Antimicrobial Resistance (AMR)

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Concern over lack of antibiotics

BAD BUGS, NO DRUGS
As Antibiotic Discovery Stagnates
A Public Health Crisis Brews

REVENGE OF THE KILLER MICROBES
Are we losing the war against infectious diseases?

Major Article

Drug Development:

IDSA
Infectious Diseases Society of America
Imagine - a world without antibiotics

- Fatal infections become incurable again - e.g. meningitis, bacteraemia, pneumonia
- Post-op surgical site infections increase
- Transplantation ceases – e.g. bone marrow and organ
- Cancer chemotherapy becomes too risky
- Joint replacement and implant surgery become high risk procedures
- Post-partum and neonatal infections return
Scale of the problem

EUROPE

25,000 people die each year as a result of hospital infections caused by 5 key resistant bacteria
"The time may come when penicillin may be bought by anyone in the shops. Then there is a danger that an ignorant man may easily underdose himself and by exposing his microbes to non-lethal quantities of the drug, make them resistant."

Alexander Fleming 1945
Antibiotic resistance

What causes antibiotic resistance?

Step 1
Large numbers of bacteria exist all around us. Because of random, natural mutations, some of them are resistant to antibiotics.

Step 2
When exposed to antibiotics, the susceptible bacteria die, even the good ones that help to protect you from infections. The bugs who are naturally resistant survive.

Step 3
The remaining resistant bacteria now have room to thrive and multiply.

Step 4
Resistant bacteria can transfer parts of their DNA that code for this resistance to other bacteria. This is how antibiotic resistance “spreads”.
Antibiotic prescribing

- Many patients have been inappropriately prescribed an antibiotic
- Estimated ½ of all patients who visit GP with a cough or cold leave with a prescription for antibiotics
- Viruses cause many of these infections, meaning antibiotics are of no use
Who is prescribing?

- General practice: 74%
- Hospital inpatients: 11%
- Hospital outpatients: 7%
- Dental practices: 5%
- Other community settings: 3%
Antibiotic resistance happens when bacteria change and become resistant to the antibiotics used to treat the infections they cause.

1. Only use antibiotics when prescribed by a certified health professional.
2. Always take the full prescription, even if you feel better.
3. Never use left over antibiotics.
4. Never share antibiotics with others.
5. Prevent infections by regularly washing your hands, avoiding contact with sick people and keeping your vaccinations up to date.

www.who.int/drugresistance
#AntibioticResistance
CALL TO ACTION
Choose one simple pledge about how you’ll make better use of antibiotics

http://antibioticguardian.com/
Campaigns
Resources

- http://antibioticguardian.com/
Carley Tomlinson
Infection Prevention & Control Nurse
Infection Prevention Team, LCC
European Antibiotic Awareness Day

18th November 2018

https://antibiotic.ecdc.europa.eu/en

#KeepAntibioticsWorking: join us on social media!

As a healthcare professional, what can you do to keep antibiotics working? What can a patient association do to contribute? What can policymakers do at European level? What can a parent do? Everyone can join the campaign on European Antibiotics Awareness Day—posting his/her own message, picture or video using the #KeepAntibioticsWorking hashtag. Tell the world what you do, in your professional or personal life, at individual or collective level, to use antibiotics responsibly and #KeepAntibioticsWorking!

Read about the #KeepAntibioticsWorking campaign
World Antibiotic Awareness Week
12th-18th November 2018
Pledge Card

World Antibiotic Awareness Week 12-18th November 2018
European Antibiotics Awareness Day 18th November 2018

OUR HOME WANTS TO KEEP ANTIBIOTICS WORKING, AND WE PLEDGE TO:

Don’t forget to tweet a picture of your pledge to @LancsIPC and include ‘Antibiotics are not always the answer #stopresistance’
Tweet or Email us!

@LancsIPC

infectionprevention@lancashire.gov.uk