7 show that trimethoprim resistance rates for *E. Coli*, a bacterium which commonly causes urine infections, ranges from 24.9 to 33.7 percent across Cumbria and the North East. In Cumbria the *E.Coli* resistance rate for trimethoprim is 28.5 percent. This means that more than a quarter of these common infections in Cumbria can no longer be treated with this cheap and safe antibiotic.

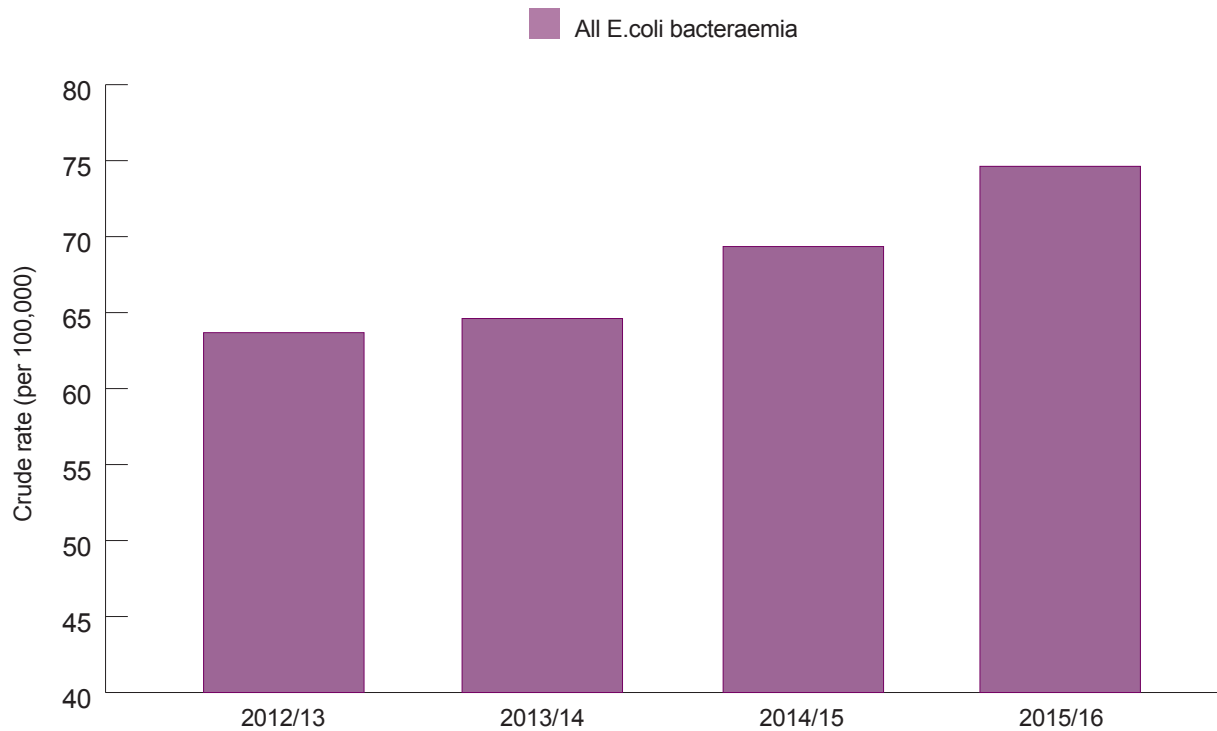
Figure 7: Rates of *E. Coli* resistance to trimethoprim in urine samples in Cumbria and the North East

Percentage of community E.coli positive urine specimens non-susceptible to trimethoprim; by quarter 2016 Q2					
Proportion - %					
Area	Count	Value		95% Lower CI	95% Upper CI
▲▼	▲▼	▲▼			
England	38,182	29.1		-	-
Cumbria and North East NHS region	3,109	29.5		-	-
NHS Durham Dales, Easington	345	33.7		-	-
NHS Hartlepool & Stockton	8	33.3		-	-
NHS South Tyneside CCG	88	32.5		-	-
NHS South Tees CCG	333	31.1		-	-
NHS Northumberland CCG	415	30.1		-	-
NHS Darlington CCG	182	30.0		-	-
NHS Newcastle & Gateshead CCG	562	29.2		-	-
NHS North Durham CCG	389	28.6		-	-
NHS Cumbria CCG	510	28.5		-	-
NHS Sunderland CCG	49	27.7		-	-
NHS North Tyneside CCG	228	24.9		-	-

Source: Routine voluntary laboratory surveillance reports to Public Health England via the second generation surveillance system (SGSS): Antimicrobial testing data module

A serious potential consequence of any bacterial infection is 'bacteraemia', or infection getting into the blood stream. This is dangerous and can be fatal. The number of cases of *E.Coli* bacteraemia in Cumbria is on the increase (Figure 8).

Figure 8: All *E.coli* bacteraemia in Cumbria Clinical Commissioning Group (crude rate per 100,000)



Source: Public Health Outcomes Framework (HCAI Mandatory Surveillance Data)

The rise in these serious infections demonstrates how vital it is to have effective antibiotics available to people living here. If action on antimicrobial resistance in Cumbria (as well as in England and internationally) is not taken now, the situation will only get worse. A failure to reduce antibiotic resistance could result in an estimated ten million deaths every year across the world by 2050³.



Who is involved in reducing antimicrobial resistance in Cumbria?

Everyone shares the responsibility to reduce antimicrobial resistance and to work together to reduce this threat to our population. Inappropriate use of antibiotics in our community needs to decrease and awareness of the issue to increase. A range of health and social care organisations in Cumbria are working jointly to tackle antimicrobial resistance at a number of levels. At present they are developing an Antimicrobial Resistance Strategy for our population.



Figure 9: Organisations working on an Antimicrobial Resistance Strategy for Cumbria

Organisation	Antimicrobial Resistance champion(s)
Cumbria County Council	Health Protection lead Director of Public Health
Cumbria Clinical Commissioning Group	Infection prevention and control lead
North Lancashire Clinical Commissioning Group	Chief nurse
North Cumbria University Hospitals NHS Trust	Consultant microbiologist Infection prevention and control matron
University Hospitals of Morecambe Bay NHS Trust	Consultant microbiologist Infection prevention and control matron
Cumbria Partnership Foundation Trust	Professional lead for infection prevention and nursing
North East Commissioning Support Unit	Medicines optimisation pharmacist
Public Health England	Consultant in Communicable Disease Control Lead Health Protection nurse
NHS England	Quality and Patient Safety manager

The **NHS Antibiotics Awareness Campaign** has more information on how everyone in Cumbria can play a part in decreasing antimicrobial resistance.

What are we doing about it in Cumbria at the moment?

Raising awareness of the threat of antimicrobial resistance and the impact it will have on our population if we do not take action.

The Antibiotic Guardian campaign was developed in England in 2014. Its aim is to slow down the development of antibiotic resistance. The campaign invites the public, health care professionals and other users of antibiotics such as farmers and veterinary services to make a pledge. The pledge outlines how they will make better use of antibiotics in order to protect these treatments for the future. To date just 46 people in Cumbria have taken the pledge. It would be fantastic to see many of the public in Cumbria taking the **Antibiotic Guardian Pledge**.



Figure 10: Number and rate of antibiotic guardians by Clinical Commissioning Group in Cumbria and the North East

Antibiotic Guardians per 100,000 population per calendar year by CCGs 2015

Crude rate - per 100,000

Area ▲▼	Count ▲▼	Value ▲▼		95% Lower CI	95% Upper CI
England	10,598	19.5		19.1	19.9
Cumbria and North East NHS region	441	14.1		12.8	15.5
NHS South Tyneside CCG	11	7.4		3.7	13.2
NHS South Tees CCG	25	9.1		5.9	13.5
NHS Cumbria CCG	46	9.1		6.7	12.2
NHS Durham Dales, Easington	27	9.9		6.5	14.4
NHS Sunderland CCG	34	12.3		8.5	14.4
NHS North Durham CCG	33	13.5		9.3	19.0
NHS North Tyneside CCG	30	14.8		10.0	21.1
NHS Newcastle & Gateshead CCG	84	17.1		13.7	21.2
NHS Hartlepool & Stockton	55	19.2		14.5	25.0
NHS Northumberland CCG	62	19.6		15.0	25.2
NHS Darlington CCG	34	32.3		22.3	45.1

Source: Public Health Outcomes Framework

Professional education and training to promote sustainable antibiotic use.

The North of England Commissioning Support Medicines Optimisation Team provides information, guidelines and resources for family doctors to support the careful and effective use of antibiotics in Cumbria. They have developed an online training course for prescribers to raise awareness of why careful use of antibiotics is important at a personal, local and global level.

Improving infection prevention and control practices in order to reduce the spread of infections and thereby reduce the need for prescription of antibiotics.

In the previous chapter we outlined the steps we are taking to reduce the spread of infections in Cumbria.



Screening

Many people in Cumbria will be aware of one of the NHS national screening programmes, perhaps through a letter inviting them to have a test, or because a friend or family member has talked about their results.



This chapter explains the purpose of screening, describes the NHS screening programmes provided in Cumbria, highlights the roles of the different organisations involved in providing this service and gives some examples of current screening activities in the county.



Why is this work being done?

The overall purpose of any screening programme is to reduce harm to the population caused by a specific health condition.

Screening is...

- a way of finding out who is at higher risk of certain serious conditions
- used when people are well and do not have symptoms of the condition being screened for
- useful for conditions where information helps people make important decisions (e.g. antenatal screening for HIV and hepatitis)
- useful for conditions where getting treatment early improves quality or length of life (e.g. diabetic eye disease)

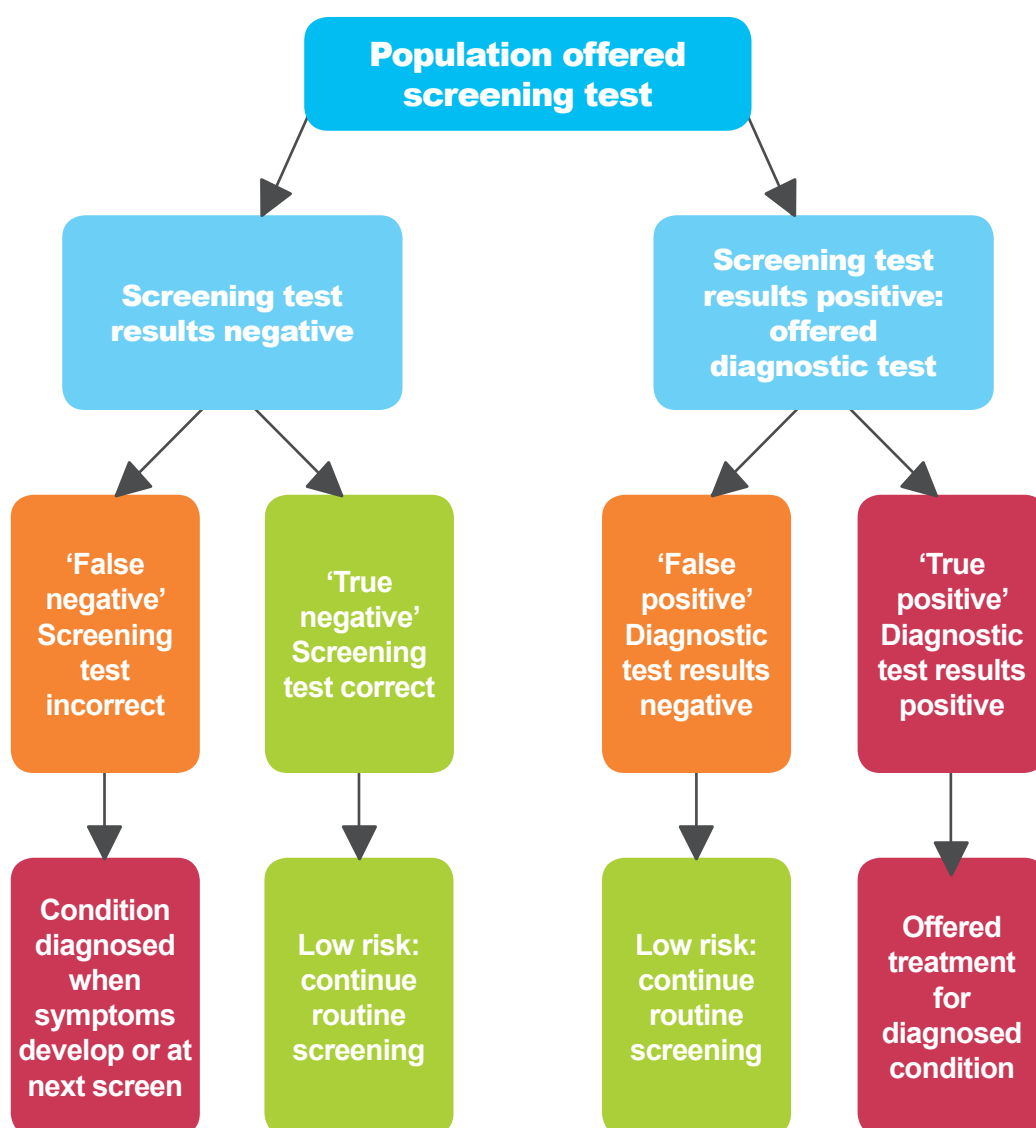
Screening is not...

- used to diagnose serious conditions... people who screen positive go on for further tests and some will turn out not to have the condition
- useful for everyone... only those groups in the population whose risk of harm will be reduced are offered screening (e.g. some screening is only offered to certain age groups)
- useful for all serious conditions... if treating a condition early does not improve quality or length of life, screening tests may do more harm than good

In England, decisions about which conditions are included in the NHS screening programme are made by the **UK National Screening Committee**. They consider the benefits of possible screening tests, such as an early cancer diagnosis meaning that people can live longer. However, they also consider the harms of each screening test, such as it giving a lot of 'false positive' results (Figure 11). If someone has a positive screening test this means they are at higher risk of having the condition being looked for. They will be offered further 'diagnostic' tests to see whether they actually do have the condition or not. These diagnostic tests can have side effects as well as causing anxiety. If most people who screen positive turn out not to have the condition on diagnostic testing, the screening test may actually be harmful overall.

The national screening committee constantly reviews new evidence on screening tests to see if the balance between benefit and harm has shifted and a new test should start, or a current one should be stopped.

Figure 11: The screening process and its outcomes



- Low risk does NOT mean no risk: anyone who develops symptoms after a negative screening test must seek advice
- Quality assurance processes monitor false positives and negatives and act to keep their numbers as low as possible

How does screening protect the health of the people of Cumbria?

There are six national screening programmes currently being delivered in Cumbria. Three of these are for cancer, and three for other conditions. In addition ‘opportunistic screening’ (screening tests offered whenever people attend certain health services) is carried out for chlamydia and HIV.

National cancer screening programmes in Cumbria

Approximately 3000 people per year in Cumbria are diagnosed with cancer, but only half of these are diagnosed at an early stage where more can be done to treat them. 74 percent of those entitled to cancer screening in Cumbria are currently being screened, compared with 69 percent in England as a whole. Although it is very encouraging that the county screening rates are above the national average, there is always work to do to improve them even further.

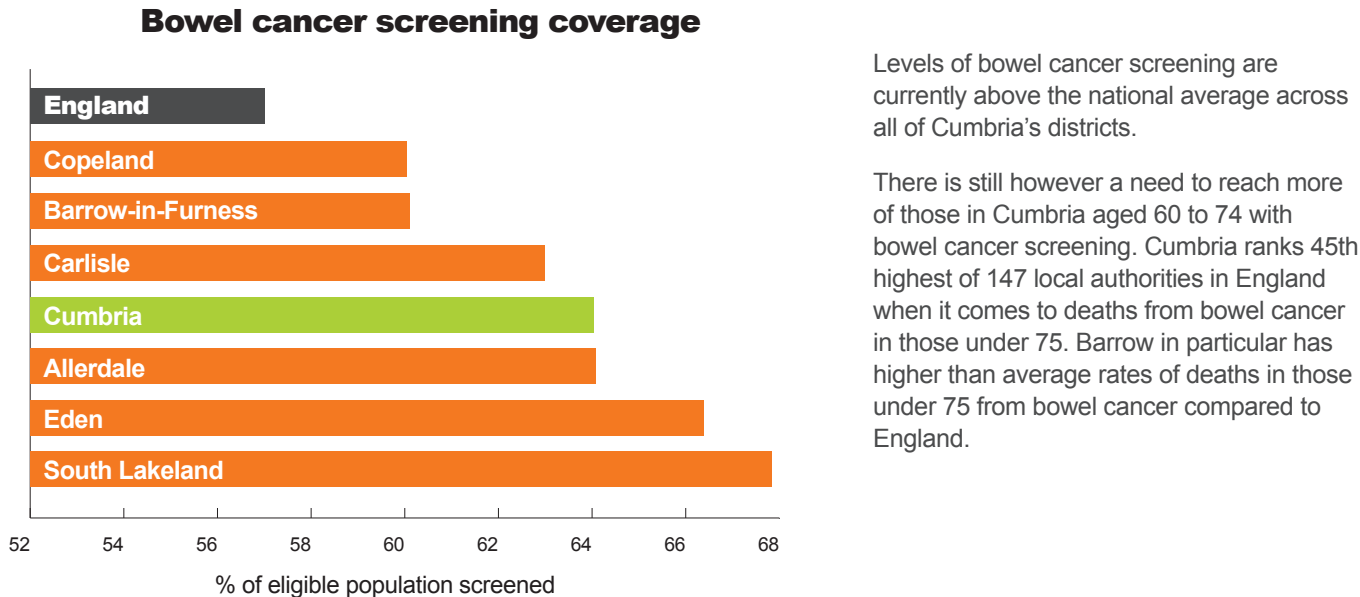
Bowel cancer

Bowel (or colorectal) cancer is the fourth most common cancer in the UK and the second highest cause of cancer deaths. Regular bowel cancer screening has been shown to reduce the risk of dying from bowel cancer¹.

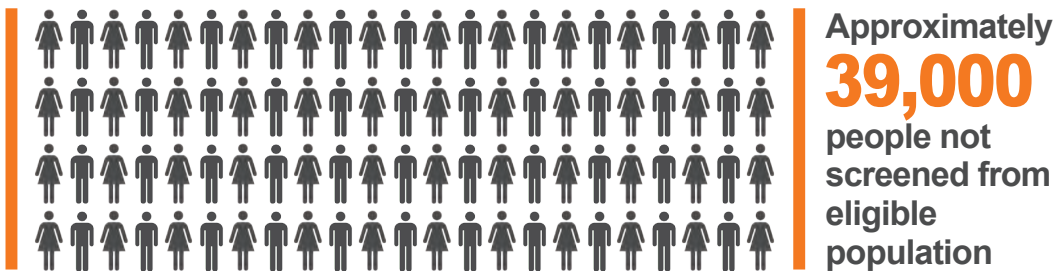
There are two types of bowel cancer screening currently offered in Cumbria.

1. All adults aged 60 to 74 are sent a home test kit every two years with which to collect a stool sample. (Those over 75 can also request a kit). The kit can be posted back for testing looking for traces of blood.
 2. Adults aged 55 are offered a bowel scope test. This uses a thin flexible instrument to look inside the lower part of the bowel.

Figure 12: Bowel cancer screening coverage, Cumbria, Districts and England, 2015



Source: Public Health England, 2015



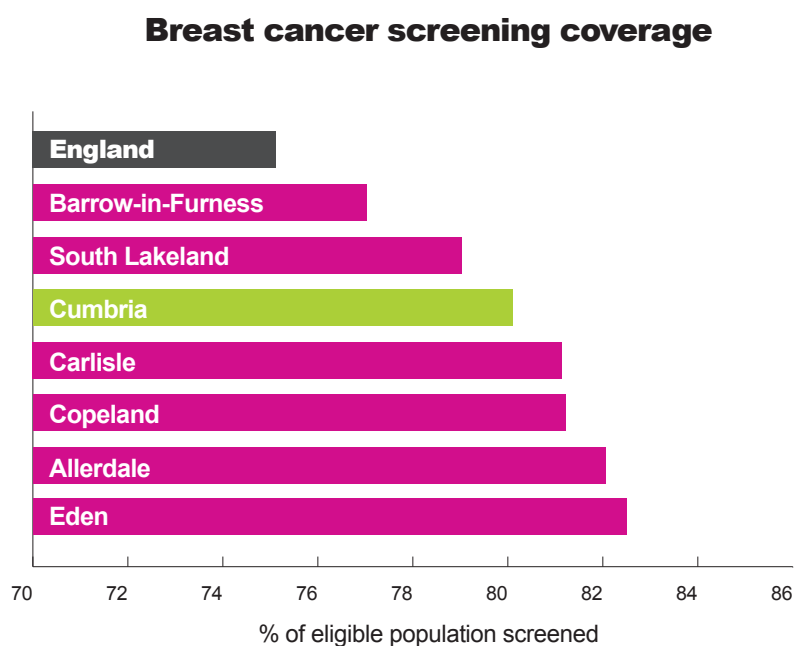
Breast cancer

Breast cancer is the most common cancer in the UK, and the third highest cause of cancer deaths. Approximately 1,300 lives are saved from breast cancer each year in the UK because of the NHS screening programme². Some women will however be diagnosed with cancers that would never actually become life-threatening. Researchers are working on ways to predict which cancers picked up through screening may become life-threatening and which will not, to avoid women being treated unnecessarily as a result of the breast screening programme.

The test used to screen women in Cumbria for breast cancer is called a mammogram, and is a type of X-ray. It is offered every three years to all women aged 50 to 70. (Those over 70 can request their mammograms to continue).

Levels of breast cancer screening are currently above the national average across all of Cumbria's districts.

Figure 13: Breast cancer screening coverage, Cumbria, Districts and England, 2015 (women aged 53 – 70 years).



Source: Public Health England, 2015



Cumbria has a higher incidence of breast cancer than England as a whole, and despite good screening coverage, the county still has rates of death from breast cancer that are higher than the national average. This is caused by particularly high rates in Allerdale and Copeland, ironically also areas with high screening rates. Further data is needed to help us understand this variation in breast cancer deaths amongst the districts of Cumbria. However, this demonstrates that in the meantime, alongside breast screening, there is a need to promote **Breast Awareness** as many cancers are first noticed by women themselves. The earlier breast cancer is diagnosed, the better the chance of it being cured.

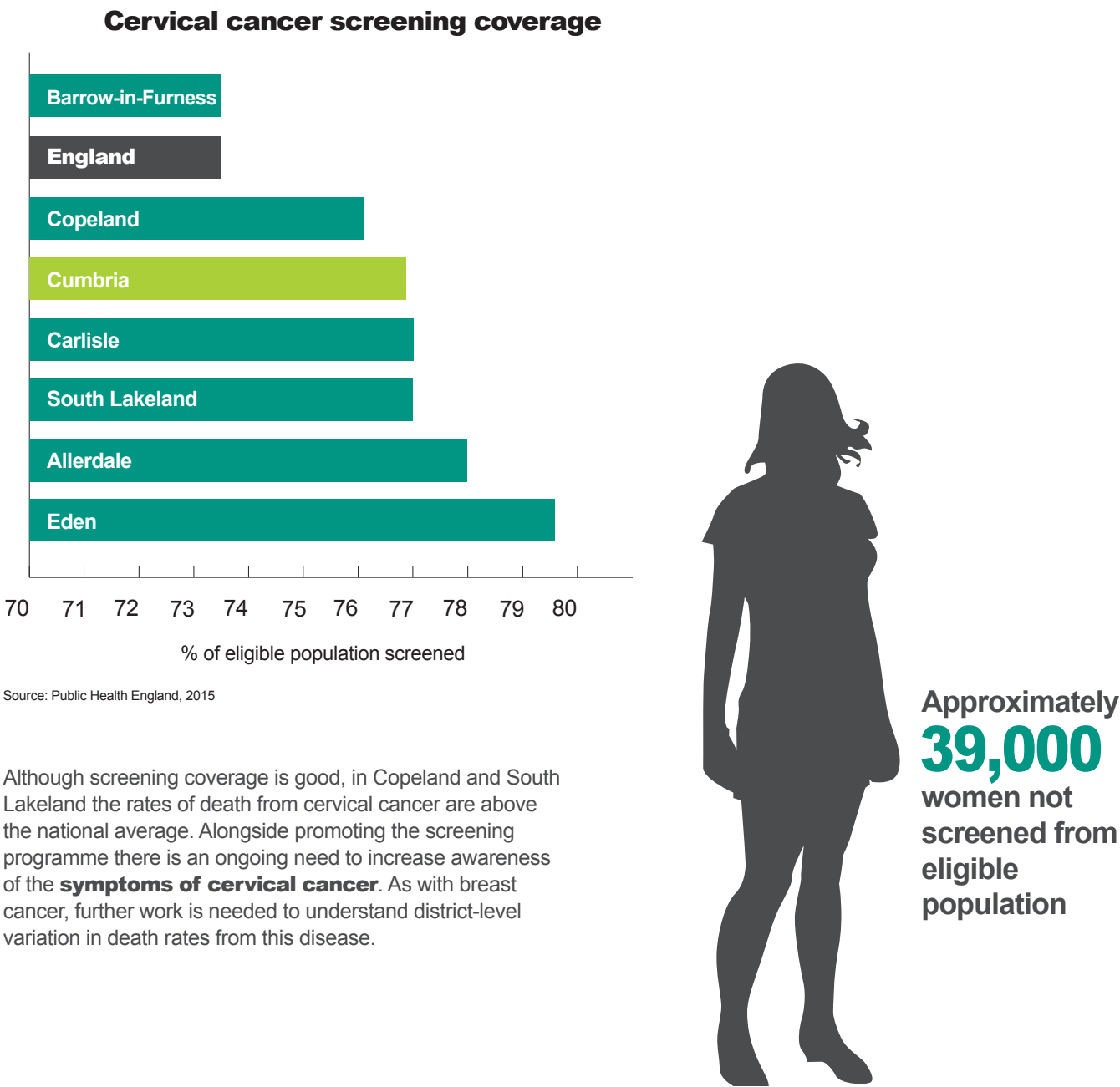
Cervical cancer

In the UK cervical cancer is the thirteenth most common cancer in women. It causes more than two deaths every day³. The UK screening programme saves as many as 5000 lives every year from this cancer⁴.

The screening test for cervical cancer is known as a smear test, and is carried out by a nurse or doctor. It is offered every three years to women between 25 and 49, and every five years to women aged 50 to 64.

Levels of cervical cancer screening are currently as good as or above the national average across all of Cumbria's districts.

Figure 14: Cervical cancer screening coverage, Cumbria, Districts and England, 2015



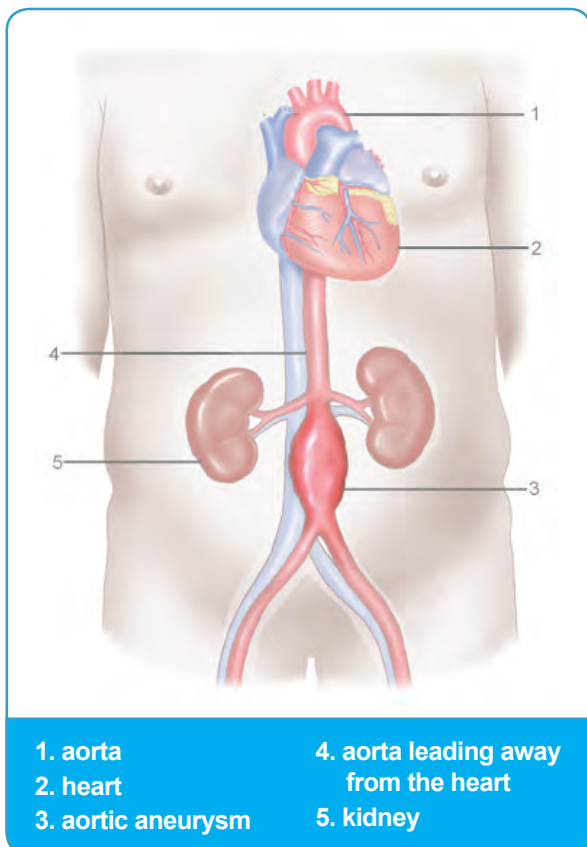
Other national screening programmes in Cumbria

Abdominal aortic aneurysm

An abdominal aortic aneurysm is a dangerous swelling of the main blood vessel running from the heart down the body. It doesn't usually cause any symptoms unless it bursts, when it is life-threatening. Around 85 out of 100 people die when an aneurysm bursts⁵. This condition is far more common in men than women, so only men are screened. It is hoped that by offering men screening in their 65th year, deaths from this condition will be halved⁵.

All men turning 65 in Cumbria are offered an ultrasound scan of their abdomen (stomach area) to look for an aneurysm. Men over 65 who have not previously received an invitation to the programme can ask to have a screening test.

Over 2700 Cumbrian men are screened each year for an abdominal aortic aneurysm. Around one in every hundred men screened is found to have an aneurysm that needs either surgery or regular monitoring. In 2015/16, in Cumbria 80.6% of eligible men took up the opportunity to be screened for abdominal aortic aneurysm – a level very similar to the national average (80%). Clinic provision may be a consideration in order to improve Cumbria's coverage still further. Lancashire has eleven screening sites in an area covering 1187 square miles, in contrast to Cumbria's five screening sites across 2613 square miles.



Diabetic eye disease

People with diabetes are at risk of a particular type of eye disease (diabetic retinopathy). Untreated this can lead to loss of sight. When it is caught early this condition can be treated and reduce or prevent sight loss.

Anyone over 12 with diabetes is offered a special half-hour eye test every year to check for this condition. This is carried out regularly in multiple towns across Cumbria.

At present 80 percent of those offered a diabetic eye screening appointment by the Cumbria, North Lancashire, Blackpool Fylde and Wyre Diabetic Eye Screening Programme, (responsible for the screening that happens in Cumbria), attend for this test. The service is therefore meeting the national target for coverage.

Screening in pregnancy and for newborn babies

The antenatal and newborn screening programme covers a range of different conditions.

In pregnancy women are screened with either blood tests or ultrasound scans for

- Infectious diseases (hepatitis B, HIV and syphilis)
- Blood conditions (sickle cell disease and thalassaemia)
- Physical abnormalities (such as heart problems) and other conditions in the foetus (such as Down's syndrome)

It is difficult to obtain figures that give a true picture of Cumbria's performance in these screening programmes at the present time. The data that do exist suggest that improvements could be made in terms of the completeness and timeliness of testing pregnant women for infectious diseases and blood conditions.

Newborn babies are screened for

- Physical problems (such as eye, heart or hip conditions) with an examination by a nurse or doctor
- Hearing problems with an electronic hearing test
- Nine rare but serious conditions with a heel blood spot test

Again there is a lack of complete data on these programmes, preventing an accurate assessment of newborn screening coverage in the county at this time.



Opportunistic screening programmes

Chlamydia screening

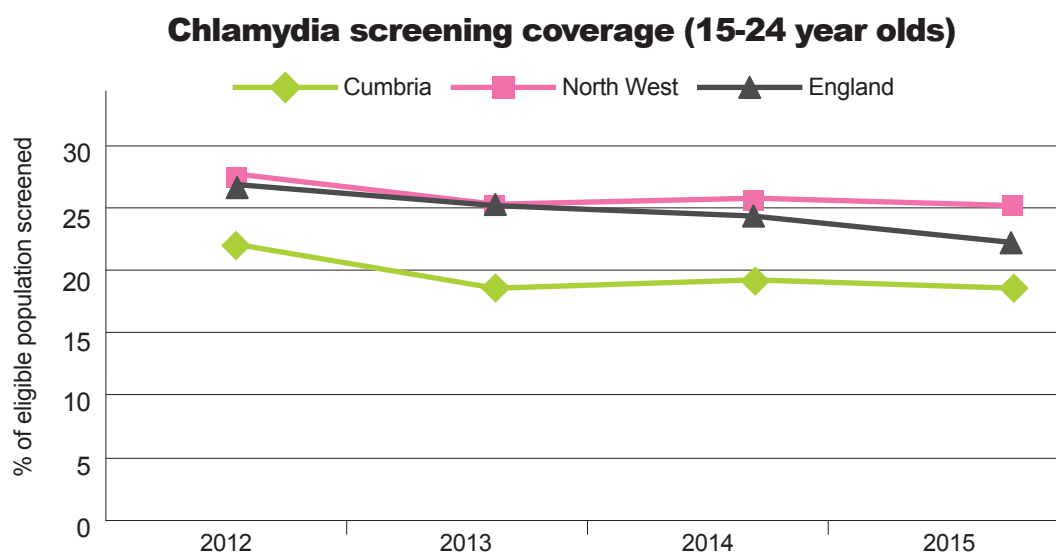
Chlamydia is one of the most common sexually transmitted infections in the UK. It is passed from one person to another through sex without a condom, and is particularly common amongst sexually active teenagers and young adults. It is recommended that people aged 15 to 24 years get tested for chlamydia every year, or when they change sexual partner. Chlamydia doesn't usually cause any symptoms and can normally be treated with a short course of antibiotics. However, if left untreated, it can lead to complications such as pelvic inflammatory disease, inflammation of the testicles, and infertility. Testing for chlamydia is done with a urine

sample or a swab test and doesn't always require a physical examination.

Chlamydia screening is available in Cumbria as part of sexual health services commissioned by Cumbria County Council. Tests are available from sexual health clinics, GP surgeries and pharmacies. Postal testing kits are also available.

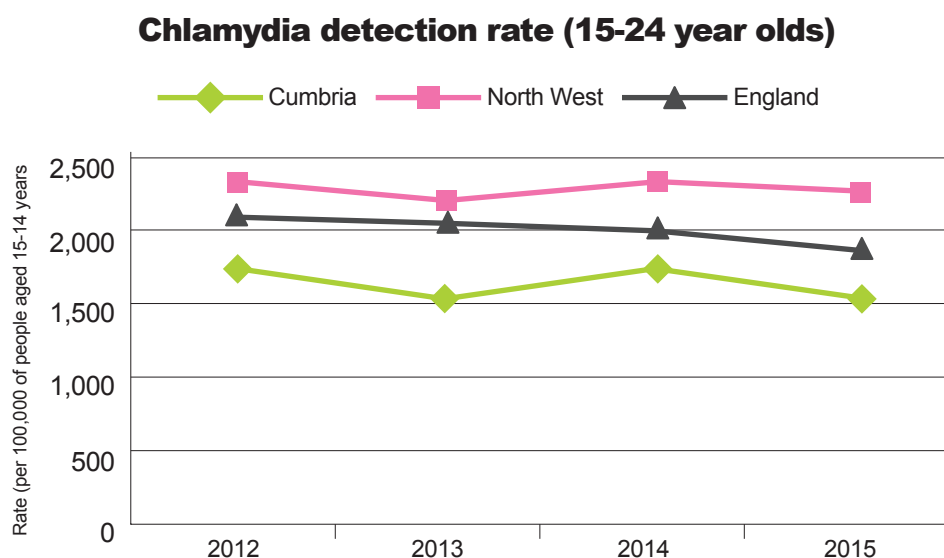
Cumbria has recorded persistently low detection rates of chlamydia in recent years. While this may truly reflect low rates of the disease in the county, an increase in testing coverage and improvements to local data recording would help to be sure that disease is not being missed.

Figure 15: Chlamydia screening coverage: percentage of 15-24 year olds; Cumbria, North West and England, 2012-2015



Source: Public Health England

Figure 16: Chlamydia detection rate of 15-24 year olds; Cumbria, North West and England, 2012-2015



Source: Public Health England

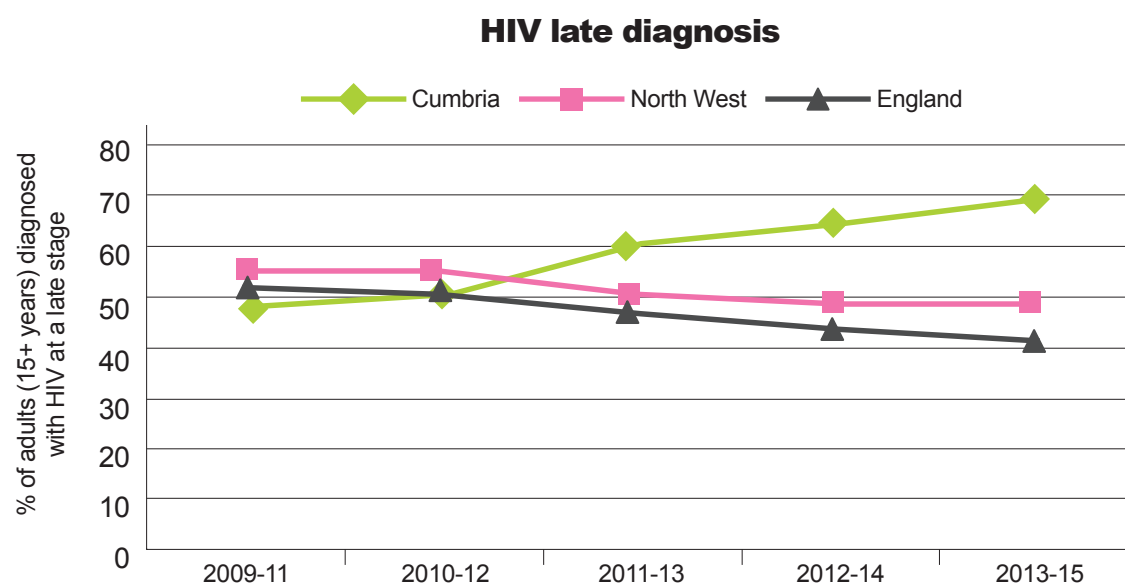
HIV Testing

HIV (Human Immunodeficiency Virus) is a virus which attacks the immune system - the body's defence against diseases. HIV remains in the body for life, but treatment can control the virus and keep the immune system healthy. People living with HIV can now expect a normal healthy life if they are diagnosed promptly. Without medication however, people with HIV can go on to develop AIDS. Those who are undiagnosed are at much higher risk of passing on the virus if they have unprotected sex.

Numbers of HIV infections in Cumbria remain low, at a rate of only 0.5 per 1000 population aged 15 to 59 (compared to a national rate of 2.3 per 1000). Possibly in part because of this, last year the county was highlighted as an area of high risk for late diagnosis of HIV following a number of serious complications, including two deaths. These could have been prevented with earlier diagnosis.

HIV testing is available at sexual health clinics and GP surgeries across Cumbria. Home sampling kits are also available online for people at high risk of HIV. Free confidential point of care HIV testing, where initial results are available within a few minutes, has recently been introduced at selected pharmacies across the county. By offering a range of options for people to access HIV testing locally, we hope to reduce some of the geographical and social barriers to increase uptake of testing, and improve rates of late diagnosis and undiagnosed HIV.

Figure 17: Proportion of HIV late diagnosis; Cumbria, North West and England, 2009-11 to 2013-15



Source: Public Health England

Who is involved in screening programmes?

Screening programmes go beyond just carrying out tests. Commissioning (or planning and agreeing on the services to be provided), quality control and provision of information for the public are all essential to reducing harm from the conditions screened for, alongside the actual testing that goes on in the NHS.

Each national screening programme has a programme board whose role is to provide strategic leadership for updating, planning, and implementing the programme. The Director of Public Health is represented on each of the screening programme boards. This enables him to challenge the commissioners and providers where there are concerns about a programme and ensures he has oversight of all the screening programmes.

Figure 18: Key national and local organisations involved in Cumbria's screening programmes.



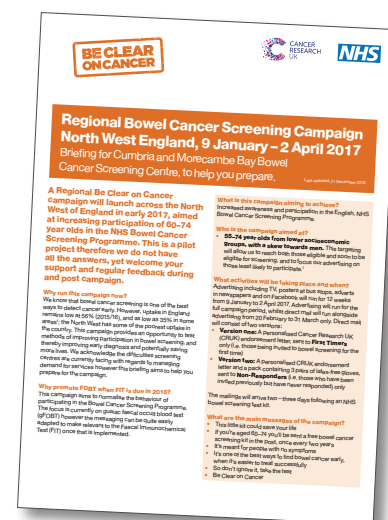
RLI Royal Lancaster Infirmary
 WGH Westmorland General Hospital
 FGH Furness General Hospital
 CI Cumberland Infirmary
 WCH West Cumberland Hospital

What is happening in Cumbria at the moment?

This section gives some practical examples of the current screening work going on across Cumbria.

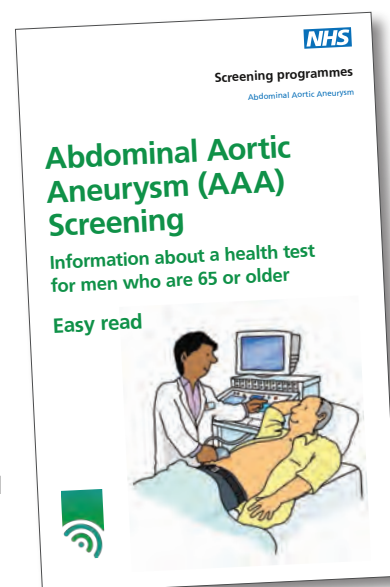
Campaign to promote bowel cancer screening to men in West Cumbria

In June 2016 Cumbria County Council's communication team worked in partnership with Cumbria Clinical Commissioning Group to appeal to West Cumbrian men who may be at risk of bowel cancer. In some areas of West Cumbria only 52 percent of men aged 60 to 69 are taking part in screening compared with 58 percent nationally. A week-long campaign was run involving local radio, newspapers and social media which aimed to increase bowel screening participation by men in this part of the county. The success of this campaign is currently being evaluated to see whether running similar campaigns in future is a good idea.



Improving uptake of abdominal aortic aneurysm screening for men with learning disability

It is well established that people with learning disabilities are less likely to take part in UK population screening programmes⁶. As a group they are known to have poorer health than the rest of the population already, and so making it easier for them to attend screening appointments is one way to reduce this unfair disadvantage. The Cumbria and Lancashire Abdominal Aortic Aneurysm Screening Programme is working specifically to help men with learning disability get to appointments. They use GP registers to find out which men due a screen have a learning disability, send them specially designed information about the test, liaise with the learning disability professionals who already know them and give them longer appointments involving a nurse practitioner. One problem the programme faces is that GPs have not always identified men as having a learning disability. If these men are given a standard appointment as a result, this has to be rearranged when they turn up and it becomes clear that they need additional support. Sometimes the men are put off as a result and do not return for screening.



Council performance and intelligence team work with screening data

The performance and intelligence team work to make sense of all the data available to the local authority on screening rates. The team also analyse information to understand the characteristics of areas with lower screening rates. They produce this data and information in an easy to use manner, which allows organisations to work on improving the uptake of screening wherever it is most needed.



Pharmacy outreach work to people at risk of diabetic eye disease

The public health team at Cumbria County Council is currently working with Cumbria Partnership Foundation Trust and the Local Pharmaceutical Committee (which represents pharmacists across Cumbria) to promote the diabetic eye screening service through Healthy Living Pharmacies. This work is still in development but is likely to include the provision of posters and leaflets promoting the eye screening service, and the opportunity for people to ask their pharmacist questions about how the screening works.

High street HIV testing pilot

Cumbria is challenged in terms of HIV testing by its geography. People living in small communities do not always want their GP to test their HIV status. They may also be unwilling to attend sexual health clinics and not wish to have testing kits sent to their home address. A pilot project has recently started hosted by OutReach Cumbria, developed in conjunction with the Local Pharmaceutical Committee and Cumbria Partnership NHS Foundation trust, and supported by Cumbria County Council⁷. It aims to make HIV testing an everyday occurrence within pharmacies. Pharmacies have trained staff, excellent opening times, private areas and most importantly, there is little risk of confidentiality being breached. **The project has identified several 'beacon' pharmacies** in areas with higher levels of high risk groups (including Carlisle and Barrow). Pharmacists will be trained in sexual health discussions and how to deliver HIV or syphilis point of care testing. Pharmacies will be sufficiently resourced to provide condoms and chlamydia or gonorrhoea screening during the same visit.

Links to further information

General information explaining screening

**Making Sense of Screening
(Sense about Science)**

NHS Choices overview of screening

Information on each of the national screening programmes

Bowel cancer screening (NHS Choices)

Breast cancer screening (NHS Choices)

Cervical cancer screening (NHS Choices)

**Abdominal aortic aneurysm screening
(NHS Choices)**

Diabetic eye screening (NHS Choices)

**Pregnancy screening for infectious diseases
(NHS Choices)**

**Pregnancy screening for genetic conditions
(NHS Choices)**

**Pregnancy screening for blood conditions
(NHS Choices)**

Pregnancy ultrasound screening (NHS Choices)

**Newborn physical examination screening
(NHS Choices)**

Newborn hearing screening (NHS Choices)

Newborn blood spot screening (NHS Choices)

Information on quality assurance of screening in England

**Screening programmes quality assurance
(UK Government)**



Review of recommendations from 2015 report

Last year's annual report focused on resilience – for individuals, for communities, and in the sense of planning for and responding to emergencies. The report emphasised the importance of continuing to focus on resilience for the future, and offered four recommendations for ongoing action. This section of the report provides comment on how these recommendations have been taken forward during 2016.

1. **The HeadStart project has already helped a number of children and young people in Cumbria. This work should be rolled out as far as possible as a key part of the system for improving young people's emotional health and wellbeing.**

Considerable work was undertaken during 2016 to develop proposals for the Big Lottery Fund to fund a roll out of the successful HeadStart pilot. Unfortunately in summer 2016 we heard that this bid had been unsuccessful. Since then we have been working to identify how we can build as much of this learning into mainstream services as possible, and also to find alternative sources of funding for those elements that need it. The learning about the importance of a whole-school approach to improving emotional health and wellbeing has been used to shape the proposals for changing school age nursing services, and further work will be developed over 2017 building on the HeadStart partnership with schools; a multi-agency care pathway for supporting children and young people with emotional and mental health has been established; resources have been identified to support a continuation of the availability of online counselling and support. Further resources are still required to roll out mindfulness in schools and some other aspects of the pilot.

2. **Resilience can be learnt and developed. Practical support to improve resilience should be spread far and wide by Cumbria County Council and its partners, in order to maximise the health benefits gained from resilience.**

Promoting resilience remains high on the agenda for the County Council. At the individual level, the appointment of 29 Health and Wellbeing Coaches offers an opportunity to support a wide range of people to build their own resilience, and the Council is ensuring that this team is trained and skilled to do this. At community level, there has been significant work to support local resilience partnerships. Local Community Development Officers working with the Public Health team are adopting a community development approach with a strong focus on promoting resilience. The emerging model enables civic, commercial and voluntary bodies in localities to collaborate in the identification and mobilisation of community assets in pursuit of increased community resilience. This initiative has benefitted from the collaboration across sectors seen in the aftermath of the December 2015 floods and has provided a context within which community strengths so evident after the floods have been harnessed for ongoing benefit.

3. **Local partners should continue to work with learning organisations, for example the CLARHC, and should foster the development of links and associations with other knowledge organisations, in order to use the best evidence-based practice for our county.**

Cumbria has continued its partnership with the CLAHRC throughout 2016. CLAHRC is a collaboration of around 40 organisations across the North West including NHS Trusts, Local Authorities and Universities. The aim is to work collaboratively to undertake and act upon applied research in order to decrease health inequalities and improve the health of local populations. The Public Health theme of the CLAHRC is focusing on improving resilience in deprived communities. In Cumbria, a partnership group has been established to undertake work within two wards in West Cumbria. Detailed neighbourhood surveys have been carried out with local residents to identify key local health issues and existing community assets. Members of the partnership have also worked closely with academic partners to undertake evidence reviews. These have identified interventions aimed at building community cohesion and preventing social isolation; reducing vulnerability to debt; and licensing of private landlords. The project is now in the process of bringing local partners together to share the findings of the surveys and the evidence reviews with the intention of developing a plan of activity to build community resilience throughout 2017. Following this, in 2018, further survey work will be undertaken to identify the impacts of the resilience activity.

4. All partners to the Local Resilience Forum should become accustomed and adept at using continuous learning and improvement methods in emergency planning to ensure we remain resilient as a whole county against future disasters. This should include ensuring that more people are trained and practiced in emergency response.

The Local Resilience Forum (LRF) has been through a process over the last year of self-examination, external examination and scrutiny of opportunities for learning from other areas of the UK and emergency planning around the world.

The most significant learning process started in January 2016 with a debriefing for every organisation in the LRF to identify areas for improvement from the “acute” phase of the December 2015 flooding. This was followed up by a synthesis of all those internal organisational debriefs and a workshop for all the organisations, where the themes that had emerged were confirmed. For the first time in the UK, this workshop involved more than just the emergency services and other Local Resilience Forum organisations, but also leaders and representatives of communities with emergency plans. This worked well, will be used again in similar scale incidents and is a significant step forward to fully embedding communities within every area of the coordination of response & recovery to major incidents and emergencies.

The learning has been taken forward and solutions continue to be developed and embedded in priority order. These lessons and themes have been shared with the chairs of all the Local Resilience Forums in May 2016. As with every incident that occurs in Cumbria where there is significant learning, lessons are shared through the Joint Emergency Services Interoperability Programme. The depth and method for debriefing that Cumbria used may well go on to be adopted as a standard for large scale, wide area incidents in the UK.

Additional training has been organised for all organisations to standardise the good practice debriefing process. In addition the learning and debriefing from the Recovery phase of the December 2015 floods has already been started, even before Recovery is complete. Learning from other incidents and all training and exercises continues to be a standing agenda item on the Local Resilience Forum Meetings.



2016 Recommendations

In April 2017, there will be some changes to the organisation of NHS services in Cumbria that will be important for the health protection services described in this report.

In particular, the current Cumbria Clinical Commissioning Group will be splitting to establish one Clinical Commissioning Group for the West, North and East of the County, and another covering South Cumbria and North Lancashire (the Morecambe Bay area). This will bring further changes, with Cumbria being split between two NHS England area teams. Screening and immunisation services may therefore be commissioned differently in different parts of Cumbria. In addition, the childhood vaccination service currently provided by Cumbria Partnership Foundation Trust is due to be recommissioned by NHS England by October 2017. Some of the following recommendations are therefore designed to ensure that we maintain our good record in screening and vaccination coverage through this period of change, while others arise from other observations made throughout this report.

- 1. The Cumbria Health and Wellbeing Board should consider establishing a Health Protection Oversight Group to maintain a county-wide focus on performance against health protection objectives.**
- 2. The NHS England area teams for the North East and Cumbria and for Greater Manchester and Lancashire should establish mechanisms for co-ordinating the commissioning of vaccination and screening services in Cumbria to ensure equity of access to these services across the county.**
- 3. All health and care organisations should increase their focus on raising uptake of flu vaccination in all three target groups and also among health and social care staff, in order both to protect health and to reduce demand on services over the winter.**
- 4. Health care organisations should be aware of the major risk factors for the development of *Clostridium difficile* infection. Each case of *Clostridium difficile* infection in their care should be reviewed to identify if there were any lapses in the quality of the care provided. Where issues are identified organisations should take appropriate steps to address these issues.**
- 5. In order to slow down the development of antimicrobial resistance locally, providers of healthcare should follow their local prescribing policy to ensure prudent prescribing of antibiotics. Where antibiotics are necessary, antibiotics with a narrow spectrum of activity should be chosen over broad spectrum where possible.**
- 6. The public health team and NHS England should jointly further investigate patterns of breast and cervical cancer mortality in Cumbria to understand whether there is any underlying reason behind higher death rates in some parts of the County.**
- 7. Further work should be undertaken to encourage greater uptake of HIV testing in order to reduce the rate of late diagnosis locally.**

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