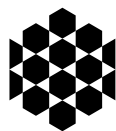
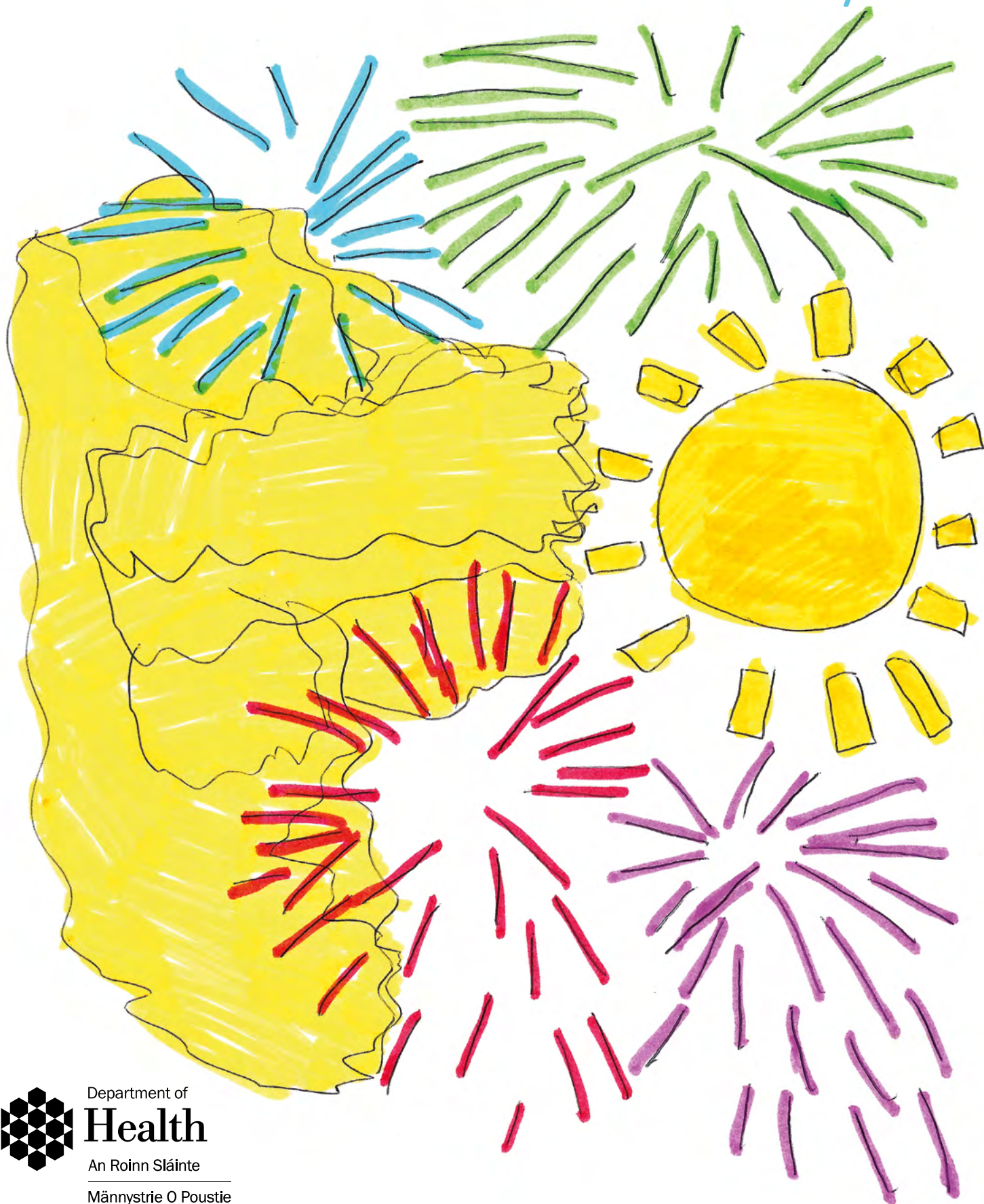


your Health Matters

The annual report of the Chief Medical Officer for Northern Ireland

2016/2017



Department of
Health

An Roinn Sláinte

Mánnystrie O Poustie

www.health-ni.gov.uk



Michael McBride

Dr Michael McBride
Chief Medical Officer

Foreword

This is my 10th Annual Report and in this year's report I have focused on the growing problem of antibiotic resistance, a global threat which means that antibiotics used to treat infections are becoming less effective. If we don't take urgent steps to save our antibiotics, routine medical operations like hip replacements, which rely on antibiotics, may become increasingly hazardous and more fatalities could result from infections like food poisoning or sepsis.

The health service has been working hard to take steps to address the problem alongside colleagues in the agriculture and food sectors to ensure we have a 'One Health' approach to tackling antibiotic resistance.

It isn't just professionals who need to take action – there is a part for everyone to play. If you're worried about your health or your family's, you need to talk to your doctor or pharmacist but you shouldn't always expect to get antibiotics. They don't work on viruses so they are no use against colds and flu. To help prevent infections in the first place and so reduce the need for antibiotics, follow simple guidelines about good hand hygiene and good food hygiene, and remember that protecting antibiotics is everyone's responsibility.

Looking back over my 11 years as Chief Medical Officer, it is heartening to see some important changes in the health of the population. In April 2007, smoking was banned in public places and legislation has been prepared to extend the smoking ban to all cars carrying children; furthermore, smoking is now prohibited at all health and social care sites.

The period also marks a significant reduction in healthcare-associated infections and a

commitment from health and social care staff to continue to drive down this type of infection.

We have seen the introduction of life-saving screening services such as for bowel cancer and for abdominal aortic aneurysms. We have also introduced a number of new vaccination programmes including shingles and various strains of meningitis as well as a major extension to the annual flu programme to include children aged 2-11.

Life expectancy has increased but there is still a gap between the most deprived and the least deprived in our society. In the most deprived areas people are more likely to smoke, have an accident in their home, to self-harm or to take their own lives.

We've seen reductions in teenage pregnancies but disparities between the most and least deprived areas remain. We know that breastfeeding is best for babies but the numbers of those breastfeeding in the most deprived areas is half that in the least deprived.

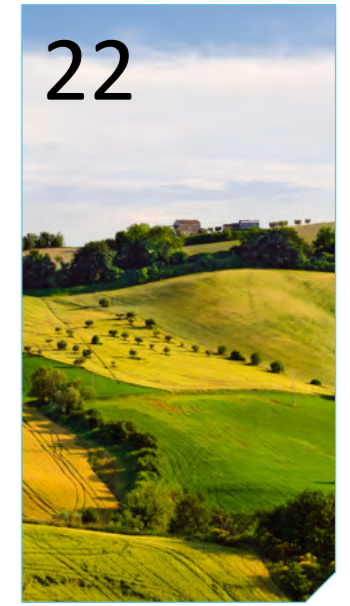
These health inequalities should concern us all and we need to ask ourselves why it has been so difficult to make progress on these issues. Housing, education and employment are all key determinants of health and life expectancy, so there are many people working across the public sector, in business and the voluntary sector who can contribute to improving the life outcomes of those in deprived areas.

Last year the Department published Health and Wellbeing 2026: Delivering Together <https://www.health-ni.gov.uk/publications/health-and-wellbeing-2026-delivering-together>, a

document which provides the roadmap for improving health. We have to accept that, in order to achieve the world-class health and social care service we all deserve, things will need to be done differently in future. Delivering Together places a greater emphasis on helping people to stay well for longer. Where care or support is needed it will be, wherever possible, provided in the community and primary care settings. Some local services will need to be replaced by regional models or specialist centres equipped to deliver the best possible healthcare for the whole population, providing high quality services in a safe and timely way. Delivering Together puts people at the forefront of how we will arrange health and social care services in the future.

We all have a role to play and change won't happen overnight – Delivering Together looks ahead over the next 10 years – but if our ambition is to address health inequalities and have a safe, sustainable healthcare system we must start to make the changes now.

In my report I offer suggestions for how all of us, as individuals, can take action to improve our own health and stay well for longer. I hope you will find it interesting and useful, and please share it with others.



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SECTION 1 Improving Your Health

Supporting Pregnant Women to Stay Healthy with 'Weigh to a Healthy Pregnancy'

Around 49% of pregnant women in Northern Ireland are overweight or obese at the start of pregnancy. This means an increased risk of pregnancy complications, such as diabetes and pre-eclampsia. These conditions can create problems for the baby, including increased risk of being born prematurely and of being stillborn. Those most at risk of pregnancy and birth complications are women with a Body Mass Index (BMI, a measure that combines your height and weight) of more than 40 and so extra support is needed to help with adopting healthier behaviours and keeping weight gain to lower levels during pregnancy.

In 2013 the Public Health Agency developed a new programme called Weigh to a Healthy Pregnancy. The programme involves providing extra support to pregnant mothers from midwives, dietitians and physiotherapists working within maternity services across Northern Ireland. The primary aim is to help mothers adopt healthy behaviours through changing eating habits and increasing physical activity levels in order to limit weight gain to within the recommended guidelines (see table).

Weigh to a Healthy Pregnancy also provides women with scales to weigh themselves weekly at home. The weights are then sent to a review

BMI Category	Total Pregnancy Weight Gain
18.5 - 24.9 (healthy)	11.5 - 16kg (25 - 35 lbs)
25 - 29.9 (overweight)	7 - 11.5kg (15 - 25 lbs)
30+ (very overweight)	5 - 9kg (11 - 20 lbs)



team of dietitians and midwives and support is provided to continue to gain weight within the recommended guidelines. Weigh to a Healthy Pregnancy has been shown to be effective in helping 47% of the women in the very overweight category to gain weight within the recommended lower guidelines. This is important for mother and baby and any subsequent pregnancies. Weigh to a Healthy Pregnancy is now streamlined as part of maternity service delivery.

Feedback from women about the programme has been positive:

'It was brilliant the way they phoned and everything and the way the results went through from the scales, I thought it was really great.'

'She asked me about what I felt my triggers were for eating... she also talked about emotional eating... so it was good to chat about those things.'

More information on Weigh to a Healthy Pregnancy can be found at:

<http://www.publichealth.hscni.net/publications/weigh-healthy-pregnancy-0>



Breast is Best

Breastfeeding helps protect babies against a range of serious illnesses including gastroenteritis and respiratory infections in infancy. It benefits the physical and emotional health and wellbeing of both mother and child. This is why we need to see an increase in the number of mothers breastfeeding their babies and continuing to breastfeed beyond the early days, ideally for at least six months.

It is particularly important to encourage mothers from lower socio-economic groups to breastfeed as nearly 63% from the least deprived areas breastfeed their babies on discharge from hospital compared to only 30% from the most deprived areas.

Our health service is to be congratulated on becoming the first country in the UK to deliver 100% of births in a Baby Friendly Initiative (BFI) fully accredited maternity service. This Unicef and World Health Organisation programme supports best practice in promoting breastfeeding and improving standards of care for mothers and babies.

Everyone has a role to play in supporting mothers to continue to breastfeed beyond those early days. As well as the information and support provided by health professionals, family and community organisations can help by providing supportive environments to facilitate mothers to breastfeed with confidence and without intrusion, as well as helping to establish breastfeeding as the 'cultural norm'.

Preventing tooth decay in children

The 2013 Child Dental Health Survey showed an improving picture of our children's oral and dental health with six out of ten (60%) 5 year-olds, and four out of ten (43%) 12 year-olds, found to be free from obvious dental decay and the number of extractions continues to fall. However, with more than half of our 12 year olds still showing signs of dental decay we can't afford to be complacent.

Here are three top tooth tips to keep children's teeth healthy:

1. Reduce sugar consumption
 - Check the sugar content of food and drinks and reduce the consumption of those with sugars, particularly at bedtime.
 - Choose healthy snacks
 - Ask for sugar free medicines where available.
2. Brush teeth regularly
 - Brush teeth at least twice daily; last thing at night and on at least one other occasion. Family toothpastes containing 1350 to 1500 ppm of fluoride will provide the maximum protection from tooth decay.
 - Brush children's teeth as soon as the first tooth appears (around six months of age) and continue to supervise brushing until the age of seven years when they can then brush their own teeth.
 - Children under three years old should use a smear of toothpaste and children aged



- three to six years no more than a pea-size amount.
 - Children should be encouraged to spit out excess toothpaste after brushing, but not to rinse with water, as this will wash the fluoride away.
3. Visit the dentist
 - Take your child to the dentist as soon as their first tooth appears and then keep visiting for regular checks as often as advised.

THINGS YOU CAN DO

1. Eat less sugary food and drink
2. Brush teeth twice daily
3. Visit your dentist regularly

Cut sugar consumption!

In Northern Ireland, adults are eating double the recommended amount of sugar and children are eating around three times more sugar than they should. Free or added sugars shouldn't make up more than 5% of the energy (calories) you get from food and drink each day. That's a maximum of 30g of added sugar a day for adults, which is roughly seven sugar cubes, no more than 19g a day for children aged 4 to 6 years old (5 sugar cubes), and no more than 24g (6 sugar cubes) for children aged 7 to 10 years old. Added sugars refer to sugar added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and unsweetened fruit juices. Sugars naturally present in milk and dairy products and sugars contained within fruit and vegetables are excluded from these limits.

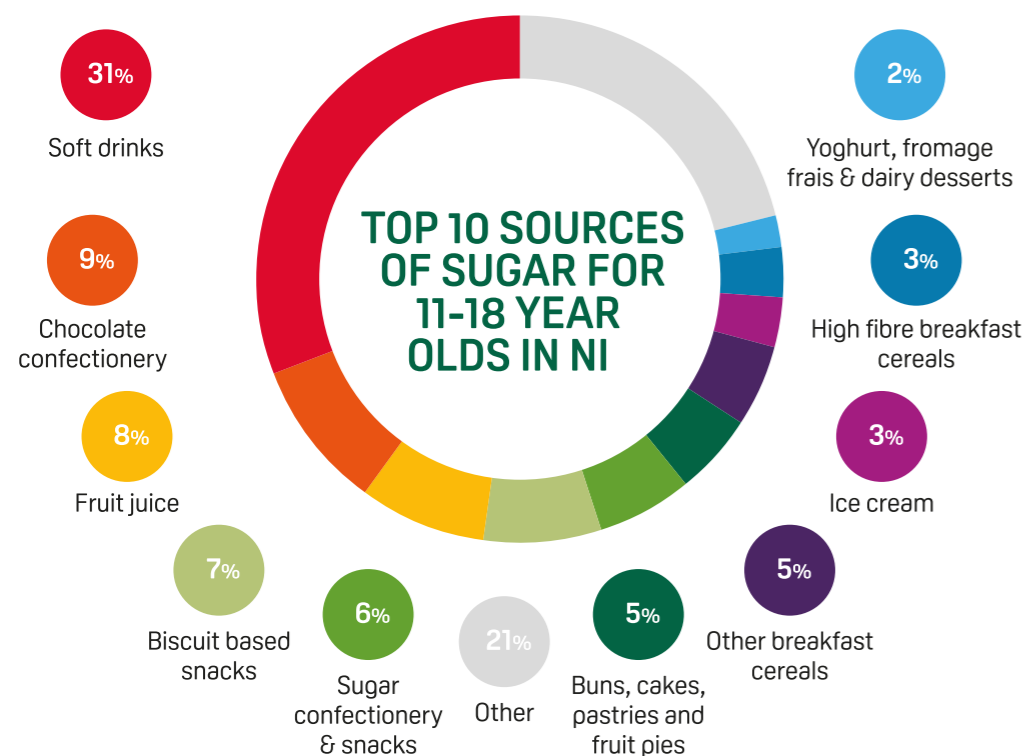
Most of the sugar we eat comes from everyday foods such as breakfast cereals or yoghurts as well as from foods high in fat, sugar and salt such

as confectionery and biscuits and this can lead to weight gain, obesity and tooth decay.



60% of adults in Northern Ireland were overweight or obese in 2015/16, a figure which has remained fairly constant for the past decade. Of great concern are the rates of childhood obesity, with 21% of children aged 2 to 15 years overweight and 7% obese.

The Food Standards Agency (FSA) is collaborating with industry experts from across Northern Ireland to support local food businesses to reduce the sugar content of the food they manufacture, serve or sell by reformulating and reducing portion size as well as shifting consumer purchasing towards lower or no added sugar products.



THINGS YOU CAN DO

1. Check sugar content and choose lower sugar foods and drinks
2. Think about portion sizes
3. Watch out for calories in beer, wine and other alcoholic drinks

Improving Men's Health

Girls born in Northern Ireland today can expect to outlive boys by an average of four years. The primary reasons for this are that men are still more likely to:

- smoke, drink excessively, use drugs and ignore health advice relating to regular exercise and a healthy diet;
- work in occupations which may put them at higher risk of harm;
- take more risks in their personal lives and engage in higher adrenaline sports; and
- delay visiting their GP when they have potential symptoms of a physical or mental illness. Reluctance to seek help with emotional problems is a factor in the higher suicide rates amongst men.



CMO visit to North Belfast Men's Shed 2016

All our health promotion strategies include relevant actions targeting men to encourage more proactive ill-health prevention. Initiatives in place include the Men's Shed programme; health checks to workplaces; and parenting programmes to young fathers. I have visited a number of Men's Shed projects over the past year and have seen the positive impact that they have in providing a welcome meeting place in the community where men can come together to work on practical interests – such as furniture restoration, and bicycle and lawnmower repair – of their own choosing in an inclusive venue. The sheds offer resource and skills sharing and a sense of purpose, achievement and social interaction. Members maintain good health and wellbeing naturally by keeping physically, mentally and socially active; and connected to their community. Information about your nearest Men's Shed can be found at: <http://menssheds.ie/>

THINGS YOU CAN DO

1. Cut down on smoking and alcohol consumption
2. Make healthier choices at mealtimes and keep active
3. Visit your GP if you have any concerns about your physical or mental health

Know your alcohol limits

Over two thirds of adults in Northern Ireland drink alcohol. While many drink at levels that are unlikely to put them at serious risk of alcohol related harm, it's vital that people know how to reduce their risk.

I, and the other Chief Medical Officers across the UK, published new "low risk" guidelines in 2016. These recommend that both men and women drink less than 14 units of alcohol a week – that equates to six pints of 4% beer or six glasses (187.5ml) of 12% wine.

It is vital to recognise that these are "low risk" guidelines and not a target. There is no level of alcohol consumption without any risk. Recent evidence shows *any* alcohol consumption can cause certain cancers.


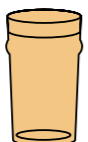






Most people can lower their long-term health risks further by drinking less than the guidelines or not drinking alcohol at all.

Why is this important?

- Over 250 people die every year in Northern Ireland from alcohol related causes;
- Each year there are over 12,000 alcohol related admissions to hospitals;
- Eight out of ten (80%) Emergency Department attendances are alcohol related at peak times during the weekend; and
- Alcohol misuse is estimated to be a contributory factor in 20% of all crimes committed.
- Adults need to watch out for calories in beer, wine and other alcoholic drinks, as these can account for up to 10% of their total calorie intake

What is a Unit?

One alcohol unit is measured as 10ml or 8g of pure alcohol. Information on the number of units in different types of drinks is shown below.

 Pint of beer (4%) = 2.3 units	 Pint of cider (5%) = 2.8 units	 Alcopop (5%/275ml) = 1.4 units	 Can/bottle of beer (5%/330ml) = 1.7 units
 Spirits eg vodka/whiskey (40%/35ml) = 1.4 units	 Bottle of spirits (40%/700ml) = 28 units	 Bottle of wine (12%/750ml) = 9 units	 Small pub bottle of wine (12%/187.5ml) = 2.3 units

The Guidelines in Full

Weekly Guideline

- You are safest not to drink regularly more than 14 units per week, to keep health risks from drinking alcohol to a low level;
- If you do drink as much as 14 units per week, spread this over three days or more. If you have one or two heavy drinking sessions, you increase your risk of death from long term illnesses and from accidents and injuries.

On Single Drinking Episodes

To reduce short term risks you can:

- limit the total amount of alcohol you drink on any occasion;
- drink more slowly, drinking with food and alternating with water;
- avoid risky places and activities, making sure you have people you know around and ensuring you can get home safely.

On Pregnancy and Drinking

- If you are pregnant or planning a pregnancy, the safest approach is not to drink alcohol at all, to keep risks to your baby to a minimum.
- Drinking in pregnancy can lead to long-term harm to the baby, and the more you drink the greater the risk.



THINGS YOU CAN DO

1. Don't drink more than 14 units per week
2. Spread this over three days or more
3. Don't drink alcohol if you are pregnant

Vaping

Vaping may have a role to play in helping committed smokers to give up or reduce their consumption of tobacco. However, electronic cigarettes should never be used by non-smokers.

Vaping involves inhaling vapour produced by heating a liquid in an electronic cigarette or e-cigarette. It is often viewed as an alternative to smoking tobacco as the heated e-liquid generally contains nicotine – the addictive element in tobacco – but, unlike tobacco, does not contain tar.

The use of e-cigarettes has grown significantly in the past five years with an estimated 87,000 adults in Northern Ireland using them regularly. A recent survey carried out here revealed that the top three reasons for vaping are:

- To reduce the number of cigarettes smoked
- To quit smoking completely
- Price compared to tobacco products

Although e-cigarettes do not contain many of the harmful chemicals found in tobacco, they do contain a lot of other

chemicals and it will be years before we really know the extent of any long-term health consequences of e-cigarette use. The fact that they contain nicotine is a concern as the World Health Organisation believes nicotine may have long-term consequences for brain development if used by adolescents.

In order to prevent uptake by children and young people, the Department of Health plans to introduce legislation to restrict the age of sale for e-cigarettes to over 18s. This will bring e-cigarettes into line with other age restricted products such as tobacco and alcohol.



Home Safety

Parents should ensure that e-cigarettes and their refills are kept out of reach of young children as there is a risk of poisoning from the nicotine fluid. In addition, poorly made or counterfeit chargers for e-cigarettes have caused house fires. Only buy e-cigarettes from reputable outlets, use the correct charger for the device, follow the manufacturer's instructions and don't leave an e-cigarette charging unattended or overnight.

For more advice and information check the Royal Society for the Prevention of Accident's website at <https://www.rospa.com>

THINGS YOU CAN DO

1. Non-smokers should never vape
2. Best be cautious – but it's better than smoking cigarettes
3. Keep all e-cigarettes and liquid refills out of reach of young children

Vitamin D and you

Vitamin D is important for maintaining the health of bones, teeth and muscles. It is important to make sure that you get enough vitamin D to avoid bone deformities such as rickets in children, and bone pain caused by a condition called osteomalacia in adults. Vitamin D also helps to reduce the risk of developing osteoporosis and brittle bones that are more prone to fractures when older.

Where does vitamin D come from?

Vitamin D comes from two sources - sunlight and food.

From early April to the end of September, most people should be able to get all the vitamin D they need from sunlight. But between October and early March we don't get enough vitamin D from sunlight in this part of the world.

A study published in 2015, the National Diet and Nutrition Survey Report for Northern Ireland, shows that "A third of adults aged 19 to 64 years in Northern Ireland had low blood levels of vitamin D, a higher proportion than in the UK as a whole". <https://www.food.gov.uk/northern-ireland/researchni/ndns-ni>

About 20 minutes exposure to sunlight between 11 AM and 3 PM is enough for an average person to get enough vitamin D to meet their needs in the summer months, though people with naturally darker skin may need longer. It is important to make sure that you do not expose yourself to the sun for too long, to avoid the risks of sunburn, excessive skin ageing and skin cancer.

Vitamin D is also found in a small number of foods, such as oily fish and egg yolks.



Should I take a vitamin D supplement?

Because many people do not get enough vitamin D, the Department of Health recommends that:

- breastfed babies from birth to one year of age should be given a daily supplement containing 8.5-10mcg of vitamin D;
- formula-fed babies shouldn't be given a vitamin D supplement until they're having less than 500ml of infant formula a day, as infant formula contains vitamin D;
- all children aged 1-4 years old should be given a daily supplement containing 10mcg of vitamin D.

Adults and children over five years old may consider taking a supplement especially during

the autumn and winter months when there is less sunshine. Year-round supplements are recommended if you:

- aren't often outdoors – for example, if you're frail or housebound;
- are in an institution like a care home;
- usually wear clothes that cover up most of your skin when outdoors;
- have darker skin colouration.

Where can I get vitamin D supplements?

You can buy vitamin D supplements or vitamin drops containing vitamin D (for under 5s) at most pharmacies and supermarkets.

Women and children who qualify for the Healthy Start scheme can get free supplements containing the recommended amounts of vitamin D.

See the Healthy Start website <https://www.healthystart.nhs.uk> for more information.

Illustration by Murray Coleman.



THINGS YOU CAN DO

1. Get about 20 minutes exposure to the sun in summer months
2. Eat oily fish and egg yolks
3. Take a supplement if you need one, especially in winter

Change Your Mind

The evidence is clear – mental health stigma isolates people and prevents them from getting well and seeking help. The ‘Change Your Mind’ campaign, supported by the Public Health Agency (PHA) and charities Inspire and Comic Relief, was launched in March 2016 and aims to reduce levels of stigma, discrimination and negative

attitudes towards people who experience mental ill health.

‘Change Your Mind’ encourages the public to offer support to those who may be struggling with their mental health - asking, listening and talking to someone with a mental health issue can be life changing.

Approximately one in five people in Northern Ireland will experience a problem with their mental health at some stage in their life. The remaining four people will know someone who is experiencing a mental health problem.

Further details can be found at: <http://www.changeyourmindni.org>



THINGS YOU CAN DO

1. Ask
2. Listen
3. Talk

Myths & Facts

Myth: Only certain people have mental health.

Fact: We all have mental health that can move up and down, just like our physical health.

Myth: Physical health problems are worse than mental health problems.

Fact: Just because you can't see a mental illness doesn't mean it's any less painful or debilitating than a broken arm. A mental health problem can feel just as bad, even worse than any other illness and needs just as much support.

Myth: You can't recover from a mental illness.

Fact: Mental health problems do not define a person or their potential in life. Recovery is possible with the right support and people can and do go on to lead rewarding and fulfilling lives.

Myth: People with mental illness cannot hold down successful jobs.

Fact: Research has shown that 60-70% of people with common mental disorders are in work (Chief Medical Officer's Annual Report, Dame Sally Davies, 2014). The chances are, you probably work with someone with a mental health problem.

Myth: Mental health problems are rare.

Fact: Mental health problems are common and it's likely you will know someone who has experienced them. One in four people will experience a mental health problem in their lifetime.

Myth: Mental health problems are a sign of weakness.

Fact: Mental health problems are not a sign of weakness just as a broken leg is not. They

are a common part of human experience and can happen to anyone from any walk of life. Many high profile, successful and inspirational people have experienced mental ill health and many people gain strength from the experience.

Myth: People with mental health problems are more likely to be violent.

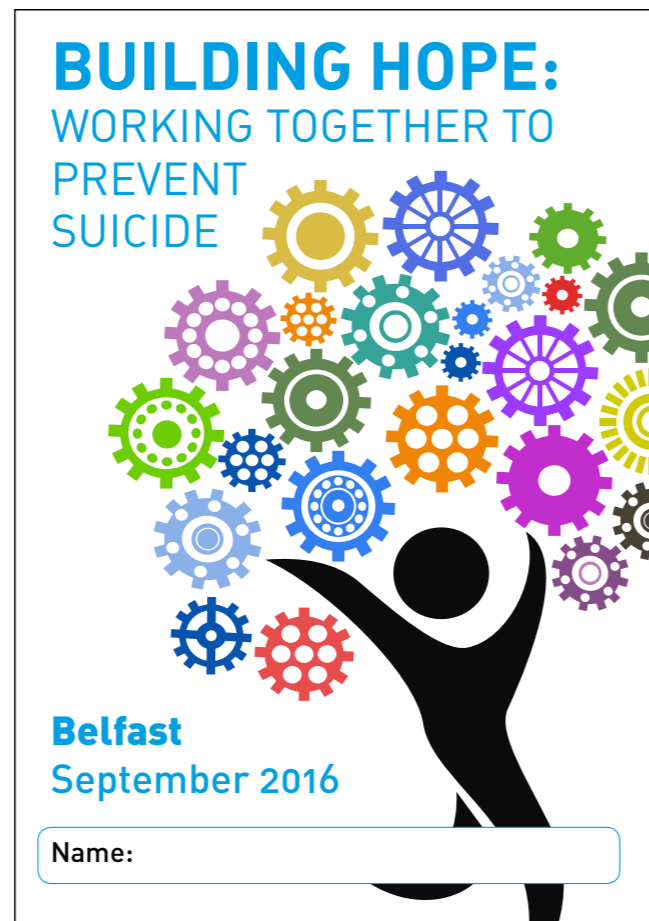
Fact: The misconceptions around mental health problems are fed by stereotypes associated with violence, criminality and danger which are equally endorsed by the media. The truth is that most people who are mentally ill are not violent. They are more likely to be a victim of violence and also more likely to harm themselves than harm others.

Working Together to Prevent Suicide

A complex range of inter-related influences can lead to despair and suicidal behaviour in individuals. Suicide rates in Northern Ireland are the highest in the UK, with north and west Belfast the local constituencies worst affected.

In late September 2016, around 80 people involved in suicide prevention in Belfast came together for a three-day workshop to develop a broad co-ordinated approach to reducing suicide in the city.

The workshop culminated in the participants agreeing what they would commit to working on in the coming years to help reduce deaths by suicide. Agreed areas of common ground for future development include: creating a culture of care; early intervention for children and families; data sharing and collection; political leadership, and building emotionally resilient communities. Working groups for each of the common ground issues are now developing practical action plans for their areas.



HPV vaccine programme

I welcome the extension of a HPV (human papilloma virus) vaccination programme in Northern Ireland. Targeting the HPV vaccine at men who have sex with men (MSM) will help to prevent HPV-associated cancers and infection which can cause genital warts. It is especially important for those who have multiple sexual partners. In all men, 80-85% of anal cancers, 28% of oropharyngeal (throat) cancer and almost 50% of penile cancers are associated with HPV infection.

The programme was rolled out across NI from October 2016 and the HPV vaccine is now being offered to all MSM aged up to 45 years of age,

attending GUM (genitourinary medicine) clinics. Three injections, over a 12 month period, are needed in order to receive maximum protection. Based on early interim uptake figures the programme appears to be going well and I would strongly encourage those eligible to receive the vaccine to take up the offer of vaccination while attending a GUM clinic.

A HPV immunisation programme for girls aged 12/13 was introduced in 2008 to help prevent cervical cancer. Heterosexual males indirectly benefit from the girls' programme, as vaccination interrupts the transmission of HPV by sexual contact.

Healthy eating health service

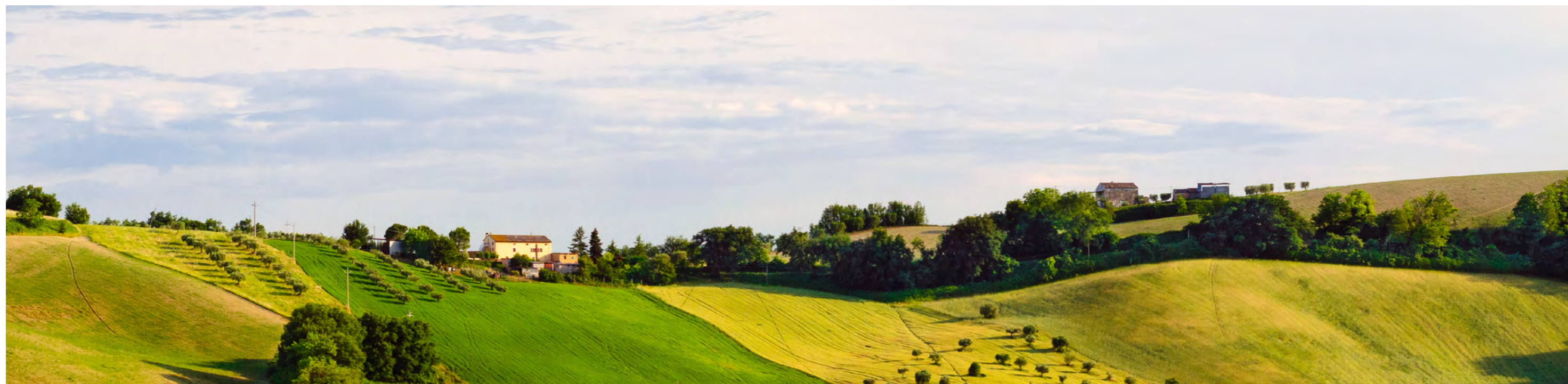
Health and Social Care (HSC) services have a key role in supporting staff and visitors to make long-term improvements to their diet.

As part of the implementation of our obesity prevention strategy, 'A Fitter Future for All 2012-22', the issue of food provision for staff and visitors within HSC settings has been highlighted as an important area for development. The Public Health Agency, Food Standards Agency and SafeFood have been working together to produce minimum nutritional standards for catering in Health and Social Care facilities.

The standards, launched in June 2017, will ensure food and drink provided to staff and visitors in all Health and Social Care settings in NI become healthier. By modelling good practice, it is hoped that these standards will also be adopted by local government, private sector employers and the public sector more widely. The standards can be accessed online at <http://www.publichealth.hscni.net/sites/default/files/Minimum%20Nutritional%20Standards%20Report%202017.pdf>



The air we breathe...



Poor air quality affects everyone. It can trigger asthma and increase symptoms in those with heart and lung disease. It can have other long term impacts on health including an increased risk of lung cancer. Air pollution has a disproportionate impact on younger and older people and those with pre-existing illness. People living in more deprived communities are more likely to be near sources of air pollution such as busy roads and are more likely to experience poor health.

There are a range of actions you can take to reduce air pollution;

- take the bus, train, walk or cycle rather than travelling by car;
- when you have to drive, try to avoid peak times, drive smoothly to keep your miles per gallon high (saves you fuel, money and your vehicle will emit less pollution), switch off engine if stationary for more than a couple of

minutes, especially near schools, and select a low emission vehicle if you are replacing your car (electric, hybrid, LPG);

- when you're at home choose cleaner, greener fuels (avoid solid fuels such as coal, wood or peat, if possible) and ensure home heating appliances are properly installed and regularly serviced (also lowers risk of carbon monoxide poisoning);
- avoid burning waste in your garden; use council civic amenity sites instead, or try composting garden waste.

You can also reduce your own exposure to air pollution:

- avoid being in or near heavy traffic, whether on foot, on a bicycle or in a car where pollution can become concentrated;
- close external doors and windows which face

onto busy roads when traffic is heavy or congested;

- avoid breathing smoke from bonfires – stop and think before you light one!

People with existing lung or heart conditions should adjust their treatment, stop strenuous outdoor activities or seek medical advice if their breathing is affected by air pollution levels.

Further advice is available at <http://www.nidirect.gov.uk> by searching for 'air pollution and health'.

Live air quality information monitored at locations across Northern Ireland is available at <http://www.airqualityni.co.uk> and you can also listen to the most recent bulletins by calling the freephone helpline on **0800 556677**.

To register to receive air pollution alerts free to your mobile phone via the 'Air Aware' service, just **text the word 'Air' to 67300**.

THINGS YOU CAN DO

1. Try alternatives to using the car or drive your car smoothly
2. Avoid burning solid fuels and think before you light a bonfire
3. Ensure heating appliances are properly installed, serviced and in good repair

How we can make life better

Being in good health is about more than health services. It's about being born and raised, living, working and aging in environments that support good health, and it's about individuals and communities being active in improving their own health.

This is at the heart of our public health strategy, Making Life Better, <https://www.health-ni.gov.uk/topics/health-policy/making-life-better> which aims to work with individuals, communities, the public sector, private businesses and others to create the conditions for people to take greater control over their lives, to make healthy choices and lead healthier, active lives.

Unfortunately not everyone has an equal chance of experiencing good health and wellbeing, and too many people still die prematurely or live with health conditions that could have been prevented. Living in an area with anti-social behaviour, no available public transport, limited access to green spaces and clean air, unemployment, financial worries can all have a serious impact on health and wellbeing. Addressing these wider determinants of health is central to Making Life Better.

A good example of the Making Life Better approach is the Duneane Community Collective - a collaboration between the local community around the village of Toome, the local Council, the Community Development and Health Network, the Public Health Agency and others. The Collective is trying out new ways of working together, between those who provide public

services and those who benefit from the services. The aim is to promote health and wellbeing and create a strong and connected community, building on the talents and skills of local people to help themselves and each other.

The group have celebrated a number of achievements to date. For example, as a result of the project, 29 community health champions have increased skills and confidence and have been recognised with Open College Network certificates. The group also held a Spirit of Duneane Day where local clubs, organisations and groups came together.

Duneane shows that when local people and representatives from public bodies including the Council get together to work for the good of the community, it can have a really positive effect on the whole area. You can read more about the Duneane project https://www.cdhn.org/sites/default/files/Duneane%20Co%20production%20report%20_1.pdf

HOW DOES YOUR AREA COMPARE ON KEY HEALTH MEASURES?

If you want to see what health outcomes look like in your area compared to the Northern Ireland average, or to other areas across the region, you can view statistics or interactive content on the NINIS website by following the Making Life Better links. <http://www.ninis.nisra.gov.uk/public/Home.aspx>

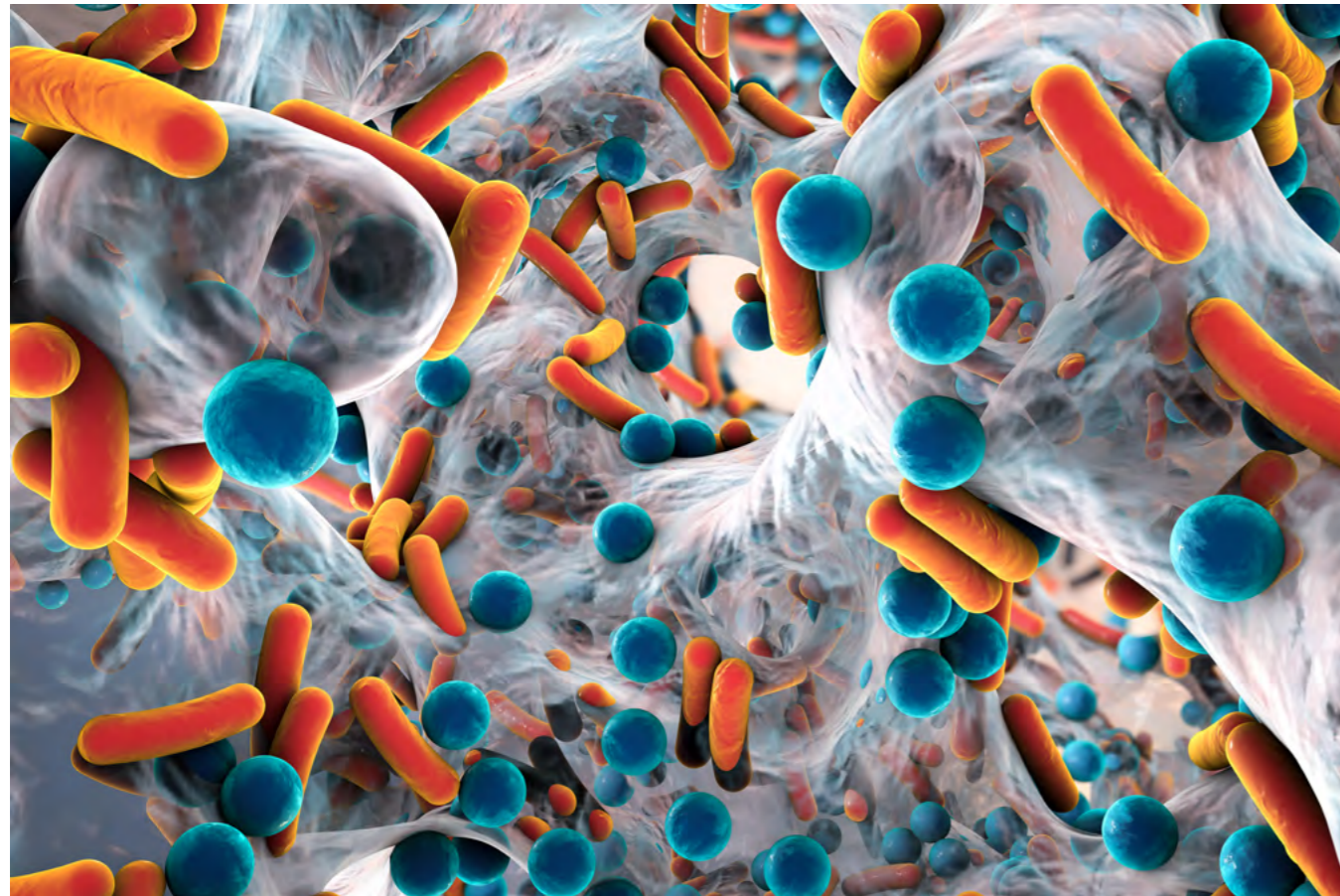


MAKING LIFE BETTER



SECTION 2 Greatest Threats to Health

ANTIBIOTIC RESISTANCE - A CONCERN FOR US ALL



What is Antibiotic resistance?

Antibiotics are medicines used to treat bacterial infections in humans and animals, and include drugs like penicillin.

However, bacteria can develop and share ways to survive the effects of an antibiotic. When bacteria are no longer killed by the antibiotics we say they have become resistant to antibiotics. The more we use antibiotics, the more bacteria become resistant to them.

You may also hear the term antimicrobial resistance or AMR – this refers to a wider group of drugs including not just antibiotics, but

also drugs such as antivirals, antifungals and antimalarials. However, when we talk about antimicrobial resistance we are usually referring to antibiotics.

The increase in antibiotic resistance means that many infectious diseases could become untreatable. This also threatens many modern medical interventions that depend on the availability of antibiotics, for example, cancer chemotherapy, organ transplantation, care of extremely premature babies and major surgery. Routine medical and surgical practices such as hip replacements may become much riskier.

To compound the problem, no new types of antibiotics have been brought into clinical practice since 1987. This is because any newly developed antibiotic would have to be used as a

last resort to fight infection. There is therefore very little incentive for pharmaceutical companies to develop new antibiotics, since their new products would be used very rarely.

Who cares?

Resistance to antibiotics has been recognised by the World Health Organization as one of the greatest threats to human health and to human medicine worldwide.

The issue is also being taken seriously by the General Assembly of the United Nations who dedicated a meeting in September 2016 to the subject – only the fourth time in its 70 year history that a health topic has been discussed by the General Assembly (the other topics were Ebola, HIV and non-communicable diseases).

In the UK, work has been ongoing within health departments and their agencies for many years but in 2014, the then Prime Minister, David Cameron, in recognising the seriousness of the threat, asked an economist, Lord Jim O’Neill, to analyse the global problem of rising drug resistance and propose concrete actions to tackle it internationally.

The final report of the review team estimated that, by 2050, drug resistant infections could kill 10 million people globally every year rising from current estimates of 700,000 - more than currently die from cancer. The report, published in May 2016, identifies 10 areas for action, of which four are regarded as critical:

- raising public awareness;
- boosting the development of new drugs;



- developing tests that could reduce unnecessary prescribing of antibiotics and
- reducing the unnecessary use of antibiotics in agriculture.

In response, the then Prime Minister said **“if we fail to act, we are looking at an almost unthinkable scenario where antibiotics no longer work and we are cast back into the dark ages of medicine.”** In warning of “catastrophic consequences” if the problem isn’t tackled, he committed the government to reducing inappropriate prescribing and reducing bloodstream infections.

Northern Ireland - Highest Antibiotic Use in UK


In 2016, there were 1.9 million individual prescriptions issued by GPs and dentists (which we call 'primary care') for an antibiotic across Northern Ireland, which equates to about one course of antibiotics for each person in the population during that year. This makes us the highest antibiotic users, on average, of all the UK nations. By comparison in England for the same period the prescribing level for primary care was 0.7 antibiotic prescriptions for each person in the population, or approximately 30% less than Northern Ireland. Although the majority of antibiotics are prescribed by GPs, around 8% of antibiotics used in primary care in Northern Ireland are prescribed by dentists.

If we look more closely at prescribing across Northern Ireland, there are some big differences in prescribing levels between different areas of the country. This can be seen on the map below - in the areas coloured darker green there are more antibiotics prescribed for every person.

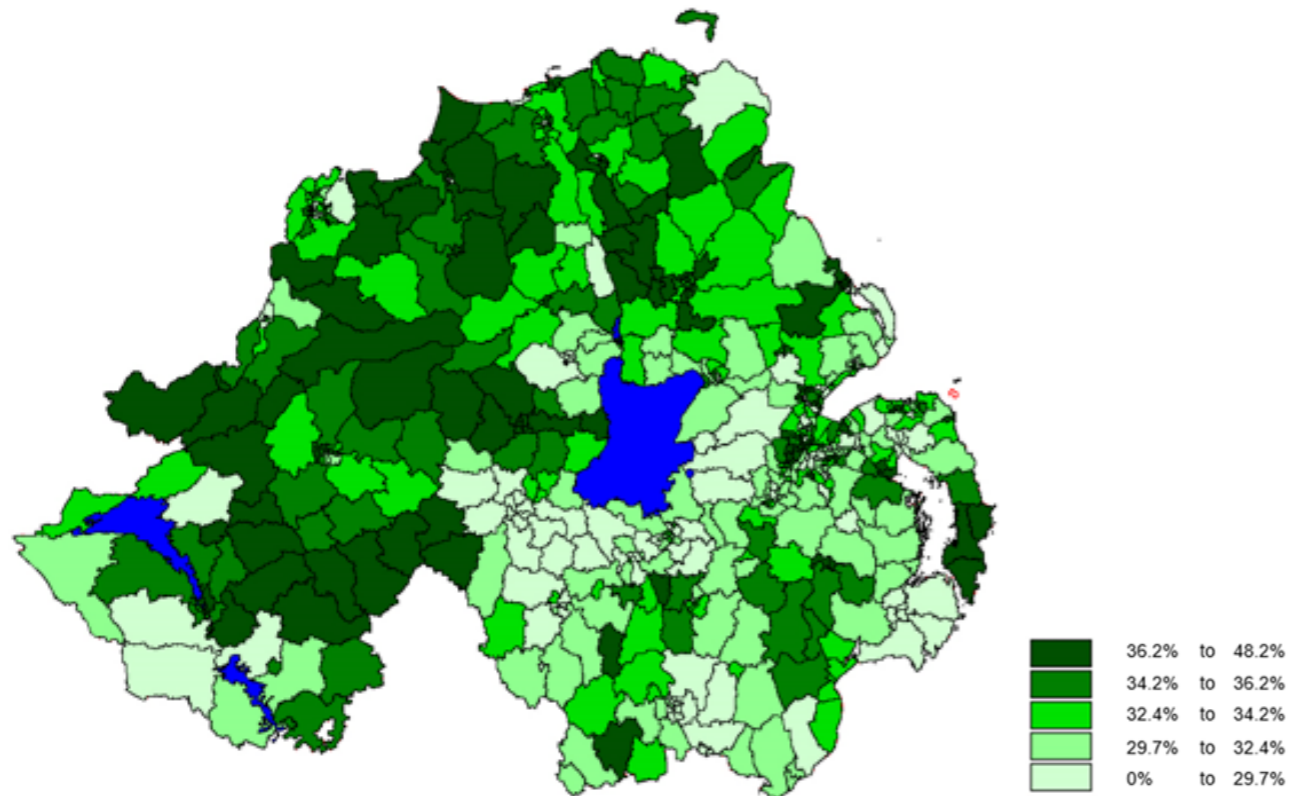
We will have to carry out some further investigations into these differences to understand the reasons behind the observed prescribing patterns.

The good news is that there has been a general reduction in the prescribing of antibiotics in

There were 1.9 million individual prescriptions issued in Northern Ireland in 2016.



Percentage of population prescribed at least one antibiotic during 2016



primary care over the past ten years, with a 10% reduction across Northern Ireland.


As well as GP and dentists, pharmacists also have a role to play in antibiotic prescribing and supply. Today pharmacists may be involved at all stages of the patient journey, working in community, hospital, social care and GP settings. Modern pharmacists' roles involve prescribing, medication reviews, advising medical and nursing staff and patients on the safe and appropriate use of medicines, as well as supplying medicines.

GPs receive a quarterly prescribing report which outlines the amount of antibiotics they have prescribed. They also get feedback on whether they have been prescribing antibiotics outside the Northern Ireland Guidelines.

New initiatives have been developed to encourage GPs to get involved in projects to reduce antibiotic prescribing. In 2016/17 over half of GP practices signed up a named 'Antibiotic Champion' in their practice and produced an antibiotic action plan. Moving into 2017/18 a number of GP practices have been selected to trial new tests which can be used in the practice to help differentiate between bacterial and viral infections. These involve a simple finger-tip blood test and can help the doctor decide whether an antibiotic is really necessary.

Measuring prescribing in dental practice is also being looked at as a way to ensure appropriate use of antibiotics by dentists. Good practice in antibiotic use is being promoted by organisations such as the British Dental

8% of antibiotics in primary care in Northern Ireland are prescribed by dentists.



Association and the Faculty of General Dental Practice and I welcome this wider support from across the dental community.

In 2016 the Chief Pharmaceutical Officer worked with me to produce a Northern Ireland Medicines Optimisation Quality Framework, which makes recommendations to promote safer and more appropriate use of medicines, including antibiotics, for better patient outcomes.

I am greatly encouraged by the steps that doctors, pharmacists and dentists are taking as they can make a beneficial contribution to reducing antibiotic resistance.

A survey conducted by the Northern Ireland Statistics and Research Agency in 2014/15 found the following:

- Two-thirds of respondents (66%) correctly identified that antibiotics are used to treat bacterial infection.
- A small proportion (8%) incorrectly thought that colds and flus should be treated with antibiotics.
- 39% of respondents had taken antibiotics in the past 12 months (during the period the survey covered).
- 55% of respondents understood that you increase your chances of developing drug-resistant bacteria if you take antibiotics when you don't need to.
- 42% knew that you increase your chances of developing drug-resistant bacteria if you do not finish the course of antibiotics.
- 50% knew that diseases such as tuberculosis, pneumonia and meningitis are becoming more difficult to treat, as drug-resistant bacteria do not respond to antibiotics and continue to cause infection.

Patient expectations – play your part

Often GPs face pressure to prescribe antibiotics even when an illness is probably a cold or flu virus and so an antibiotic is ineffective. Although colds and flu can make us feel very unwell, the best treatment is to rest, drink plenty of fluids, eat healthy food and take over-the-counter medicines such as paracetamol to control the symptoms.

Of course, if your symptoms persist longer than expected or if you have a long-term medical condition or immune deficiency then you should seek advice from your GP.

If you are prescribed antibiotics, always follow the instructions and complete the full course of antibiotics. If you stop treatment early, there is a risk the antibiotics won't have killed all the bacteria that made you sick and some of the bacteria might become resistant. By taking the full course prescribed by your doctor, even if you start to feel better earlier, you increase the chances of killing all of the bacteria and reduce the risk of resistance.

It is estimated that by 2050 the annual death toll from antibiotic-resistant infections could be 10 million worldwide.



What can you do to help?

At an individual level the single most important thing each of us can do is maintain good hand hygiene practice. The simple act of washing our hands can help protect us and our families from infections that may require antibiotics.

It's especially important to ensure that you wash your hands after using bathroom or toilet facilities, before preparing or eating food, after coughing or sneezing into your hands, or when your hands are visibly dirty.

It is also important to remember that anti-bacterial gels and wipes are generally not a substitute for washing hands with liquid soap and warm water, as they may not be able to remove bugs and germs in an effective way. However, gels and wipes may be useful as a short-term measure if hand-washing facilities are not readily available.

See illustration opposite or view the full publication by the Public Health Agency, http://www.publichealthagency.org/sites/default/files/HandHygiene_Leaflet_04_17.pdf



Hand hygiene technique

It takes less than a minute!

45 seconds

- 1 Palms
- 2 Backs
- 3 Between fingers
- 4 Knuckle grip
- 5 Thumbs and webs
- 6 Fingertips
- 7 Wrists

By following the steps above, everyone can ensure they have clean hands:

- wet hands with warm water;
- apply enough liquid soap to cover the surface of both hands;
- rub hands together, thoroughly applying the soap to all areas including the backs of the hands and between the fingers;
- rinse hands with warm water;
- dry both hands thoroughly.

Become an Antibiotic Guardian

The Antibiotic Guardian website contains lots of simple information about things like treating your cold and flu symptoms, caring for your children when they are sick and hand-washing.

Becoming an antibiotic guardian is not just for professionals – everyone has their part to play and can pledge their support to the Antibiotic Guardian website today at <http://antibioticguardian.com>



It isn't just for adults either, the website has fun games, quizzes and fact sheets for kids in the junior section so, if you're a teacher or a parent, you can use the online resources to make sure that our budding doctors, pharmacists and scientists of the future are already aware of the importance of using antibiotics responsibly.

THINGS YOU CAN DO

1. Talk to your pharmacist or GP before you request an antibiotic
2. Always follow your GP's instructions about taking medication
3. Become an Antibiotic Guardian

Advice for pet owners and farmers

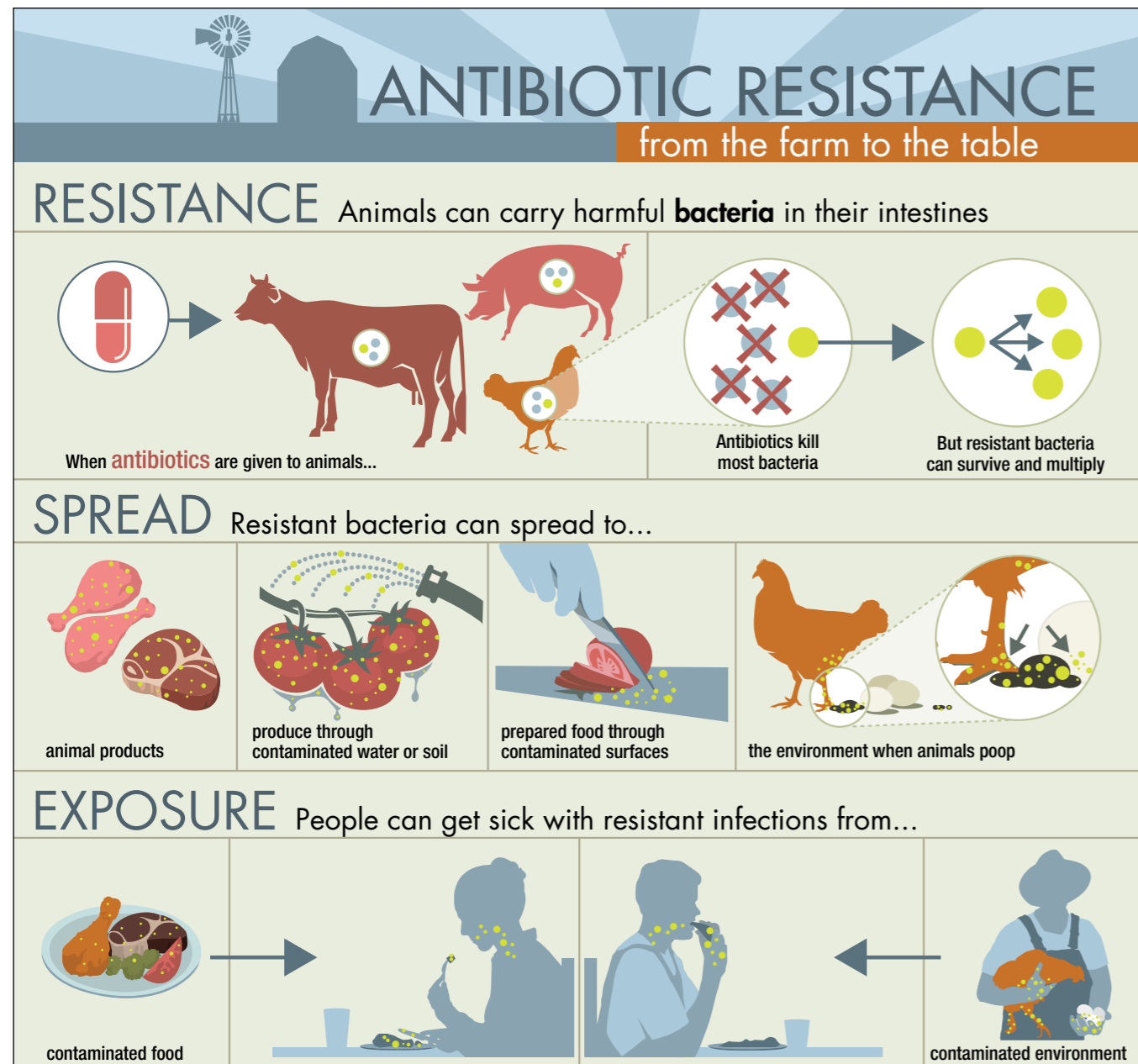
Antibiotics are not just used to treat humans, they are also used in veterinary medicine to treat a wide variety of infections in animals.

There is growing concern that the use of antibiotics in animals and agriculture and the development of antibiotic resistance in bacteria in animals can compromise the effective treatment of human infections. This is because resistant

bacteria may be transferred between humans and animals. This transfer may be through human contact with farm animals, wildlife, pets or their environment, through ingestion of contaminated food or through contact with effluent waste from humans, animals or industry.

As with human medicine, continued availability of antibiotics and the development of new ones for veterinary use are essential to maintain the health and welfare of both pets and food animals.

In order to optimise the therapeutic effects of antibiotics whilst minimising the development of



Centre for Disease Control and Prevention (www.cdc.gov)



antibiotic resistance, the following points should be considered by animal keepers, whether you are a pet owner or a farmer:

- Avoiding the need for antibiotics is the best way to stop resistance development. Ensure animals receive recommended immunisations, ensure good nutrition, hygiene (for you and your animal), animal welfare and good farm management (including good biosecurity such as isolating new animals).
- Ensure that suspected disease is accurately diagnosed – consult your veterinary practitioner early.
- Not every condition needs to be treated with antibiotics, so don't expect antibiotics from your vet as they may not be needed.
- Follow the advice given by your vet and use any antibiotics prescribed at the right dose for the correct duration. Complete the full course even if the animal gets better after a few doses.

- For farm animals that will be used for food, ensure the appropriate withdrawal period for the antibiotic is followed prior to the sale of milk or eggs for human consumption and before slaughter.

The golden rule for responsible antibiotic use in animals is: 'As little as possible but as much as necessary'.

For further advice contact your veterinary practitioner.

THINGS YOU CAN DO

1. Practise good hygiene and animal husbandry
2. Consult your vet if you suspect disease
3. Not every disease needs to be treated with antibiotics

Tackling antibiotic resistance in our community and hospitals

The Public Health Agency (PHA) is leading the charge in trying to address the issue of infections acquired in hospital and the need for better antimicrobial stewardship. By antimicrobial stewardship we mean efforts to educate and persuade those who prescribe medicines not to overuse antibiotics.

My colleagues in the PHA know that this focus on quality and safety will help to reduce numbers of hospital-acquired infections and antimicrobial resistance.

A number of new areas of work will be taken forward including a specific piece of work on managing urinary tract infections in residential care homes and in general practice.

The PHA also recognises the importance of antimicrobial stewardship in GP practice and has been working with colleagues in the Health and Social Care Board to provide additional support to GPs to encourage appropriate prescribing.

In addition the PHA has produced a Northern Ireland Infection Control Manual which promotes best infection prevention practice. The manual is available at <https://www.niinfectioncontrolmanual.net/>

During 2017 the PHA is coordinating a study of hospital-acquired infections and antibiotic use in all Northern Ireland acute hospitals. This will give us a snapshot of how many infections there are and how antibiotics are being used in Northern Ireland hospitals.

Globally there are an estimated 700,000 deaths each year from antibiotic-resistant infections.



Seeing the big picture

To meet the challenges of antibiotic resistance and healthcare-associated infections in Northern Ireland, we need detailed and accurate information about the nature of the problem so we need to ask questions such as:

- What bacteria are causing infections?
- What antibiotics are these bacteria resistant to?
- Are these resistant infections more common in different areas of Northern Ireland, or in different groups of people?
- Which parts of the health and social care system are prescribing more antibiotics than others?
- Is the situation getting better or worse?

During 2017, we will be collecting and analysing data, interpreting the information and sharing knowledge with healthcare professionals and the public. We hope to be able to take action to reduce inappropriate prescribing, reduce infections and find out where our interventions have made a difference.

Food and antibiotics

When handling food, the Food Standards Agency has the following advice:

- Remember the 4Cs when handling food – Clean well, Cook thoroughly, Chill correctly and avoid Cross-contamination.
- Handle and cook your meat - such as poultry, pork, minced beef and lamb - so that the meat is steaming hot throughout, there is no pinkness and any juices run clear.
- Thoroughly wash and/or peel fruits and vegetables if you are eating them raw.

Further information is available online at <https://www.food.gov.uk/news-updates/campaigns/amr>



Make your home safer for children

SECTION 3 Improving Safety

Children under five, particularly those aged 16-36 months, are at most risk from blind cord/chain strangulation. In Northern Ireland there have been three confirmed deaths from blind cord strangulation in the last three years. Approximately 82% of homes here have looped blind cords so further deaths and injuries are sadly possible.

Much good work has been done over recent years to raise awareness of the dangers posed by blind cords/chains, none more so than the launch in November 2016 of a blind cord awareness video. The video aims to highlight the dangers of looped blind cords and look at ways in which blind cord injuries and deaths can be reduced. The video is available online at <https://www.nidirect.gov.uk/articles/blind-cord-safety> and translated versions are available in the top 10 most spoken languages in Northern Ireland.

Having met with some of those bereaved, I would urge all those who have children living in

or visiting their homes to watch the video and take all necessary precautions to reduce these preventable deaths and injuries.

What you can do to make your home safe:

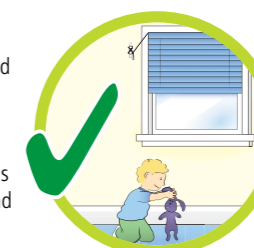
- examine every blind. If they have a looped control chain or cord and do not have a safety device fitted, then you can easily install one of the many devices available;
- ensure that all operating blind cords and chains cannot be reached by children;
- move cots, beds and any furniture away from windows and blinds – remember children love to climb;
- when buying a new blind, always look for one that does not contain cords, has concealed cords or has an in-built safety device and complies with the new European Standards.

Chain-break connector

These will break apart when undue pressure is applied on the operating chain but, after inspection, can be reconnected again. Chain sizes vary so you **must** use the chain-break connector which is designed to be used with your specific chain.



Make sure all cords and chains are always secured out of reach of babies and young children. Do not tie cords or chains together. Make sure cords or chains do not twist and create a loop.



Cord/Chain tidys & tensioners

These devices should be securely fixed to an adjacent surface and at the maximum distance from the top of the blind so the cords and/or chains are held permanently taut by the device.



Move beds, cots, highchairs and playpens away from window covering cords and chains.



Cleat

This should be securely fixed to an adjacent surface out of the reach of children and at least 1.5 metres from the floor. The cords must be secured in a figure of eight after each and every operation of the blind. Ensure all spare cord is securely contained on the cleat.



Move furniture away from window covering cords and chains as children love to climb.



THINGS YOU CAN DO

1. Install safety devices on looped blind cords
2. Make sure children can't reach or climb up to blinds
3. Ensure new blinds comply with the European Standard

Dangers of misusing prescription drugs

What is meant when we say 'Prescription Drug Misuse'?

When we use the term 'Prescription Drug Misuse', we are actually referring to the non-medical use of prescription and over-the-counter drugs, as well as substances that have been purchased illegally over the internet, but it mainly refers to taking a medicine or drug that has not been prescribed for you by a healthcare professional.

In Northern Ireland we have a much higher rate of misuse of prescription drugs than across the rest of the UK and Ireland. There are many reasons for this, but it does mean that we have a significant number of people who come to harm unnecessarily.

Prescription medicines are highly regulated for good reason and should only be taken as advised by a health professional. Many prescription medicines have the potential to be misused and that is why some are also classified under

If an online supplier conceals its physical address, this is a warning sign that their products could be **DANGEROUS**

the Misuse of Drugs Act – for example, following increasing concerns about its potential for misuse and resultant health harms, Tramadol, a strong painkiller, was re-classified as a Class C drug under the Misuse of Drugs Act in 2013.

What can we do?

Never share your prescription medicines with others and *never* take prescription medicines that haven't been prescribed for you - it comes with real, potentially fatal, risks.

In particular, it is vital that we are all aware of the increased risks from combining medicines prescribed for us with the consumption of alcohol or other drugs which have not been prescribed for us.. Using more than one substance at a time (known as polydrug misuse) is of concern as there is often no way of knowing how the drugs will interact with each other and the impacts – this includes using illicit substances along with legitimate prescription medicines. Mixing drugs can be fatal.

The WHO estimates that **50%** of medicines available from unregulated websites are **COUNTERFEIT**



More information can be found at: <http://www.hscboard.hscni.net/safemedsn/>

Buying online

If buying medicines online, check that the website is legitimate by clicking on the registered EU common logo which will lead to a list of approved sellers.



THINGS YOU CAN DO

1. Never share your medicines
2. Never take someone else's prescription medicines
3. Never buy medicines online through unregulated websites

Inspecting our hospitals

Unannounced inspections are an important part of ensuring the safety of our acute hospitals.

During 2016 the Regulation Quality Improvement Authority (RQIA) continued the first phase of its rolling programme of unannounced inspection of Acute Hospitals, visiting Antrim Area, Royal Victoria, Ulster, Craigavon and Altnagelvin hospitals.

RQIA ask three questions:

1. Is care safe?
2. Is care effective?
3. Is care compassionate?

The quality of leadership and management across the areas inspected is also examined. In each of the hospitals visited in 2016, emergency care, medical care (including older people's care) and surgical care were assessed. The main findings show that although there remain challenges, the systems we have in place continue to support safe, effective and compassionate health and social care service provision. This is echoed in the patient and relative feedback, with patients reporting they were happy with their care. Relatives agreed that care was good.

Infection prevention policies were found to be generally well delivered, including hand hygiene, use of personal protective equipment (PPE) and aseptic non-touch technique (ANTT). In addition, ward-based systems are in place to treat patients who have developed, or are at increased risk of developing, blood clots (thrombo emboli), blood stream infections (sepsis) or areas of broken skin (pressure ulcers).

Issues raised through the inspections include the challenges of ensuring appropriate nurse staffing levels and the impact of this on staff morale and service delivery; the need to strengthen communication systems to underpin strong multi-disciplinary team working; and the need for adherence to protected mealtimes with oversight by senior nursing staff to ensure good record keeping of patients' food and fluid intake.

The inspections have continued into 2017. All findings are shared with the Department of Health and HSC Trusts for consideration and action. Inspection reports can be found on the RQIA website using the following link: <https://www.rqia.org.uk/>



KEY STATISTICS

