

READING BOROUGH COUNCIL

TO:	HEALTH AND WELLBEING BOARD		
DATE:	27 JANUARY 2017	AGENDA ITEM:	19
TITLE:	ANTIMICROBIAL RESISTANCE		
LEAD COUNCILLOR:	COUNCILLOR HOSKIN / COUNCILLOR EDEN	PORTFOLIO:	HEALTH / ADULT SOCIAL CARE
SERVICE:	ALL	WARDS:	BOROUGHWIDE
LEAD OFFICER:	KIM WILKINS	TEL:	0118 9373624
JOB TITLE:	SENIOR PROGRAMME MANAGER (PUBLIC HEALTH)	E-MAIL:	<a href="mailto:Kim.wilkins@reading.gov.uk">Kim.wilkins@reading.gov.uk</a>

1. PURPOSE OF REPORT AND EXECUTIVE SUMMARY

1.1 This report provides an information briefing for the Board on Antimicrobial resistance (AMR)

2. RECOMMENDED ACTION

2.1 That Health and Wellbeing Board considers the information provided

3. POLICY CONTEXT

3.1 Antimicrobial resistance (AMR) is resistance of a microorganism to an antimicrobial drug that was originally effective for treatment of infections caused by it. Resistant microorganisms (including *bacteria*, *fungi*, *viruses* and *parasites*) are able to withstand attack by antimicrobial drugs, so that standard treatments become ineffective and infections persist. Alternative medications or higher doses that may be more costly or more toxic are therefore required, causing delay in treatment. Treatment could also fail altogether.

3.2 AMR is a topic that is often poorly understood by the general public, due in part to lack of clear communication from health professionals and scientists but as discussed below, the time has come where this is no longer acceptable. Recent calls for action require the support and action from all roles in society,

from patient to prescriber. AMR arises when the microorganisms which cause infection survive exposure to a medicine that would normally kill them. The initial evolution of resistant microorganism strains is a natural phenomenon that occurs when they replicate themselves erroneously (a mutation) or when resistant traits are exchanged between them. Resistant strains of microorganisms capable of surviving exposure to a particular drug then grow and spread, due to a lack of competition from other susceptible strains. Though this process occurs naturally, the recent increase in the **use and abuse of antimicrobials** has accelerated the rate at which resistance is developing and spreading. This issue is compounded by a very limited numbers of new drugs under development to replace those being rendered ineffective. Essentially, we are facing an **ever-growing enemy with a largely depleted armoury**. In the past, resistant infections were associated predominantly with hospitals and secondary care settings, but over the last decade, resistant infections have been seen in the community too.

- 3.3 The World Health Organisation ([WHO](#)) estimates that antibiotics add 20 years to average life expectancy. Currently AMR is responsible for 700,000 deaths per year worldwide but by 2050, it could kill someone every three seconds (10 million people a year). In a keynote address at a conference on Combating Antimicrobial Resistance, [Dr Margaret Chan](#), Director-General of WHO stated:

*“If current trends continue unabated, the future is easy to predict. Some experts say we are moving back to the pre-antibiotic era. No. This will be a post-antibiotic era. In terms of new replacement antibiotics, the pipeline is virtually dry. A post-antibiotic era means, in effect, an end to modern medicine as we know it. Things as common as strep throat or a child’s scratched knee could once again kill”*

#### 4. SUPPORT FOR ANTIBIOTIC AWARENESS

- 4.1 **AMR does not discriminate.** Though antimicrobials are primarily used to treat infection, they also play a key role prophylactically in reducing life threatening complications in surgery, chemotherapy and transplantation. While certain patient populations may thus be affected by AMR earlier than others (e.g. elderly populations or chronic disease groups), it will **impact everyone** - and even everyday infections that we now seen as trivial may once again soon be deadly. Similarly, though most of the direct and much of the indirect impact of AMR will fall on low and middle-income countries, **microbes travel freely** - and the steps that are required will need to be taken in a coordinated and international manner. No single local authority, country or continent can solve the AMR problem on its own and several of the proposed solutions will require a critical mass of countries behind them if they are to make a difference.
- 4.2 Despite its international importance, only a small number of local authorities have dedicated AMR chapters in their Joint Strategic Needs Assessments (JSNAs). A new JSNA chapter on AMR has been developed. The purpose of the new JSNA chapter for Reading is to ensure that not only is the issue well

explained, but that everything possible is being done to adhere to and support the numerous national and local strategies - with input from the highest level of leadership possible. The AMR JSNA contains:

- A summary of **what AMR is**, how it comes about and why it is a growing problem
- A summary of the **impact** AMR has and will have, and a look at current gaps in **public perception**
- A summary of the available local-authority specific **facts, figures and trends** concerning AMR
- A summary of national and local **AMR strategies**, and how we can monitor engagement
- A description of what all of this is telling us, and where any health **inequalities** fall
- A summary of recommendations from both the [WHO Global Strategy](#) and the [ESPAUR report](#)

4.3 Current **strategies** to tackle AMR rest on the **three pillars** of **Antimicrobial Stewardship - Prevent, Protect and Promote**. As [Lori Diamond](#) summarises, this means:

- **Preventing** infectious disease by:
  - Washing your hands
  - Avoiding contact with sick people, or using the appropriate personal protective equipment
  - Keeping current with vaccinations (humans and animals)
  - Improving hygiene and sanitation conditions
- **Protecting** our current antibiotics
  - Ensuring antibiotics are prescribed only for confirmed bacterial infections
  - Ensuring the right antibiotic is prescribed at the proper dose and for the proper duration
  - Ensuring that prescribed antibiotics are used until the full antibiotic course is finished
- **Promoting** and monitoring infection prevention and control measures
  - Promoting the proper use of antibiotics and the impact of antibiotic resistance
  - Improving the surveillance and reporting of antibiotic-resistant infections
  - Strengthening public health strategies around infection prevention and control

4.4 National and local strategies and initiatives for tackling AMR can include:

- Recognising the threat of AMR and the need for cross-sectoral action - e.g. inclusion of AMR in JSNA, participation in European Antibiotic Awareness Week and other campaigns
- Supporting European Antibiotic Awareness Week by taking a pledge to become an Antibiotic Guardian - this pledge can be taken at any time and the link is <http://antibioticguardian.com/>

- Taking action to enable changes in culture around antibiotic prescribing and use across all settings by supporting prescribers and others who advise on prescribing decisions to make the decision not to prescribe where other appropriate strategies exist.
- Educating and engaging with residents and the public about the threat posed by antimicrobial resistance, the steps they can take to reduce risks of infection and how they can minimise unnecessary use of antibiotics through use of existing resources as outlined in the paper and JSNA chapter and through innovative community engagement work
- Ensuring antimicrobial stewardship is included as a measure of quality in local systems - due consideration of AMR in commissioning of health and social care services, e.g. offering flu vaccination to employees, ensuring training on hand hygiene etc.
- Adopting antimicrobial stewardship as a priority in commissioning decisions due consideration of AMR in commissioning of health and social care services

## 5. CONTRIBUTION TO STRATEGIC AIMS

- 5.1 Health protection seeks to prevent or reduce the harm caused by communicable diseases and minimise the health impact from environmental hazards such as chemicals and radiation. Local authorities (and directors of Public Health acting on their behalf) have a critical role in protecting the health of their population, both in terms of helping to prevent threats arising and in ensuring appropriate responses when things do go wrong.
- 5.2 Understanding and responding to those health risks will need to be informed by the process of health and wellbeing boards developing joint strategic needs assessments (JSNAs), joint health and wellbeing strategies, and commissioning plans based upon them.

## 6. COMMUNITY & STAKEHOLDER ENGAGEMENT

- 6.1 The recently established, and unique, *Berkshire AMR stewardship group* (with representatives from all Berkshire CCGs, acute and community NHS Trusts, private healthcare providers, Public Health England, Local Authority Public Health and Community Pharmacy and includes microbiologists, pharmacists, public health and dental public health specialists and a lay member) meets regularly to focus and coordinate these efforts. Initiatives that support antibiotic awareness raising include:
- The [European Antibiotic Awareness Day](#) which took place on the 18<sup>th</sup> November and [World Antibiotic Awareness Week](#) which took place from the 14<sup>th</sup>-20<sup>th</sup> November (2016). These annual events aim to raise awareness about the threat to public health of AMR and the importance of prudent antimicrobial use.
  - The [Antibiotic Guardian](#) campaign - an online PHE-led drive also aiming to promote improved behaviours and engagement on the prudent use and prescription of antibiotics. Locally we promoted the campaign via social media and campaign resources to encourage as many people as possible to sign-up

and pledge what they would do to join the fight against AMR. Anyone and everyone can help in some way.

## **7. LEGAL IMPLICATIONS**

7.1 None identified

## **8. EQUALITY IMPACT ASSESSMENT**

8.1 The JSNA process provides an opportunity to develop an understanding of how AMR might impact differently across groups

## **9. FINANCIAL IMPLICATIONS**

9.1 Awareness raising activities were undertaken using existing resources.

## **10. APPENDICES**