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What is the purpose of this toolkit?

The aim of this toolkit: to provide Public Health England centres and voluntary organisations with a compilation of resources to improve public engagement on antimicrobial resistance (AMR).

The toolkit contains: key messages on AMR, frequently asked questions (FAQs), resources and examples of AMR related public engagement activities.

Resources include: posters, leaflets, quizzes and worksheets. Either written information or images are displayed on each of the slides, with a link to the website provided in the "**resources**" box on each of the slides. You can click on each of the links to access the resource.

How you could use sections of the resource (depending on the audience) within your organisation:

- Exhibit resources at public events
- Distribute to members of the public and organisations via e-mail, bulletins, newsletters
- Promote resources and key messages via social media i.e. on Facebook and Twitter
- Send resources to relevant groups i.e. e-Bug resources to young people's organisations and children's centres
- Distribute to GP Patient Participation Groups
- Display posters and leaflets in public libraries



Key messages on AMR



What is antibiotic resistance?



- Antimicrobial resistance happens when microorganisms (such as bacteria, fungi, viruses, and parasites) change when they are exposed to antimicrobial drugs (such as antibiotics, antifungals, antivirals, antimalarials, and anthelmintics). Microorganisms that develop antimicrobial resistance are sometimes referred to as "superbugs".
- Antibiotic resistance refers specifically to the resistance to antibiotics that occurs in common bacteria that cause infections

Resource: click below to access the resource

<u>Health Matters: antimicrobial resistance</u> <u>WHO: Antimicrobial Resistance</u> What is antibiotic resistance, and why should we care?

What do we need to know?

- Antibiotics are essential medicines for treating bacterial infections in both humans and animals.
- Antibiotics are losing their effectiveness at an increasing rate.
- Bacteria can adapt and find ways to survive the effects of an antibiotic. They become 'antibiotic resistant' so that the antibiotic no longer works. The more you use an antibiotic, the more bacteria become resistant to it.
- Antibiotics should be taken as prescribed, never saved for later or shared with others; it is
 important we use antibiotics in the right way, the right drug, at the right dose, at the right time for
 the right duration. Appropriate use of antibiotics will slow down the development of antibiotic
 resistance.
- There are very few new antibiotics in the development pipeline, which is why it is important we use our existing antibiotics wisely and make sure these life-saving medicines continue to stay effective for ourselves our children and grandchildren.
- Many antibiotics are prescribed and used for mild infections when they don't need to be. All colds and most coughs, sinusitis, otitis media (earache) and sore throats get better without antibiotics.
- Community pharmacists are well placed to help provide advice on over the counter medicines to treat symptoms and help with self-care.

Resource: click below to access the resource

Antibiotic Awareness Key Messages NHS Choices- Antibiotics

Impact of AMR nationally and locally







people die each year

as a result of hospital infections caused by





Resource: click below to access the resource

Health Matters: Antimicrobial Resistance

There are a number of reasons why antibiotic resistance occurs

CAUSES OF ANTIBIOTIC RESISTANCE







Patients not finishing their treatment



Over-use of antibiotics in livestock and fish farming



Poor infection control in hospitals and clinics



Lack of hygiene and poor sanitation



Lack of new antibiotics being developed



www.who.int/drugresistance

Resource: click below to access the resource

World Health Organisation: Causes of Antimicrobial Resistance

Read the blog to find out more about why you should be worried about antibiotic resistance

🏟 GOV.UK

Blog Public health matters

Organisations: Public Health England

10 reasons YOU should be worried about antibiotic resistance

Diane Ashiru-Oredope, 18 November 2014 — Antimicrobial resistance, Health Protection, Uncategorized

Antibiotics are essential for treating many infections but they're losing their effectiveness. Bacteria are fighting back by adapting and finding ways of surviving the effects of our medicines.

Categories

this blog.

1

Public health matters

The official blog of Public Health

the organisation's work and all

England, providing expert insight on

aspects of public health. More about

Public Health England

Q

5. Cancer chemotherapy and effective antibiotics go hand in hand Chemotherapy is an important weapon in the fight against cancer, but did you know the procedure destroys our white blood cells, which we need to fight off infection? Without antibiotics chemotherapy will become increasingly dangerous.



9. We have to save our surgery

None of us want to think about getting ill or having a serious operation but we all understand that surgery can save lives. But complex surgery brings with it the risk of infection. Take heart bypass operations or joint replacements for instance – if we don't have antibiotics these procedures designed to help people and ease suffering could actually lead to many more deaths caused by bacterial infections.



Resource: click below to access the resource

- 10 reasons why you should care about antibiotic resistance
- 7 more reasons why you should care about antibiotic resistance

Why do we need to educate different groups on AMR?

Women	 Women are 27% more likely than men to receive an antibiotic in their lifetime The amount of antibiotics prescribed to women was 36% higher than prescribed for men in the 16 to 34 years ago group and 40% greater in the 35 to 54 years age group Women consult their general practitioners more frequently than men Urinary tract infections (UTIs) are more common in women than in men
Parents and Children	A significant number of prescriptions for antibiotics are obtained by parents for their children In 2008, it was noted that in the UK, there are around 6 million antibiotic prescriptions for children each year
The elderly	A higher use of antibiotics in the elderly population has been documented

Cancer patients	 Cancer treatments increase the risk of getting an infection, so antibiotics are an essential part of treating cancer patients. Many cancer patients need antibiotics during all stages of their treatment (surgery, radiotherapy, chemotherapy)
People with cystic fibrosis	People with cystic fibrosis are more likely to get chest infections, which can result in complications and even death. For this reason, antibiotics are an essential part of looking after cystic fibrosis patients
People with diabetes	Diabetes can increase the risk of infection, so antibiotics are an essential part of caring for diabetes patients
People with urinary tract infections (UTIs)	 Urinary tract infections can cause serious problems, so antibiotics are an essential part of treatment If left untreated, UTIs can lead to complications such as blood poisoning and kidney failure More and more bacteria that cause UTIs are resistant to the most commonly used "first-line" antibiotics. Infection by resistant bacteria can result in serious illness, leading to longer hospital stays and more complex treatments with more harmful side-effects

Black and Minority Ethnic communities	 History of travel (particularly to the Indian subcontinent) is correlated with a higher risk of colonisation with antibiotic-resistant bacteria There is some evidence that ethnic variation in diet could influence the risk of developing an antimicrobial-resistant infection
Young people	Research has shown that a significant number of 15-24yr olds take antibiotics that are obtained without prescription (given to them by other people, previously unfinished courses, purchased abroad etc.)
Pet owners	Antibiotics are vital to treat disease in animals as well as humans. Pets can also fall victim to antibiotic-resistant superbugs like MRSA, and for the same reasons (i.e. misuse and overuse of antibiotics)



Resources



For further information on national and global efforts to tackle AMR, have a read of one of the reports below



Resource: click below to access the resource

UK 5 Year Antimicrobial Resistance Strategy 2013-18

The Review on Antimicrobial Resistance



Infection prevention and control



Did you know that you could prevent infections by taking some very simple steps?



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Public / Patients

Links to Patient Groups

Your Role in Infection Prevention Your Role in Infection Prevention

Infection Prevention, Patients and Public Role

Infection prevention and control is commonly described as everyone's responsibility. IPS members work across health and social care to make sure the right practices take place at the right time to keep patients, visitors and staff safe. As a patient or member of the public it's important to make sure you're aware of information that is available to you, in for example your local hospital, on the role you can play in infection prevention and control.

This information might cover the following important topics (note this list is not exhaustive):

Hand Hygiene

Hand hygiene at the right times is essential for safety - find out more about hand hygiene and the role you can play.

Visiting Hospital

Hospitals provide advice to the public on visiting during outbreaks and/or when you yourself may be suffering from certain infections - check your local hospital advice before visiting relatives or loved ones if you are at all unsure.

Admission to Hospital

Before going into hospital you may be provided with advice and information on infection control; you can ask your

Resource: click below to access the resource

Your Role in Infection Prevention

Washing hands helps to fight superbugs

NICE highlights how hand washing can save lives

Stay Well All Year Round



Preventing flu

There are three main ways of preventing flu: the flu vaccination, good hygiene (such as handwashing and cleaning) and antiviral medication.

The flu vaccine

The annual flu vaccine can help reduce your risk of getting flu each year, although it's not 100% effective because it doesn't work against every possible type of flu virus.

Good hygiene

To reduce your risk of getting flu or spreading it to other people, you should always:

- · make sure you wash your hands regularly with soap and warm water
- clean surfaces such as your keyboard, telephone and door handles regularly to get rid of germs
- · use tissues to cover your mouth and nose when you cough or sneeze
- put used tissues in a bin as soon as possible

Read more about preventing the spread of germs.

10 winter illnesses



Some health problems, such as asthma, sore throat and cold sores, are triggered or worsened by cold weather. Here's how to help your body deal with cold weather ailments.

Colds

You can help prevent <u>colds</u> by washing your hands regularly. This destroys bugs that you may have picked up from touching surfaces used by other people, such as light switches and door handles.

Read this guide to how to wash your hands properly

Resource: click below to access the resource

<u>Flu Prevention</u> 10 Winter Illnesses

Learn how to protect yourself from gastroenteritis

NHS choices Your health, your choices					
Health A-Z	Live Well	Care and support	Health nev		
Diarrhoea and vomiting (gastroenteritis)					
Overview Clinica	l trials				
Gastroenteritis					
Contra antonitia in a		endition that course disvulses			
and vomiting. It's u	sually caused by	a bacterial or viral tummy bug	Use		
It affects people of al	l ages, but is part	icularly common in young childre	n. NHS		
Most cases in children are caused by a virus called rotavirus. Cases in					
adults are usually caused by <u>norovirus</u> (the "winter vomiting bug") or Def bacterial food poisoning.					
Gastroenteritis can b	e very unpleasan	t, but it usually clears up by itself	Noro		
within a week. You can normally look after yourself or your child at home					
unui you're reeling be	aller.		Food		

Symptoms of gastroenteritis

The main symptoms of gastroenteritis are:

- sudden, watery <u>diarrhoea</u>
- feeling sick
- · vomiting, which can be projectile
- · a mild fever

What to do if you have gastroenteritis

If you experience sudden diarrhoea and vomiting, the best thing to do is stay at home until you're feeling better. There's not always a specific treatment, so you have to let the illness run its course.

You don't usually need to get medical advice, unless your symptoms don't improve or there's a risk of a more serious problem (see <u>When to get</u> <u>medical advice</u>).

To help ease your symptoms:

- Drink plenty of fluids to avoid <u>dehydration</u>—You need to drink more than usual to replace the fluids lost from vomiting and diarrhoea. Water is best, but you could also try fruit juice and soup.
- · Take paracetamol for any fever or aches and pains.
- · Get plenty of rest.
- If you feel like eating, try small amounts of plain foods, such as soup, rice, pasta and bread.
- Use special rehydration drinks made from sachets bought from pharmacies if you have signs of dehydration, such as a <u>dry mouth</u> or dark urine read about <u>treating dehydration</u>.
- Take anti-vomiting medication (such as metoclopramide) and/or antidiarrhoeal medication (such as loperamide) if you need to – some types are available from pharmacies, but check the leaflet that

Resource: click below to access the resource

Diarrhoea and vomiting (gastroenteritis)

The importance of vaccinations

Health A-Z Care and support 10 myths about flu and the flu vaccine

NAS choices Your health, your choices

Live Well





Who should have the flu jab?

Flu is an unpredictable virus that can cause mild or unpleasant illness in most people. It can cause severe illness and even death among vulnerable groups including older people, pregnant



women and people with an underlying health condition.

Certain people are more likely to develop potentially serious complications of flu, such as bronchitis and pneumonia. These people are advised to have a flu jab each year.

For otherwise healthy people, flu can be very unpleasant. Most people will recover from flu within a week or two

Resource: click below to access the resource

Who should have the flu jab?

10 myths about flu and the flu vaccine

Health matters: giving every child the best start in life

Find out more about how you can prevent Urinary Tract Infections (UTIs)

Dehydration - Prevention

Overview	Clinical trials		
Introduction	Symptoms	Causes	Treatment

Preventing dehydration

You should drink plenty of fluids to avoid becoming dehydrated.

Most of the time, you can prevent dehydration by drinking water regularly throughout the day. Be guided by your thirst, but be aware that in hot weather, when exercising and during illness, you should drink more.

Mild dehydration can be relieved by drinking more water and diluted fruit squash. If necessary, you can purchase oral rehydration solutions (ORS) from a pharmacy. As a guide, passing pale or clear-coloured urine (wee) is a good sign that you're well hydrated.

Urinary tract infections in adults

Prevention

Overview Clinical trials

Urinary tract infections in adults

Urinary tract infections (UTIs) are common infections that can affect the bladder, the kidneys and the tubes connected to them.

Anyone can get them, but they're particularly common in women. Some women experience them regularly (called recurrent UTIs).

UTIs can be painful and uncomfortable, but usually pass within a few days and can be easily treated with <u>antibiotics</u>.

This page is about UTIs in adults. There is a separate article about $\underbrace{\text{UTIs in }}{\text{children}}.$

Preventing UTIs

If you get UTIs frequently, there are some things you can try that may stop it coming back. However, it's not clear how effective most of these measures are.

These measures include:

- avoiding perfumed bubble bath, soap or talcum powder around your genitals – use plain, unperfumed varieties, and have a shower rather than a bath
- going to the toilet as soon as you need to pee and always emptying your bladder fully
- · staying well hydrated
- wiping your bottom from front to back when you go to the toilet
- · emptying your bladder as soon as possible after having sex
- not using a contraceptive diaphragm or condoms with spermicidal lubricant on them – you may wish to use another method of contraception instead
- wearing underwear made from cotton, rather than synthetic material such as nylon, and avoiding tight jeans and trousers

Resource: click below to access the resource

Urinary tract infections in adults

Dehydration prevention

Did you know that an infection can be prevented simply by breaking up one of the links?



Breaking the Chain of Infection

Getting smarter about hygiene



however, we must first understand the basics about how infections are spread. The aim of this simple resource is to help you to visualise how infections are spread and how hygiene helps to break the chain of infection.



Resource: click below to access the resource

Breaking the Chain of Infection: Preventing Spread of Infection in Home and Everyday Life

Beating E.coli- what are you doing to break the chain of infection?

Antimicrobial Resistance: Resource Handbook

Preventing infections with food hygiene

How to prepare and cook food safely



Studies show that the kitchen contains the most germs in the home. One study found that the kitchen sink contains 100,000 times more germs than the bathroom.



Washing hands

Our hands are one of the main ways that germs are spread, so it's important to wash them thoroughly with soap and warm water before cooking, after touching the bin, going to the toilet, and before and after touching raw food.

Resource: click below to access the resource

How to prepare and cook food safely 10 ways to prevent food poisoning



Leaflets and posters

There are a number of leaflets available for healthcare professionals to share with patients in order to improve their confidence to self care





Home >> Clinical >> Toolkits >> TARGET Antibiotics Toolkit

TARGET Antibiotics Toolkit

The table below is an excerpt of the TARGET Antibiotic Toolkit "Guide to treat your infection" and shows you how long these common illnesses normally last, what you can do to ease your symptoms and when you should go back to your GP or contact NHS 3 Direct

Your infection	Usually lasts	How to treat yourself better for these infections, now and next time	When should you get help: Contact your GP practice or contact NHS 111 (England), NHS 24 (Scotland dial 111), or NHS Direct (Wales dial 0845 4647)		
Middle-ear infection	4 days	Have plenty of rest. Drink enough fluids to queid facting	1. to 8. are possible signs of serious illness and should be assessed urgently. Phone for advice if you are not sure how urgent the symptoms are.		
Sore throat	7 days	Onlink enough indias to avoid reening thirsty. Ask your local pharmacist to	 If you develop a severe headache and are sick. If your skin is very cold or has a strange colour, or you develop an unusual rash. 		
Common cold	10 days	recommend medicines to help your symptoms or pain (or both).	 If you feel confused or have slurred speech or are very drowsy. If you frave difficulty breathing. Signs can include: 		
Sinusitis	18 days	 Fever is a sign the body is fighting the infection and usually gets better by 	 o breatning quickly turning blue around the lips and the skin below the mouth skin between or above the ribs getting sucked or pulled in with every breath. 		
Cough or bronchitis	21 days	itself in most cases. You can use paracetamol (or ibuprofen) if you or	itself in most cases. You can use paracetamol (or ibuprofen) if you or 6. If you develop chest pain. 6. If you have difficulty swallowing or are drooling.	 If you develop chest pain. If you have difficulty swallowing or are drooling. 	
Other infection:		of a fever. • Other things you can do suggested by	 If you cough up blood. If you are feeling a lot worse 		
	days	GP or nurse.	Less serious signs that can usually wait until the next available GP appointment		
			 If you are not improving by the time given in the 'Usually lasts' column. In children with middle-ear infection: if fluid is coming out of their ears or if they 		
			nave new deatness. 11.Other		

These could be shared to improve people's knowledge and understanding of the duration of symptoms, as well when to visit the GP

Available in:

Albanian, Arabic, Bengali, Cantonese, French, Greek, Gujarati, Hindi, Hungarian, Mandarin, Polish, Romanian, Somali, Spanish, Turkish, Urdu, Welsh

Resource: click below to access the resource TARGET: Leaflets to Share with Patients



Resource: click below to access the resource e-Bug: Managing Your Infection

Why not spread the word by displaying these posters and sending them to your networks?



The best way to treat most colds, coughs or sore throats is plenty of fluids and rest. For more advice talk to your pharmacist or doctor.

Resource: click below to access the resource

Get Well Soon Without Antibiotics

No Amount of Antibiotics

Available in:

Arabic, Bengali, Simplified Chinese, Hindi, Polish, Portuguese, Punjabi, Slovak, Somali, Urdu















Antibiotic Guardian campaign

Have you signed up to become an Antibiotic Guardian?

CURRENT PLEDGES: 32412





CHOOSE YOUR PLEDGE

RESOURCES

Antibiotic resistance is one of the biggest threats facing us today.

NEW

Why it is relevant to you: without effective antibiotics many routine treatments will become increasingly dangerous. Setting broken bones, basic operations, even chemotherapy and animal health all rely on access to antibiotics that work.

What we want you to do: To slow resistance we need to cut the unnecessary use of antibiotics. We invite the public, students and educators, farmers, the veterinary and medical communities and professional organisations, to become Antibiotic Guardians.

Call to action: Choose one simple pledge about how you'll make better use of antibiotics and help save these vital medicines from becoming obsolete.

Antibiotic Guardian supports the UK Antimicrobial Resistance strategy, European Antibiotic Awareness Day (18 November) and World Antibiotic Awareness Week (16-22 November)

How many people can you sign up to become an Antibiotic Guardian?

The campaign calls on everyone in the UK to become Antibiotic Guardians by simply choosing a pledge. Evaluation of the campaign has shown that it is effective for changing behaviour and increasing knowledge (self reported)



Resource: click below to access the resource

Antibiotic Guardian



Once you have printed out your Antibiotic Guardian certificate after signing up, you can print it and display it in a place of your choice You can also display posters at your workplace or in the community to promote the campaign



Resource: click below to access the resource Antibiotic Awareness Resources: Posters and Leaflets

You can test your antibiotics knowledge by completing a crossword or a quiz





Resource: click below to access the resource Antibiotic Awareness Resources: Quizzes and Crosswords

Resources for University Healthcare Students



Healthcare Students - Antibiotic Guardian Champion Badge

Become an Antibiotic Guardian Champion



As part of UK's activities for World Antibiotic Awareness Week (WAAW) (14 – 20 November 2016) and European Antibiotic Awareness Day (18 November) we are inviting healthcare students and pre-registration professionals to become Antibiotic Guardian Champions. Earn your badge by completing the tasks via Open Badge Academy and sharing your evidence. You can add your badge to your LinkedIn account.

We also encourage you to share actively via social media using #AntibioticGuardian

University healthcare and pre-registration students can now earn virtual badges to add to their LinkedIn accounts

Resource: click below to access the resource

Healthcare Students: Antibiotic Guardian badge









The e-Bug website contains a number of games and activities that children can complete to improve their knowledge on antibiotics and preventing infections. e-Bug also has resources for teachers to use in classrooms



Resource: click below to access the resource <u>e-Bug</u> <u>e-Bug lesson packs</u>

Junior pre and post questionnaires: to give to children before and after teaching them about AMR using the lesson packs

Questionnaire 1 Student Nam		nt Name: First name Surname			Class		
Tick whether y	ou think each statem	nent is true, false or o	lon't know	True	False	Don't Know	
	All microbes are b	All microbes are bad/harmful					
Microbe	Bacteria and Viruses are the same thing						
Mania	Bread Mould is a	Bread Mould is a type of microbe					
	All microbes are the	he same size					
	Microbes only live	in dirty places					
►							
	Washing hands w	ith soap and water re	emoves more microbes than water alone				
Horrid Hands	Washing hands ca	an prevent the spread	d of disease				
	Microbes can spre	ead onto your hand b	y just touching something				
Bug	Washing your har	ids in cold water is ju	ist as good as washing in warm water				
ed under	A !!	in minute a		1	1	r	
Health	All sneezes contain microbes						
Super	Microbes in a sneeze can travel the length of a bus						
Sneezes	Catching a sneeze with a tissue will stop the spread of microbes						
	There is no need to wash your hands after sneezing into them because						
	microbes don't live	e very long outside o	T the body	L	1	L	
	There can be harm		/ food	[
	Meat is the only raw food to carry harmful microbes						
of Dean Maybern	Cooking food quickly is the best way to destroy harmful microbes						
	You only need to clean kitchen surfaces when they look dirty						
	Meat and vegetab	Meat and vegetables should be cut on different chopping boards					
	Antibiotics:		kill bacteria				
	Anabiores.		kill viruses				
	The flu is caused by bacteria						
Antibiotics	Most coughs and	Most coughs and colds get better without antibiotics					
	Bacteria are beco	Jacteria are becoming resistant to antibiotics					
	You should keep a	'ou should keep any leftover antibiotics to treat infections in the future			ļ	L	
	Antibiotics also kil	our good bacteria					

School.....

Senior pre and post questionnaires: to give to older children before and after teaching them about AMR using the lesson packs

Antibiotics	Kitchen Mayhem	Super Sneezes	Horrid Hands	Microbe Mania	:e:-Bug
Antibiotics kill: Bacteria Viruses Fungi All of the above To treat coughs and colds we should: Rest and take fluids Take antibiotics Have the flu vaccination Go to the hospital	Hamful microbes can be found on: Raw meat Raw fish Fruit and vegetables All of the above The best way to destroy harmful microbes o food is to: Cook food thoroughly Cook food as quickly as possible To make sure food is cooked on the outside To make sure food is warm before we eat it	Sneezes contain: Harmful microbes Useful microbes All of the above Only as far as our hands To the person next to us The length of a football field	The best way to remove microbes is to: Wash hands with warm water Wash hands with warm running water Ut doesn't matter which We pick up microbes on our hands from: Objects that we touch Surfaces that we touch Surfaces that we touch All of the above	The smallest microbe is a: Bacteria Virus Virus Fungi They are all the same size Microbes: Are all badhamful Are all useful Can be useful or hamful Have no effect on the human body Have no size	Questionnaire 1 Student name: First name
Bacterial resistance is caused by: Hospitals Hospitals The overuse of antibiotics Alternative medicines Vaccinations When taking antibiotics you should: Stop when you feel better Save some for the next time you are ill Take the full course Take the full course Share them with your friends	Meat and vegetables should be: Stored on the same shelf in the fridge Cut on different chopping boards Cut with the same knife Stored in a warm cupboard on Yeast is used to make bread. Yeast is a: Vinus Fungi None of the above	The best way to stop microbes spreading is: To use your hand to cover your sneeze To use a tissue to cover your sneeze To take antibidics To for the plenty of fluids After we sneeze into our hands, we should: Wash our hands Dry our hands on our clothes Take antibiotics None of the above is necessary	You need to wash your hands: To get rid of good microbes To get rid of good microbes After a bath Before asking a question in class None of the above None of the above None of the above Microbes are found: In the air On our hands On the floor Everywhere Everywhere	Most microbes can be seen: Only with a microscope With the naked eye With the naked eye With a magnifying glass Never, they are invisible Flu is caused by: A bacteria A vinus A fungi None of the above None of the above	Iease tick ONE answer for each question

Junior and Family Antibiotic Guardian



Junior and Family Antibiotic Guardian have been developed by PHE in collaboration with Makewaves, for children, young adults and their families/carers to complete tasks and earn badges.

Resource: click below to access the resource

Junior and Family Antibiotic Guardian



Resources for animal keepers



The Bella Moss Foundation



Educating, supporting, pet carers and vets on the treatment of resistant bacteria

The Bella Moss Foundation provides an advice helpline for owners and clinicians, as well as educational resources for the public, including quizzes, hygiene tips and a new #BeatTheBugs video for families.



These guys might look cute but antibiotic resistance is very real and very deadly.

Together we can #BeatTheBugs

Resource: click below to access the resource

Bella Moss Foundation The Bella Moss Foundation- Survey for pet owners on antibiotic use

Leaflets on antibiotic use in animals

Make sure your antibiotics are working for you

To ensure the best possible outcome for your pet, it is really important that antibiotics are given correctly. Follow the simple tips below to make sure your pet's antibiotics work effectively and help your pet to make a swift and full recovery:



Give the correct amount As directed by your vet.



Give at the correct time If medication is to be given twice daily, give it at as close to 12 hourly intervals as you can, not at breakdast and tea time. Similarly, for three times daily, give at 8 hourly intervals



Give for the correct length of time Even if your pet seems to be better, don't stop before the end of the prescribed course.





scheduled recheck appointments Your vet may wish to prescribe a longer cou If the infection has not fully cleared.

Used incorrectly, antibiotics may contribute to the spread of antibiotic resistance.

For more information about antibiotic resistance ao to www.itsinfectious.co.uk and for support with pet health visit www.thebellamossfoundation.com



Vétoquinol Bella Moss (Digne de filman Foundation

Hand washing guidelines

It's very important that you wash your hands Washing your hands protects you, your family and pets from unwanted bugs.

Wet your hands

2. Put on the soap - into your cupped hands if it's a liquid

3. Clean them for 15 to 20 seconds

- · Palm to palm
- · Back of hands
- . Between the fingers
- · Finger tips
- . Thumbs and wrists
- · Nails

www.pdsa.org.uk Registered charity not

208217 & 50037585

- 4. Rinse your hands thoroughly using running water
- 5. Dry using a clean towel or disposable paper one-





Resource: click below to access the resource Bella Moss Foundation: Posters and Surveys for Your Practice

Guidance for farmers on antibiotic use in farm animals



Resource: click below to access the resource British Veterinary Association:

Antimicrobials



BVA client leaflet Number 4 • November 2013

Antibiotics-what are they and why are they important

Antibiotics are drugs used to treat, and in some cases prevent, bacterial infections.

Antibiotics are vital to treat and prevent disease in animals and humans, but the risk that the organism causing the disease will develop resistance to them increases every time they are used.

Antibiotics always need a veterinary prescription

To make sure antibiotics stay effective now and in the future, they must be strictly controlled. Only veterinary surgeons and human doctors are legally allowed to prescribe antibiotics, following an examination and clinical diagnosis.

Wherever possible, your vet will do a sensitivity test to determine which antibiotic will be most successful in treating a particular condition.

Prevention is better than cure-your role as a farmer

As a farmer you can reduce animal disease and the need to use antibiotics to a large extent by good animal husbandry and management and by drawing up an effective health plan with your vet.

A health plan should outline how you will keep animals healthy and provide effective bio-security. Your vet should conduct frequent herd health visits to your farm.

Antibiotics should never replace good husbandry, biosecurity and management practices. Prevention is essential for all animals, including companion animals and horses.

Measures taken should always be science- and risk-based

Your vet should put in measures to ensure responsible use of antibiotics are based on scientific evidence and a thorough assessment of the risks they pose. With their knowledge and experience, vets play a pivotal role in developing better solutions to manage antibiotics.

New and critically important antibiotics must be strictly controlled

Vets and farmers have to prevent development of resistance to antibiotics classed as "critically important" or to new antibiotics for as long as possible. Your vet should only prescribe these as a very last resort, following a sensitivity test, and should administer them themselves.

Key points

- Farmers and vets have a responsibility to use antibiotics responsibly—over-the-counter and illegal sales should be prohibited.
- Animal health and human health = One Health. Animal and people's health are closely intertwined and it is important that farmers and vets work together for the common good.

 Speak to your vet today about drawing up a health plan and for any questions you have about antibiotics.

About the BVA

The BVA is the national representative body for the UK veterinary profession. We support our members to fulfil their roles for the benefit of animals and the public.

This is one of a series of leaflets for animal owners produced by the BVA, you can find more at www.bva.co.uk/public

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Public engagement activities

Examples of public engagement activities to promote AMR

news centre

Home Business and Economy Community Education Environment Health and Wellb

llfracombe Mums tums campaign targets overuse of antibiotics

Posted on: 15 September 2014

An innovative new campaign has been launched in Ilfracombe which aims to help increase confidence in mums that they're providing the right care for their children when they're suffering from common illnesses such as cough and colds.



The Listen to Your Gut campaign has been developed for parents by parents in conjunction with Devon County Council's Public Health Team and My Start Children's Centre in Ilfracombe, which is run by Action for Children.

The campaign aims to increase parents' confidence in caring for a child with common illnesses such as a cold, cough sore throat or ear ache. It includes a social media animation and game and a guide on caring for an ill child.



The goal is to increase knowledge and understanding of how to care for an ill child and develop an understanding of antibiotics and their side effects, reducing demand for unnecessary antibiotics.

According to a review of GP practices in North Devon covering 65,000 patients, a quarter of patients received at least one prescription for antibiotics in the previous twelve months.

The review also showed that 25% of children under 10 were



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'Antibiotic resistance' – latest topic for award winning Torbay Health Science Café

On March 19, 2014 • Add Comment

Antibiotic resistance is currently one of the most significant threats to patients' safety in Europe and will be the subject of a discussion at Torbay Hospital's next Health Science Café event on Monday 24 March at 6.00pm in the Horizon Centre Café.

At this free public event, Consultant Medical Microbiologist, Dr Paul Turner, and Antimicrobial Pharmacist, Stephanie Thompson will explain their roles at Torbay Hospital, the history of antibiotics and the development of resistance.

Resource: click below to access the resource

Healthwatch Torbay Science Café

Mums tums campaign targets overuse of antibiotics

Listen to Your Gut video

Beat the Bugs Course



A complete guide to running the community based hygiene course: Beat the Bugs **Beat the Bugs** is a six week community hygiene course aiming to increase awareness and change behaviour around antibiotic use. The course comprises of six sessions covering an Introduction to Microbes, Hand and Respiratory hygiene, Food hygiene, Oral hygiene, Antibiotics and a final session on self-care and action planning for the future.

Resource: click below to access the resource

E-Bug: Beat the Bugs Course



Frequently asked questions

FAQs

Q: What is antimicrobial resistance?

Antimicrobial resistance occurs when microorganisms such as bacteria, viruses, fungi and parasites change in ways that render the medications used to cure the infections they cause ineffective. When the microorganisms become resistant to most antimicrobials they are often referred to as "superbugs". This is a major concern because a resistant infection may kill, can spread to others, and imposes huge costs to individuals and society.

Antimicrobial resistance is the broader term for resistance in different types of microorganisms and encompasses resistance to antibacterial, antiviral, antiparasitic and antifungal drugs.

Antimicrobial resistance is facilitated by the inappropriate use of medicines, for example, when taking substandard doses or not finishing a prescribed course of treatment. Low-quality medicines, wrong prescriptions and poor infection prevention and control also encourage the development and spread of drug resistance. Lack of government commitment to address these issues, poor surveillance and a diminishing arsenal of tools to diagnose, treat and prevent also hinder the control of antimicrobial drug resistance.¹

Q: What is the difference between antibiotic and antimicrobial resistance?

Antibiotic resistance occurs when bacteria change in response to the use of antibiotics used to treat bacterial infections (such as urinary tract infections, pneumonia, bloodstream infections) making them ineffective.

Antimicrobial resistance is a broader term, encompassing resistance to drugs that treat infections caused by other microbes as well, such as parasites (e.g. malaria or helminths), viruses (e.g. HIV) and fungi (e.g. Candida)¹.

Reference: click below to access the resource

1. http://www.who.int/features/qa/75/en/

Q: What is fuelling antibiotic resistance?

A third of the public believe that antibiotics will treat coughs and colds. 1 in 5 people expect antibiotics when they visit their doctor. GPs commonly express concerns that they feel pressurised by patients asking for antibiotics. For example, people asking on behalf of a child to treat infections that don't respond to the drugs.

Antibiotic prescribing and antibiotic resistance are inextricably linked. Areas with high levels of antibiotic prescribing also have high levels of resistance².

Q: Why is antimicrobial resistance a global concern?

New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases, resulting in prolonged illness, disability, and death.

Without effective antimicrobials for prevention and treatment of infections, medical procedures such as organ transplantation, cancer chemotherapy, diabetes management and major surgery (for example, caesarean sections or hip replacements) become very high risk.

Antimicrobial resistance increases the cost of health care with lengthier stays in hospitals and more intensive care required.

Antimicrobial resistance is putting the gains of the Millennium Development Goals at risk and endangers achievement of the Sustainable Development Goals³.

References: click below to access the resource

- 2. http://www.who.int/features/ga/75/en/
- 3. http://www.who.int/mediacentre/factsheets/fs194/en/

Q: Who is prescribing?

- 74% General practice
- 11% Hospital inpatients
- 7% Hospital outpatients
- 5% Dental practices
- 3% Other community settings⁴

Q: Does stopping a course of antibiotics early lead to antibiotic resistance?

There has been a lot of research into how long antibiotic courses should be, to determine the shortest possible length of course needed to completely kill all bacteria.

If you are being treated for an infection, the kind of antibiotics your doctor prescribes and the length of the course should be based on the best evidence.

If you stop treatment early, there is a risk the antibiotics won't have killed all the bacteria that made you sick and that it will mutate and become resistant. This will not happen to everyone – the problem is that we don't know who can safely stop treatment early.

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 resistance⁵.

References: click below to access the resource

- 4. <u>https://www.gov.uk/government/publications/health-matters-antimicrobial-resistance/health-matters-antimicrobial-resistance</u>
- 5. http://www.who.int/features/qa/stopping-antibiotic-treatment/en/

Q: Why do we need to act now?

Antibiotics are a vital tool for modern medicine. Not only for the treatment of infections such as pneumonia, meningitis and tuberculosis. We also need them to avoid infections during chemotherapy, caesarean sections and other surgery.

A failure to address the problem of antibiotic resistance could result in:

- an estimated 10 million deaths every year globally by 2050
- a cost of £66 trillion in lost productivity to the global economy

Global concern about antibiotic resistance is compounded by the fact that the discovery of new classes of antibiotics is at an all-time low. It has been 30 years since a new class of antibiotics was last introduced.

Only 3 of the 41 antibiotics in development have the potential to act against the majority of the most resistant bacteria⁴.

References: click below to access the resource

4. <u>https://www.gov.uk/government/publications/health-matters-</u> antimicrobial-resistance/health-matters-antimicrobial-resistance

Acknowledgements

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