



Public Health
England

Supporting appropriate antibiotic prescribing in primary care



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My talk:

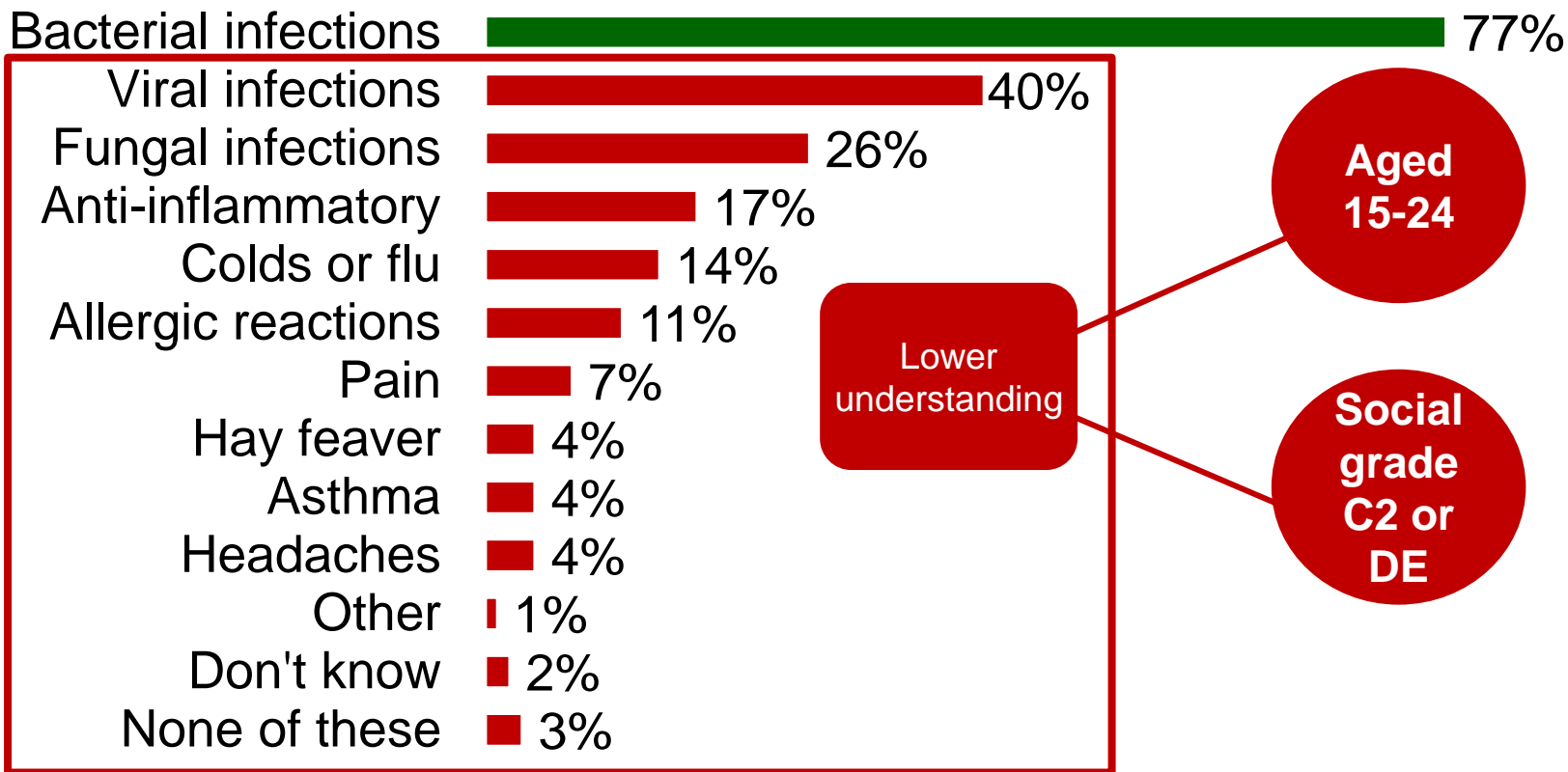
- ❖ **The general public's opinions**
- ❖ **Evidence for different approaches**
 - ❑ **Communication, CRP, Back-up/delayed**
- ❖ **TARGET**
- ❖ **e-Bug**
- ❖ **Antibiotic Guardian**



Misconceptions about antibiotics

Which of the following conditions, if any, do you think can be effectively treated by antibiotics? 1,625 respondents Jan 2014

Correct
answer?



The Patient Perspective: why do patients visit their doctor?



1,767 ≥ 15 y in England



58% had RTI in last 6 months



What did they do?

60%	took OTC(50%) or alternative medicine(21%) for symptoms
37%	took extra rest
20%	Contacted or visited GP surgery
6%	asked pharmacy for advice
1.4%	used NHS direct
0.4%	took left-over antibiotics
0%	visited NHS walk in centre

The Patient Perspective: They visited their GP if they were worried

- 51% Symptoms severe
- 47% Symptoms not improved after several days
- 14% family or friends suggestion
- 11% Other health problem
- 9% I usually visit GP with these symptoms
- 5% Worried will infect others who may get very ill

200



What did they expect?

53% Expected antibiotics

- 24% Advice about self-care
- 7% Information about illness duration
- 3% For referral to hospital/specialist

- 22% Other treatment for symptoms
- 12% Rule out more serious illness
- 6% A sick/fit note for work
- 3% For Tamiflu

93% who asked, got an antibiotic

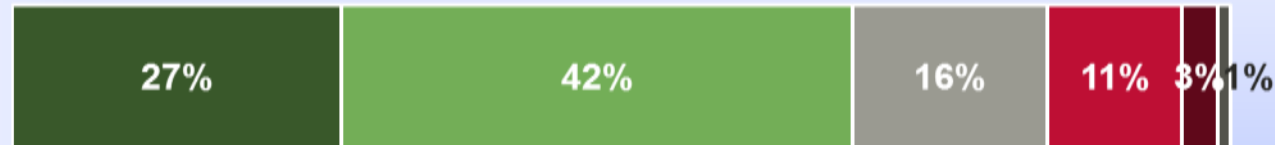
McNulty, Nichols, French, Joshi & Butler. British Journal of General Practice, 2013 e429)

The Patient Perspective: A 2014 survey showed patients trust GPs and nurses' advice

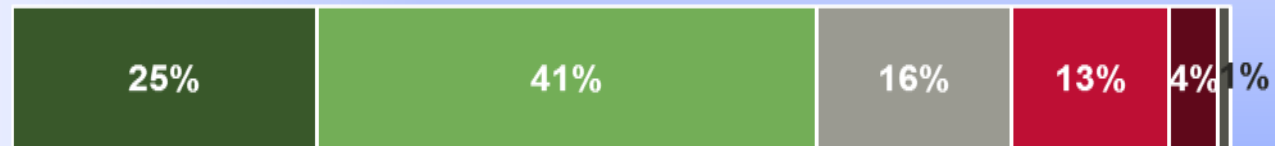
I trust my GP's advice as to whether I need antibiotics or not



I trust my nurse's advice as to whether I need antibiotics or not



I trust the pharmacist's advice as to whether I need antibiotics or not



■ Strongly agree ■ Tend to agree ■ Neither / nor ■ Tend to disagree ■ Strongly disagree ■ Don't know

It's worth sharing information about the need or not for antibiotics in consultations, and self care



Evidence for GP based interventions



Booklet to share with patients

Antibiotic prescription 20% v 40%

Intention to reconsult 55% v 76%

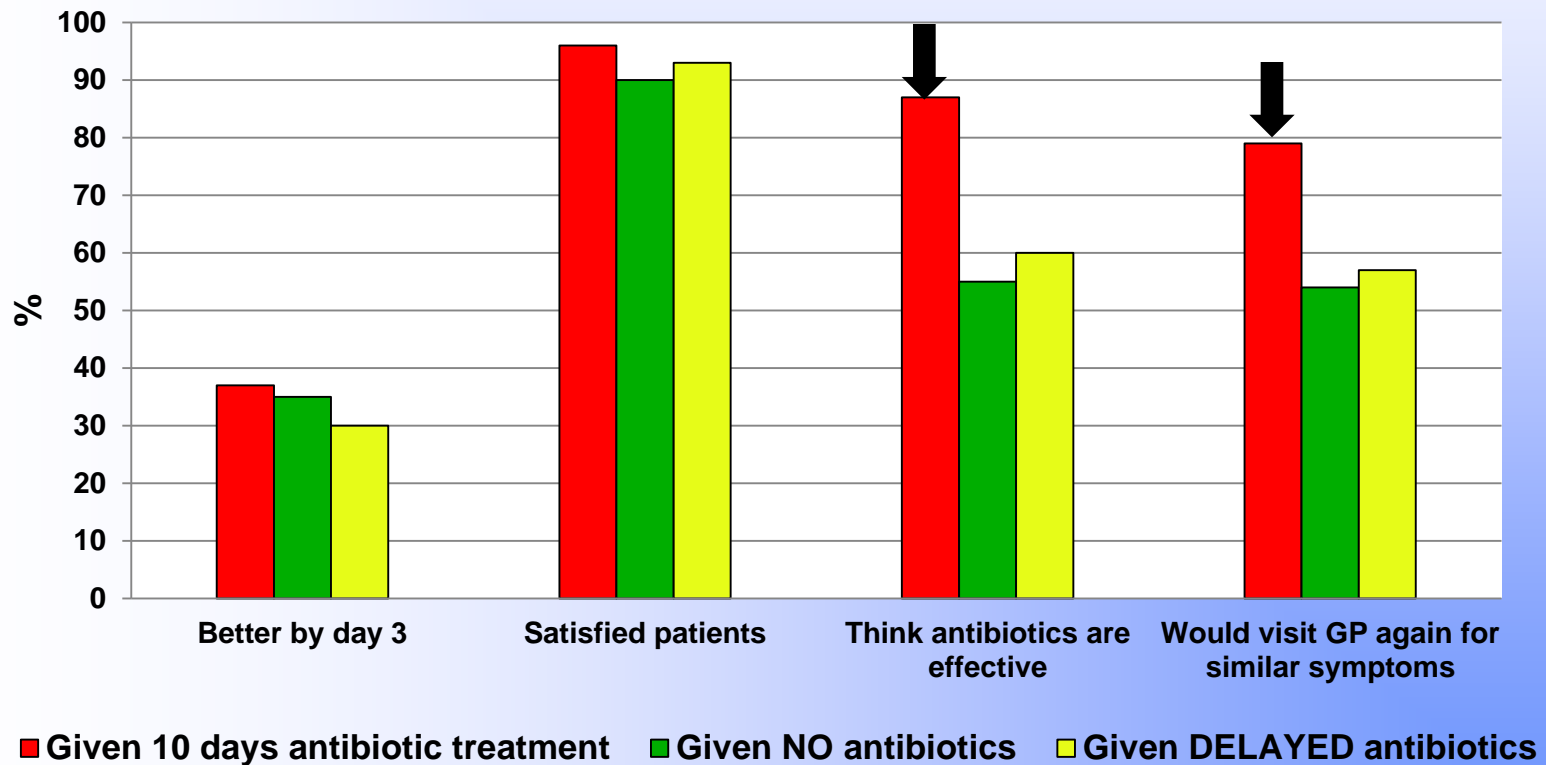
IMPACT

CRP and communication skills

Antibiotics in usual care	68%
communication	33%
CRP	39%
Both	23%

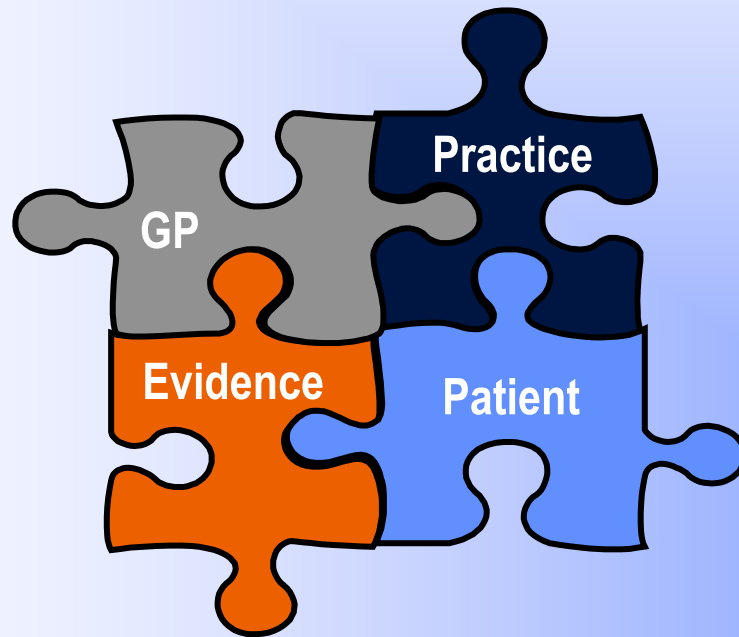
The patient: Back-up / delayed prescribing can reduce antibiotic use & patient expectations

English RCT comparing three treatment strategies for sore throat (n=582)



Possible Answers

How can we fit together this evidence and change behaviour during consultation with patients to improve antibiotic prescribing?



Changing antibiotic use

In order for prescribers and patients to change their antibiotic use they need to:

- Be convinced of the importance of antibiotic resistance and how their responsible antibiotic use can contribute to controlling resistance.**
- Have the confidence and tools to use antibiotics responsibly.**

TARGET: The TARGET antibiotic toolkit

This toolkit is here to help clinicians and commissioners to use antibiotics responsibly and meet CQC requirements

TARGET Antibiotics toolkit



Training resources

Patient information leaflets

Self assessment checklist and audit

Resources for clinicians

Antibiotic management guidance

External clinical resources

The TARGET Antibiotics Toolkit

- Includes a range of resources to support prescribers in optimising antibiotic prescribing in primary care
- Hosted on the Royal College of General Practitioners (RCGP) website www.rcgp.org.uk/targetantibiotics
- Developed collaboratively and launched in 2012
- Advocates a whole team approach

Whole team approach

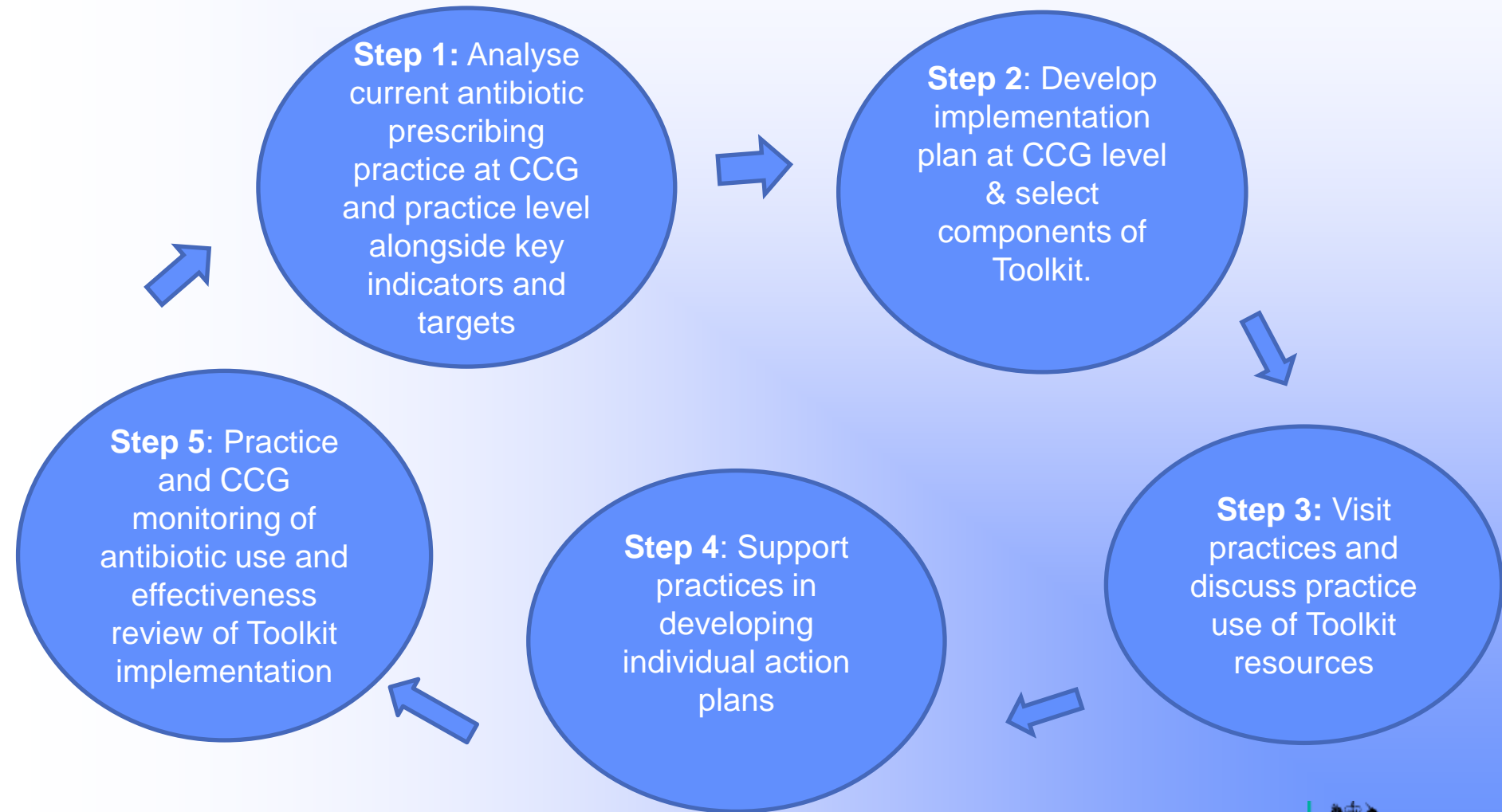


**Should we guide
and advise?**



Or cajole?

Planning implementation of TARGET



TARGET resources: interactive presentation

- **One hour presentation – workshop format**
- **Aimed at all primary care professionals (not just prescribers)**
- **Local prescribing data**
- **Based around clinical scenarios**
- **Action planning**

TARGET resources: self-assessment checklist

What would be good practice now

Does your practice use antibiotic guidance provided nationally or locally by the microbiologist or commissioners for treatment of common infections? ☐ Yes ☐ No [i](#)

Does your practice use delayed prescribing on a regular basis for uncomplicated respiratory tract infections? ☐ Yes ☐ No [i](#)

Is the latest antibiotic guidance made available to all temporary prescribers working in your surgery? ☐ Yes ☐ No [i](#)

Have you undertaken a practice wide antibiotic audit in the last two years? ☐ Yes ☐ No [i](#)

Do your clinicians record clinical indication for antibiotic prescribed in patient notes using read codes? ☐ Yes ☐ No [i](#)

What most practices should aim to do soon

Is there a GP within your practice who takes a lead for antibiotic stewardship in the practice? ☐ Yes ☐ No [i](#)

Do you analyse and discuss antibiotic prescribing at your surgery in comparison to local targets at least once a year? ☐ Yes ☐ No [i](#)

Do you keep a written record and surgery action plan resulting from antibiotic audits? ☐ Yes ☐ No [i](#)

What all antibiotic aware practices should be doing

Does your practice use patient focused strategies to highlight the importance of responsible antibiotic use? For example patient information, leaflets and posters. ☐ Yes ☐ No [i](#)

Do your clinicians use patient information leaflets within your consultations? ☐ Yes ☐ No [i](#)

Is there a standard approach to antibiotic prescribing to avoid patients re-consulting with other clinicians within the practice, to obtain the antibiotic they expect? ☐ Yes ☐ No [i](#)

Have you or anyone in your practice undertaken any antibiotic related prescribing clinical courses, for example MARTI and MUTs on the RCGP website? ☐ Yes ☐ No [i](#)

TARGET: Patient Information Leaflets

Treating your infection

NHS
20454
© NHS UK
Printed in the UK

Patient Name

Your doctor or nurse recommends that you self-care ☐ Back-up antibiotic prescription issued ☐

Your infection	Usually lasts	How to treat yourself better for these infections, now and next time	Contact your GP practice or contact NHS 111 (England), NHS 24 (Scotland dial 111), or NHS Direct (Wales dial 0845 4647)
<input type="checkbox"/> Middle-ear infection	4 days	<ul style="list-style-type: none"> Have plenty of rest. Drink enough fluids to avoid feeling thirsty. 	<p>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.</p> <ol style="list-style-type: none"> 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. If you feel confused or have slurred speech or are very drowsy. If you have difficulty breathing. Signs can include: <ul style="list-style-type: none"> breathing 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. If you develop chest pain. If you have difficulty swallowing or are drooling. If you cough up blood. If you are feeling a lot worse. <p>Less serious signs that can usually wait until the next available GP appointment:</p> <ol style="list-style-type: none"> 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 have new deafness. Other _____
<input type="checkbox"/> Sore throat	7 days	<ul style="list-style-type: none"> Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both). 	
<input type="checkbox"/> Common cold	10 days	<ul style="list-style-type: none"> Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol (or Ibuprofen) if you or your child are uncomfortable as a result of a fever. 	
<input type="checkbox"/> Sinusitis	18 days	<ul style="list-style-type: none"> Other things you can do suggested by GP or nurse: _____ 	
<input type="checkbox"/> Cough or bronchitis	21 days		
<input type="checkbox"/> Other infection: _____	_____ days		










Back-up antibiotic prescription ONLY to be collected in ☐ days if you do not feel better or feel worse.

Collect from: ☐ GP reception ☐ GP or nurse ☐ Pharmacy

- Colds, most coughs, sinusitis, ear infections, sore throats, and other infections often get better without antibiotics, as your body can usually fight these infections on its own.
- The more we use antibiotics, the greater the chance that bacteria will become resistant to them so that they no longer work on our infections.
- Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight, other symptoms, or being sick if you drink alcohol with metronidazole.

Never share antibiotics and always return any unused antibiotics to a pharmacy for safe disposal

Leaflet developed in collaboration with these professional societies

All sections can be personalised and added to by the GP

“Usually lasts” section educates patients about when to consult

Safety netting

Back-up prescription

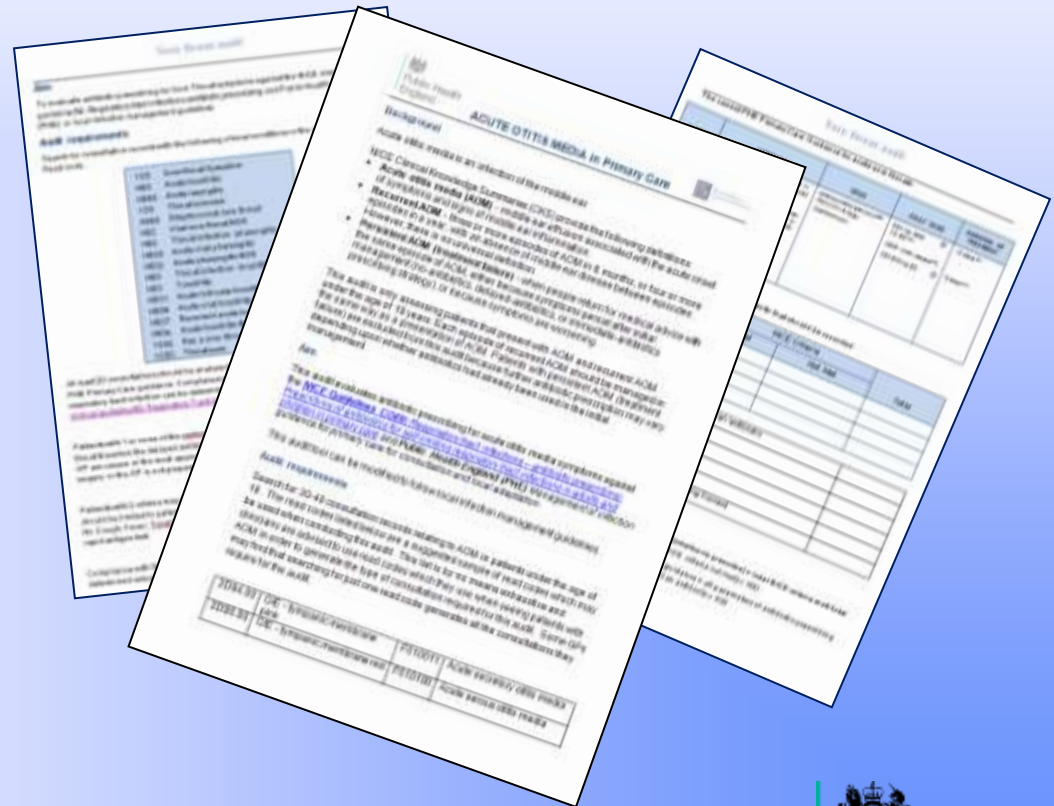
Information about antibiotics & resistance

Read codes: Delayed:8CAk, Leaflet: 8CE

TARGET resources: audits

The TARGET website has audit templates for :

- Acute otitis media
- Sore Throat
- Acute cough
- Otitis externa
- UTI



TARGET: Training Resources

www.rcgp.org.uk/TARGETAntibiotics/



Managing Acute Respiratory Tract Infections



Managing Urinary Tract Infections



Skin Infections



Stemming the Tide of Antimicrobial Resistance

TARGET Antibiotics toolkit



Training resources

Self assessment checklist and audit

Antibiotic management guidance

Patient information leaflets

Resources for clinicians

External clinical resources

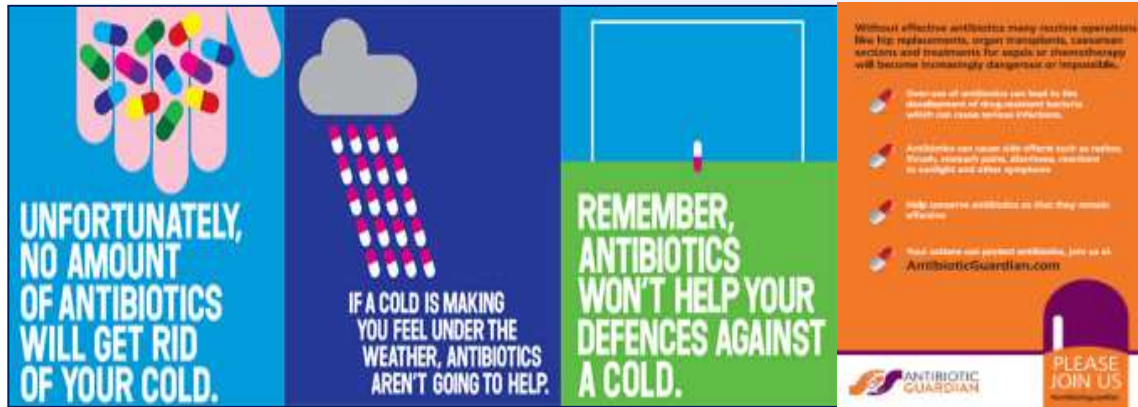
TARGET toolkit on-line course



Public Health
England

For patients: resources for clinical and waiting areas

Posters for display



Videos for patient waiting areas



What do professionals think about TARGET?

Interactive workshop presentation

“think we felt a little bit more encouraged to drive, to use antibiotics properly” - GP

“Talking about antibiotic resistance and stuff, is stuff that we’ve known about forever really, isn’t it?” - GP

“Focussing on the clinical areas like sore throat, ear infection and UTIs ...generated more interest than looking at the figures” - Stakeholder

What do professionals think about TARGET?

Treating your infection leaflet

"Actually being able to pass them a piece of paper. Instead of passing them a prescription but it's something to take away. It's good. I think it's helpful because it looks official as well" -

GP

"Here's the problem, it's not a click away" -

GP

"Having hard copies of the leaflets would be a good idea ..GPs are so busy & they've got so much going on in their heads, it's only the keen ones that will use it and remember ..having it ..to hand visually on the desk will help." -

Stakeholder

What do professionals think about TARGET?

Action planning

“Surgeries needed to develop a plan. ...If you’re actually going to get the practice to do something there was enough time in the one hour allocated to do that.

You were left with the fact that it was raising awareness but not necessarily delivering a plan to reduce antibiotic use.” – Stakeholder 5

What's new with TARGET?

New TARGET audits

(Updated UTI audit, acute cough audit, otitis media audit, otitis externa audit (in progress))

New Treating Your Infection leaflets

(For out of hours clinics, for community pharmacies, in 6 new languages)

Updated UTI eModule

New TARGET presentation/workshop format

(Now clinical scenario based, includes local action planning)

Updated National Antibiotic Management Guidance

(UTI, acute cough)

Planned update to the Guide to Resources

Implementation and adaptation: Southern Derbyshire CCG

- Established Antimicrobial Pharmacist (0.5 FTE) post to develop and implement a programme of work.
- Educational meetings for prescribers; support materials aimed at avoidance of prescribing or using back-up prescribing; improving patients' knowledge in self-care of minor illnesses; and development of different treatment guidelines for prescribers.
- Education on antibiotics in over 180 primary schools was a novel approach to increase public awareness of the appropriate treatment of common illnesses without antibiotics.



e-Bug: The free microbe, hygiene and antibiotic resource for teachers and young people





Why educate young people about antibiotics?

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EUROBAROMETER

- ❖ Although younger respondents less likely to consult a doctor:
69% 15-24 yrs vs 82% over 55 yrs.
- ❖ More likely to take antibiotics in past year
46% 15-24 yr olds vs 39% over 55yrs



Education in schools can help break the chain of infection

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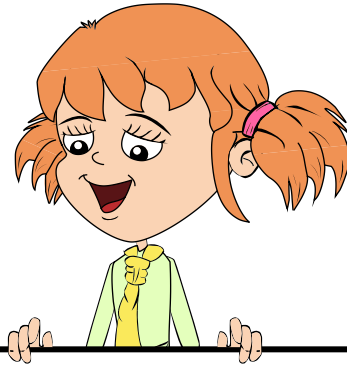
- ❖ **Primary mode of illness transmission via contaminated hands**
- ❖ **Hand washing interventions reduce illnesses and absenteeism**



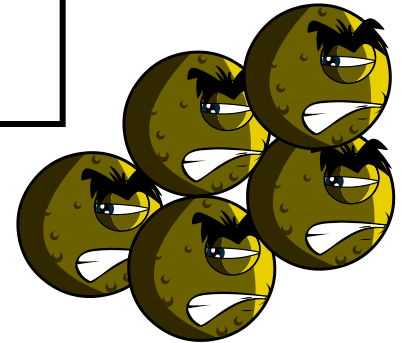
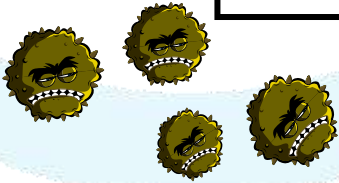
- ❖ **Respiratory transmission important especially during flu season**



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How was e-Bug developed





Focus groups with teachers



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- ❖ **MUST link closely to the National Curriculum**
- ❖ **MUST be adaptable**
- ❖ **Important to have IT links**
- ❖ **Cover a range of teaching styles**
- ❖ **Student and teacher friendly**





Resources for 15 – 18 years 2014

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Interviews and focus groups to explore young adults' and teachers attitudes towards:

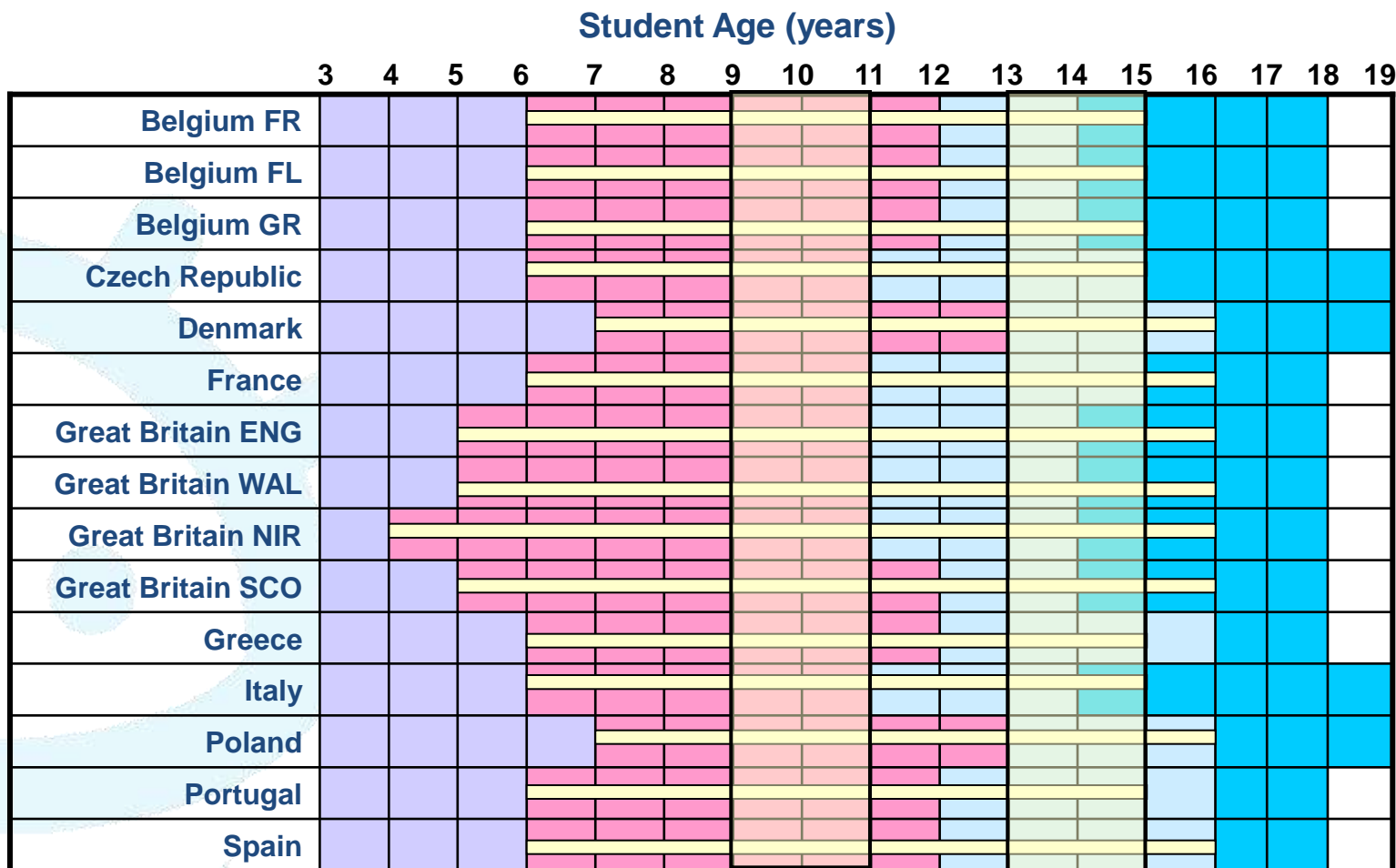
- ❖ **antibiotics,**
- ❖ **antibiotic resistance**
- ❖ **antibiotic use**
- ❖ **vaccinations**



Why 9-11 years & 13-15 year olds?



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 Pre school
 Primary
 Compulsory Full Time Education
 Lower Secondary
 Upper Secondary

Junior
packs

Senior
packs

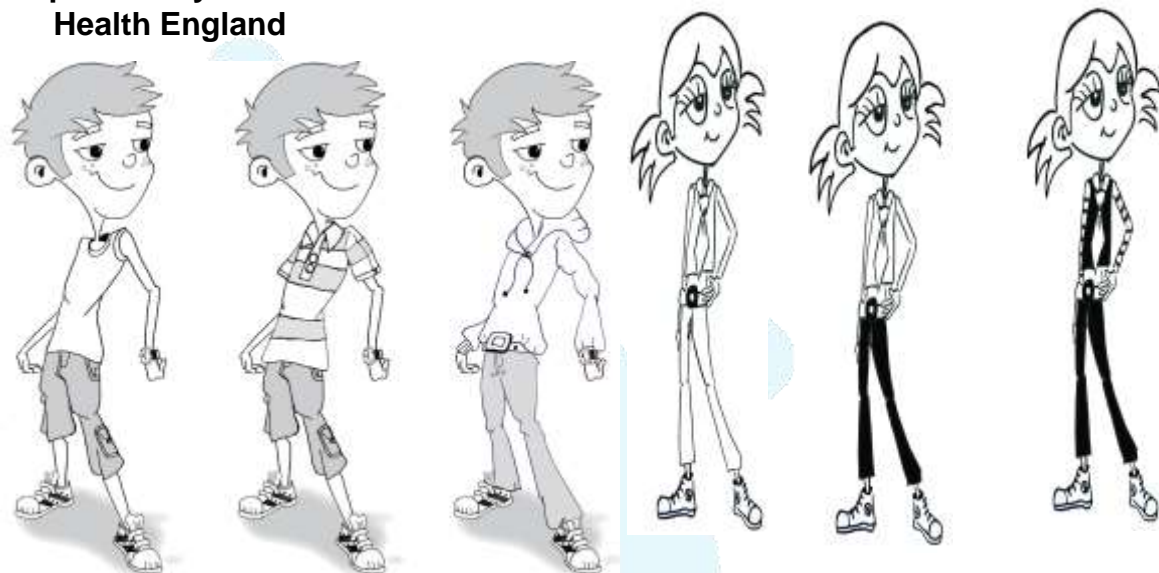


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Draft pack and website activities, and learning outcomes discussed and agreed with teachers and partner countries at face to face meetings



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Clothing



Hair styles

Amy & Harry





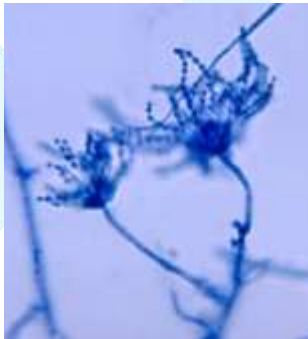
e-Bug

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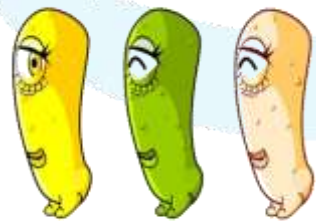
Bug development



Good Bugs



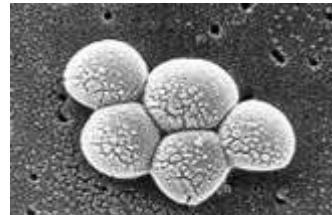
PENICILLIUM



LACTOBACILLUS



Bad Bugs



STAPHYLOCOCCUS



CAMPYLOBACTER



INFLUENZA



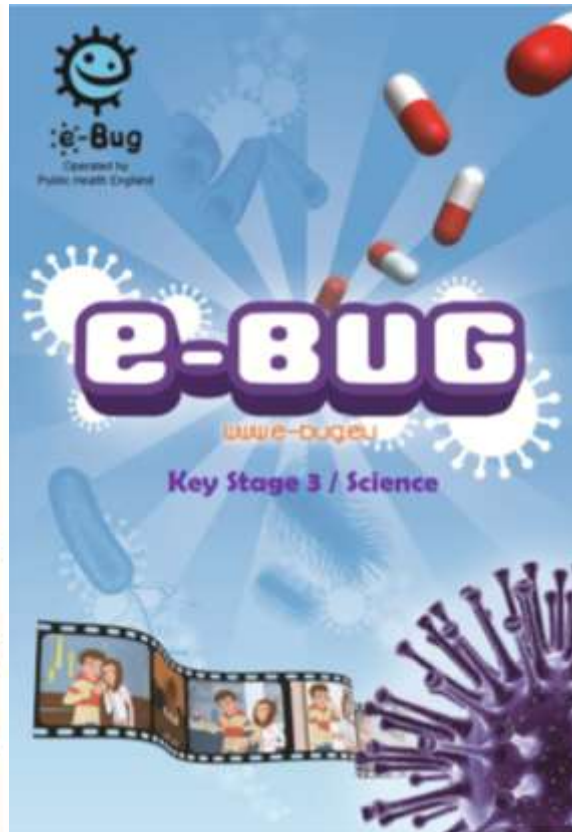
DERMATOPHYTE





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Pack content



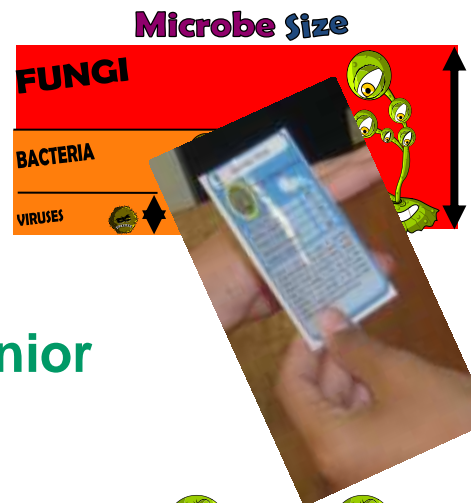


Microbes



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Introduction to microbes



Senior

❖ Useful microbes – Yeast race

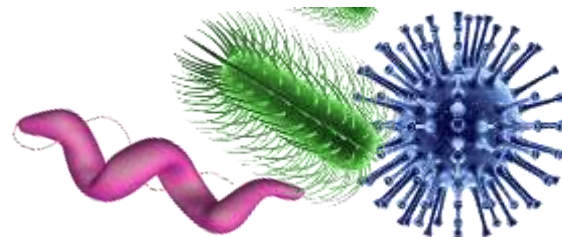
- Yogurt making



Senior



❖ Harmful microbes





Spread of infection



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Hand hygiene



Senior

Cycle of infection,
Grow microbes on
agar plates



How clean are *your* hands?

Junior hand washing activity
with soap and water and glo gel

Respiratory hygiene





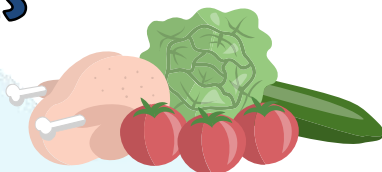
Spread of infection continued



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❖ Juniors - Food hygiene

How **clean** was
your sandwich?



❖ Juniors - Farm hygiene





Antibiotic use



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junior schools: Treatment of Infection



It really hurts
and I think I'm
getting a cough.

Don't you have any antibiotics
at home you can take?

Senior schools: Antibiotic resistance activity



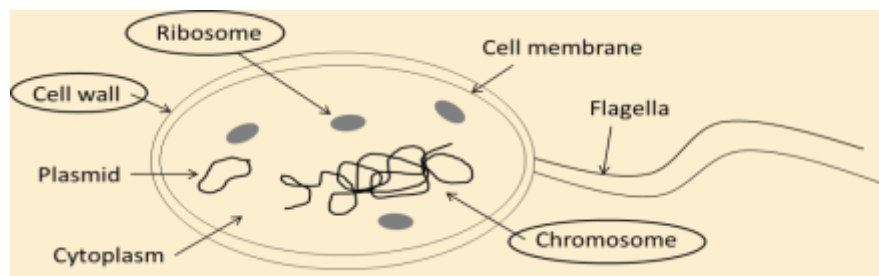


**15 to 18
years**

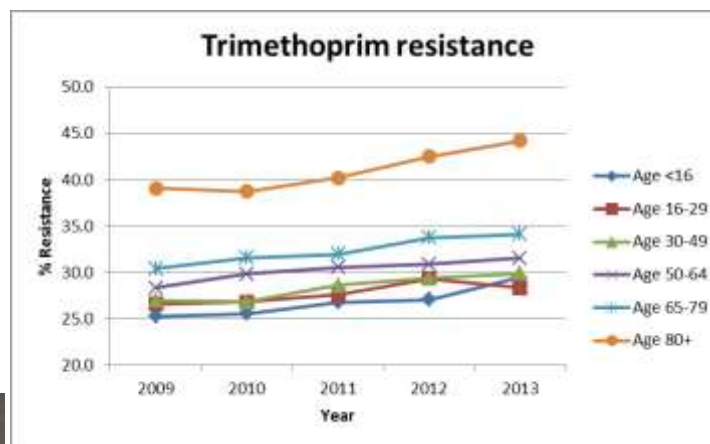


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**Draw a bacterial cell, circle areas
where antibiotics are active**



**Use data, to plot a graph of %
resistance by year, and age**



Peer education balloon activity



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Young adult example

So how do we use e-Bug to teach 15-18 year olds about antibiotics?



**Animations
with teacher
notes**



Lesson Plans



**Debate kit on
antibiotic
resistance**



Peer education

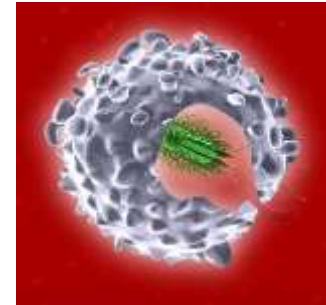


Vaccines



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Animations of:
The bodies natural defences



Junior schools
Act out story of Jenner

Senior schools: Vaccine card
game shows how vaccines can
help control outbreaks

Susceptible

Infected

**Recovering
but still
Infectious**

Immune

Vaccinated



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The lessons can be modified for peers and plenty of material is available to use in these lessons including PowerPoint presentations and practical activities.





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www.e-Bug.eu



This is the e-Bug home page

For ages 7-10 year resources you can visit 'Junior Student'



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e-Bug Junior

Fact of the Week
Microbes are the oldest form of life on Earth.! They've been here for 3.8 billion years.

Disease Fact File
Click here to find out how deadly and disgusting microbes can be!

Revision Guide
Need to ace those exams? This is the section for you!

Quiz
Ready to test what you really know about microbes?

Games
Go on, play our games and have some fun!

Downloads
Browse our gallery for images you can download.

Hall of Fame
Find out about legendary scientists and their discoveries

Home Science
Investigate microbes with some experiments at home.

Picture of the Week

Helicobacter pylori
Helicobacter have long tails and like to swim around in your stomach all your life; but they can cause painful ulcers.

◀ **BACK**

Junior online resources also have a variety of interactive activities



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For ages 11-15 year resources you can
visit 'Senior Student'



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**e-Bug**

e-BUG Senior

Fact of the Week

More antibiotics are given to animals than humans.

Disease Fact File

Click here to find out how deadly and disgusting microbes can be!

Revision Guide

Need to ace those exams? This is the section for you!

Picture of the Week



Quiz

Ready to test what you really know about microbes?

Games

Go on, play our games and have some fun!

Helicobacter pylori

Helicobacter have long tails and like to swim around in your stomach all your life; but they can cause painful ulcers.

Downloads

Browse our gallery for images you can download.

Hall of Fame

Find out about legendary scientists and their discoveries

Home Science

Investigate microbes with some experiments at home.

Hi! Welcome to e-Bug! Navigate through the sections to see what's on offer. Don't forget, the more you do, the more you will find out about the mysterious world of microbes!

[BACK](#)

**Senior**

Disease Fact File

- General Health
- Childhood vaccines
- Sexual Health
- Antibiotics
- Cholera
- Dysentery
- Lassa Fever
- Typhoid Fever
- Shingles
- Spread by insects
- Shingles
- Antibiotic resistance

What is Ebola?

School children in the UK have no risk of getting this infection unless they or their family or close friends visit an outbreak area and develop symptoms.

Ebola (formerly known as Ebola haemorrhagic fever) is a severe and often fatal virus in humans. The illness usually affects primates such as monkeys, gorillas and chimpanzees. Ebola is introduced into the human population through close contact with bodily fluids of infected animals including chimpanzees, gorillas, fruit bats and monkeys (found ill, dead or in the rainforest).

The death rate is currently 50% in West Africa where the healthcare services are poor and limited.

How do I know I have it: what are the symptoms?

The first symptoms of the Ebola virus are sudden onset of fever, fatigue, headache and sore throat. The next stages of symptoms are vomiting, diarrhoea, rashes, stomach pain and muscle aches, which will follow onto symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding (e.g. oozing from the gums, blood in stool). In worst cases, death can occur. The patient only becomes contagious when they start to show symptoms.

How does it spread?

The amount of virus in the body increases as symptoms increase as people are not infectious during the incubation period or when they first develop the virus. In contrast, when a person

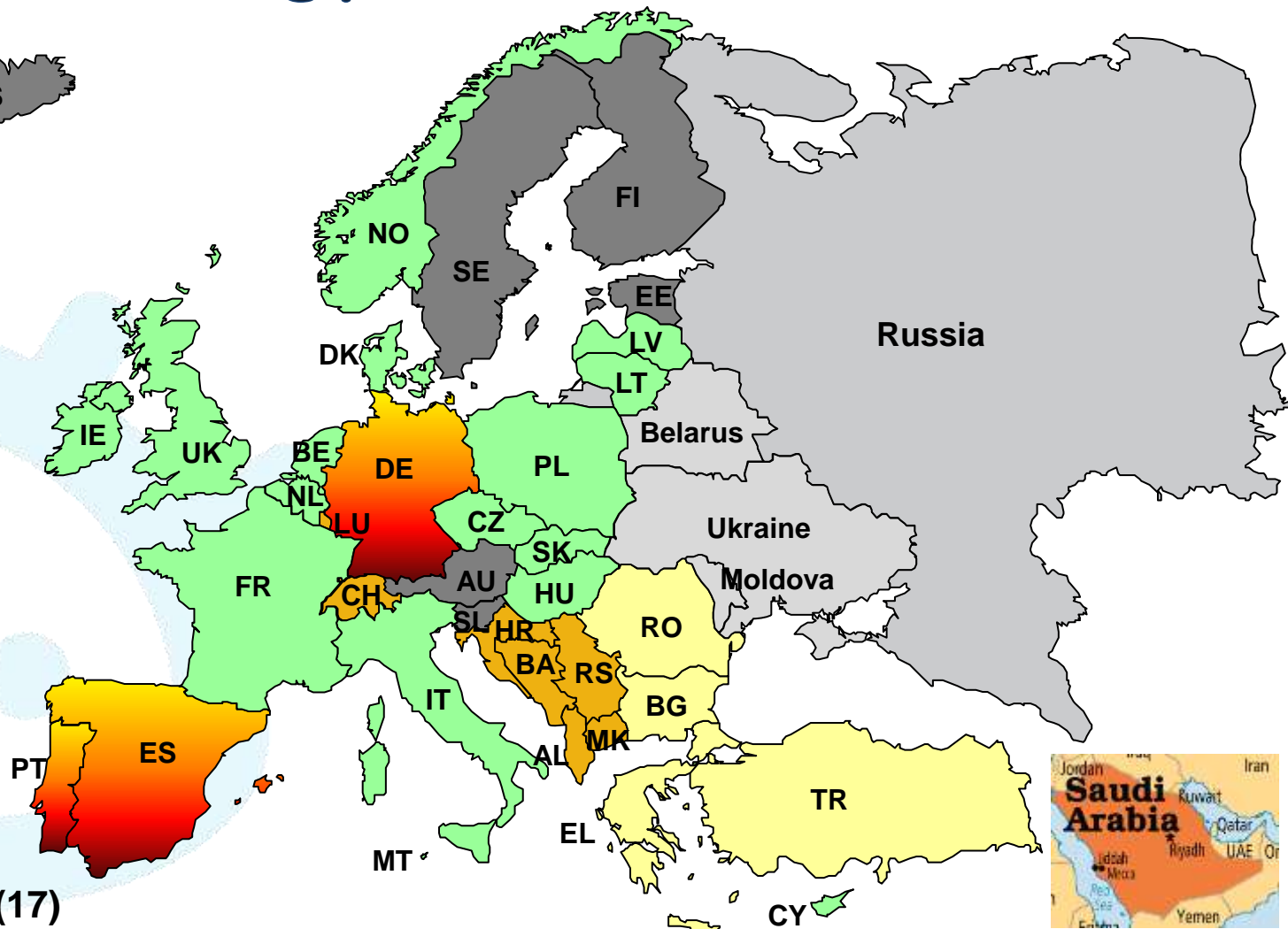
[BACK](#)



e-Bug

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e-Bug partners 2015



Active partner (17)

Translated / no partner (4)

Partial translation/ no partner (3)

No translation / no partner (7)

ECDC partial translation (teacher
website only) / no partner (6)



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To attain e-Bug aim, of improving antibiotic use in our future generations

**We need to reach as many children with the
pack & website as we can**



To do this we need your help and enthusiasm

Awareness & engagement Campaigns

18th November

**EUROPEAN
ANTIBIOTIC
AWARENESS DAY**



A European Health Initiative



**ANTIBIOTIC
GUARDIAN**

UK SUPPORT FOR EUROPEAN ANTIBIOTIC AWARENESS DAY

Developed by Public Health England

Treat Yourself Better with Pharmacist Advice



September to March

Find out more about the new joint Pharmacy Voice and PAGB winter campaign.





Public Health
England

UK: Moving from awareness to engagement (HCP & public)

Focus on raising awareness over the years.
UK AMR Strategy focus: engagement and changing behaviour



Moving from awareness to engagement (HCP & public)

PHE in collaboration with multi-professional & organisation group developed the Antibiotic Guardian and European Antibiotic Awareness Day resources to **provide individuals and organisation a key resource to engage, educate encourage others** towards positive behaviour change with regards to antibiotic prescribing, expectation and use.



Public Health
England

Calls on everyone in UK to become Antibiotic Guardians –

Pledge system: <http://antibioticguardian.com/>

Behaviour change – ‘if-then’ approach



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

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).

Video created with TV doctor

Educates on antibiotic resistance; suggests three steps that public can take to help and a call to become an antibiotic guardian. [Available for download](#)



BE PART OF THE FIRST
**WORLD ANTIBIOTIC
AWARENESS WEEK**

16-22 November 2015



**EUROPEAN
ANTIBIOTIC
AWARENESS DAY**



A European Health Initiative



RESOURCES TOOLKIT FOR
HEALTHCARE PROFESSIONALS
IN ENGLAND



**ANTIBIOTIC
GUARDIAN**

UK SUPPORT FOR EUROPEAN ANTIBIOTIC AWARENESS DAY

All resources and materials are available via
<http://bit.ly/eaad-resources>

Gateway Publication Number: 2014483

EAAD & AG TOOLKIT: Digital for local adaptation

Leaflets, quizzes, crosswords, video & more



Public Health England

European Antibiotic Awareness Day (EAAD) is a Europe-wide initiative that takes place annually on 18 November.

Public Health England (PHE) is leading the co-ordination of EAAD activities in England in collaboration with the Department for Environment, Food and Rural Affairs (DEFRA), the Department of Health, devolved administrations, and other professional organisations.

PHE have established the Antibiotic Guardian campaign to help protect antibiotics and improve knowledge about antibiotic resistance.

You are invited to become an Antibiotic Guardian.

As an Antibiotic Guardian, encourage others to join you in protecting antibiotics against the growing threat of antibiotic resistance at www.antibioticguardian.com.

Resources and promotional materials for Antibiotic Guardian and EAAD are available via <http://uk.iaac2014>.

Protect yourself, your family and friends against the spread of antibiotic resistance.

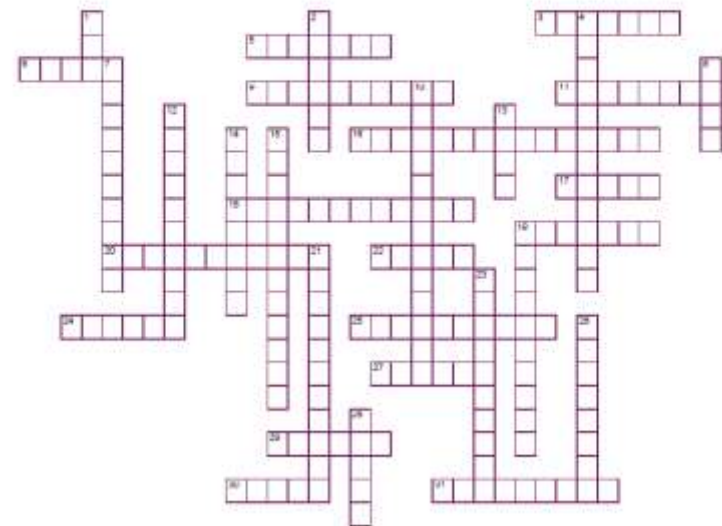
Become an

ANTIBIOTIC GUARDIAN

www.antibioticguardian.com



Antibiotic Guardian Challenge Crossword



ANTIBIOTICS & INFECTION PREVENTION

HOW MUCH DO YOU KNOW? TRY OUR QUIZ FOR PHARMACY AND LAB STAFF

Are the following statements True or False?

1. Gentamicin dosing is based on actual body weight so obese patients will need a significantly higher dose than lean patients. True / False
2. Of Fluoroquinolones plus Doxycycline is a useful combination to treat a patient with MRSA bacteraemia. True / False
3. On a microbiology lab result, if bacteria are isolated and identified, but susceptibility NOT given, then you should treat the patient based on the usual susceptibilities for that organism. True / False
4. If a Pseudomonas infection is resistant to significant parenteral treatment with an alternative drug is the only option. True / False



The Antibiotic Guardian Quiz

Winter is coming...

1. Antibiotics are not effective against colds and flu. This is...
 A. correct: colds and flu are mostly caused by viruses, which antibiotics do not work against.
 B. partly correct: antibiotics sometimes work against viruses.
 C. wrong: antibiotics work against everything.
2. When I have a cough, cold or sore throat, I should contact to my GP for an appointment. This is...
 A. correct: I should book an appointment with my GP for all cold symptoms or throat.
 B. partly correct: if I have difficulty breathing I should seek immediate medical attention, but if it's mild I should first check with a pharmacist first about how to treat my symptoms.
 C. wrong: I should first check with my pharmacist about how to treat my symptoms.



ANTIBIOTICS

HOW MUCH DO YOU KNOW? TRY OUR QUIZ FOR PRESCRIBERS

Principles of antimicrobial prescribing:

Are the following statements True or False?

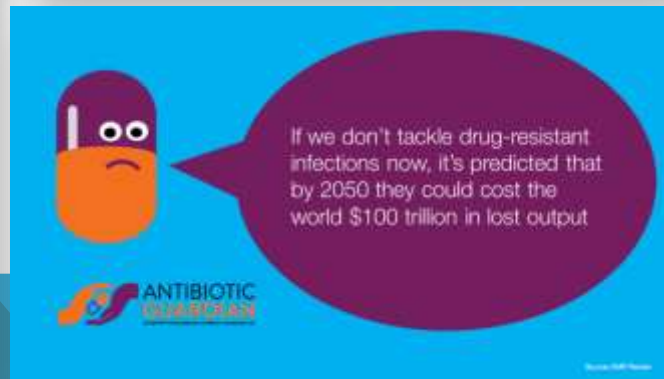
1. Do not start antibiotics without clinical evidence of bacterial infection. True / False
2. Broad spectrum antibiotics are penicillin G, dicloxacillin, erythromycin. True / False
3. Unnecessary or inappropriate antibiotic prescribing increases the emergence and spread of resistant bacteria. True / False
4. Take appropriate cultures before starting antibiotics. True / False

SOCIAL MEDIA GRAPHICS

To obtain the images and other messages for use on social media please request for a **social media pack** by emailing: socialmedia@phe.gov.uk.

They can also be shared from PHE Social media platforms

Twitter: https://twitter.com/PHE_uk Facebook: www.facebook.com/PublicHealthEngland



ANTIBIOTIC GUARDIAN
UK SUPPORT FOR CURBING ANTIBIOTIC RESISTANCE

Developed by Public Health England

BECOME AN ANTIBIOTIC GUARDIAN CHOOSE YOUR PLEDGE NOW!

I AM A

HEALTHCARE
PROFESSIONAL
OR LEADER

Select from the list below

MEMBER OF
THE PUBLIC

Select from the list below

- Adults
- Families
- Farmers
- Pet/Horse Owners

STUDENT OR
EDUCATOR

Select from the list below

**One Health approach
Adults, families, pet
owners, farmers**

SELECT A PLEDGE MESSAGE

Messages will display below



Public Health
England

BE PART OF THE FIRST
**WORLD ANTIBIOTIC
AWARENESS WEEK**

16-22 November 2015



EAAD (18th November) is an international collaboration with World Antibiotic Awareness Week and awareness weeks in USA, Canada & Australia (16-22 November)



USA Get Smart
without Antibiotics



Canada Antibiotic
Awareness week



Australia Antibiotic
Awareness Week





Public Health
England

**You are invited to become an Antibiotic Guardian
today and to ask others to join you**
(You can do so now via your mobile device)

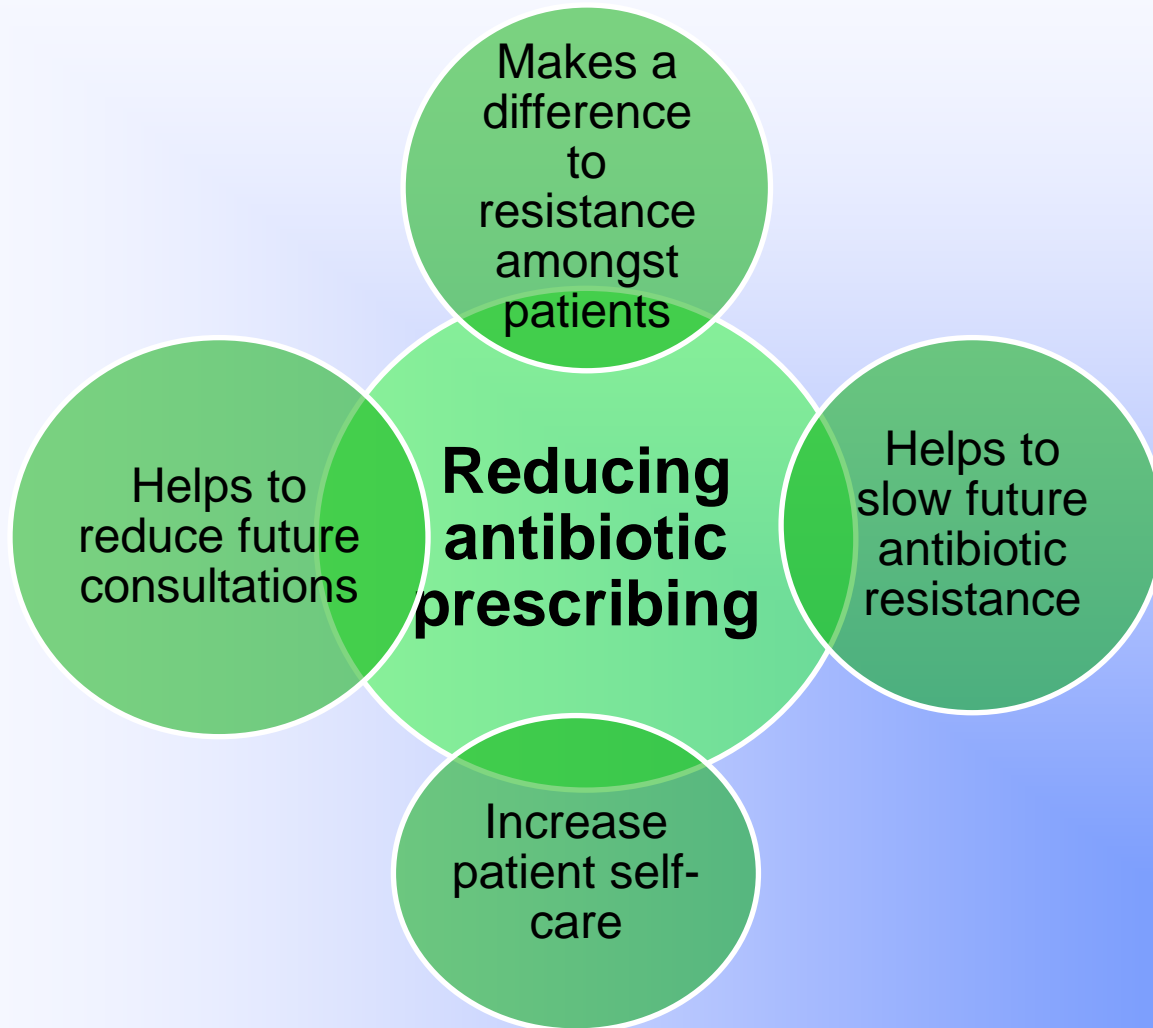
my actions protect antibiotics
 **ANTIBIOTIC
GUARDIAN**
UK SUPPORT FOR EUROPEAN ANTIBIOTIC AWARENESS DAY
join me at antibioticguardian.com



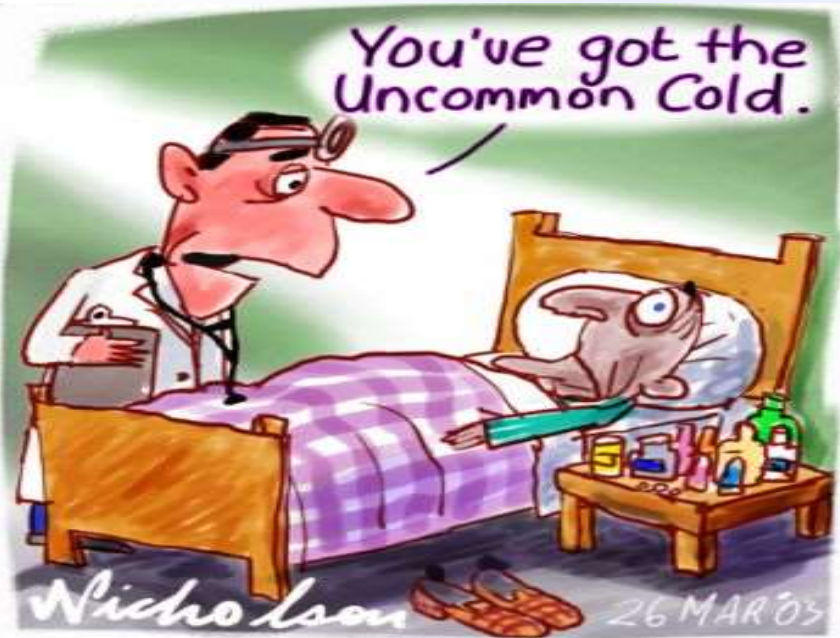
What can you do now?

- Take a look online and plan a collaborative approach to optimising antibiotic prescribing in your area
- Use a range of TARGET resources and if appropriate adapt them to meet local needs
- Become an Antibiotic Guardian - choose a simple action based pledge and encourage others to join
- Encourage use of e-Bug in your schools and
- use the Near-peer e-Bug lesson plan
- Appoint an antibiotic champion
- Tell us what you think!

In summary



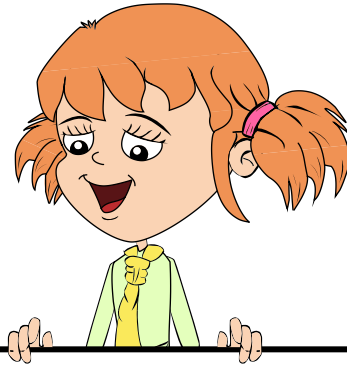
The TARGET Antibiotics Toolkit



Thank you!



Operated by Public
Health England



Any Questions?

