

### 2016:

## A historical year in the fight against antibiotic resistance

Herman Goossens
Chair BAPCOC
Chair Technical Advisory Committee EAAD

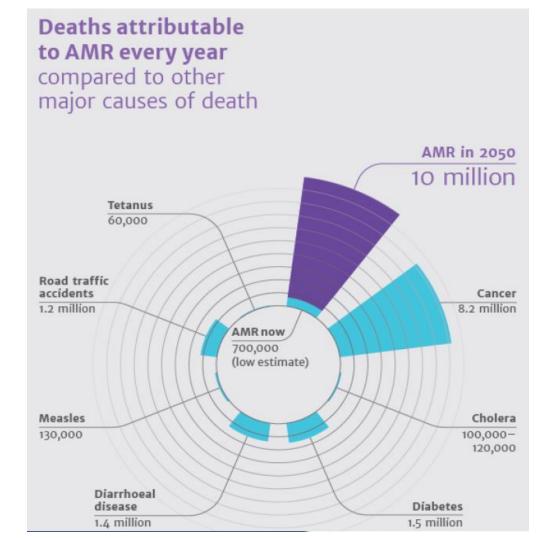
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#### Antimicrobial resistance a 'greater threat than cancer by 2050'

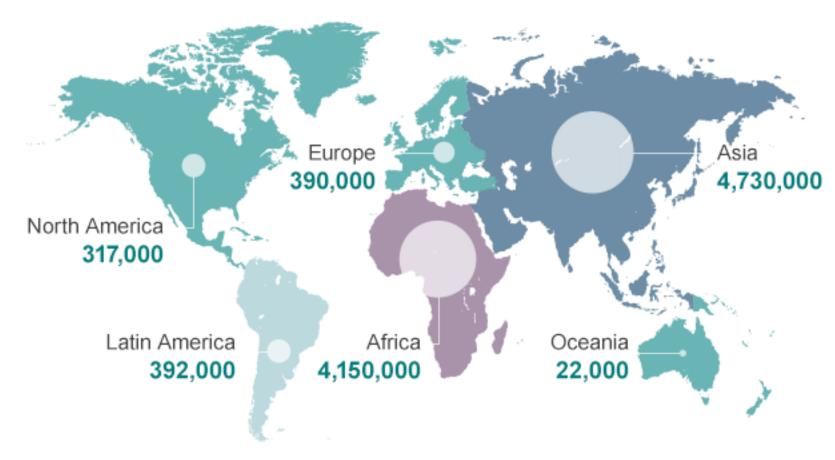
UK chancellor George Osborne to tell IMF that 10m people a year could die without radical action





## Antimicrobial resistance is a major public health threat in LMIC

Deaths attributable to antimicrobial resistance every year by 2050



Source: Review on Antimicrobial Resistance 2014

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## Three World Leaders in a One Health Collaboration







Global leader for food and agriculture

Global leader for animal health and welfare standards

Global leader for human health

#### 68th World Health Assembly (May 2015)

## Adoption of the Global Action Plan (GAP) on antimicrobial resistance





## **Key areas in Global Action Plan and National Action Plans**

4. Optimize the 2. Strengthen 3. Reduce the 5. Ensure 1. Improve use of sustainable knowledge incidence of awareness and antimicrobial infection through through investment understanding medicines in surveillance and effective hygiene through research human & animal of AMR & IPC & development research health National AMR IPC in health Measuring the Access to Risk burden of AMR surveillance care qualified communicat antimicrobial medicines. ion regulation, AMS Assessing Laboratory Community level investment capacities prevention needs Use in veterinary Education Animal health: and agriculture Establishing Research and prevention and procedures for development control participation

#### 83rd World Assembly of the OIE Delegates (May 2015)

#### Adoption of the Resolution No. 26 on AMR





## The 39th Session of FAO's governing Conference (June 2015)



#### Adoption of the Resolution 4/2015 on AMR





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# A year of intense awareness-raising among political leaders culminated on 21 September 2016 at the United Nations General Assembly high-level meeting on AMR.





## High-level meeting of the UN General Assembly on antimicrobial resistance

United Nations Headquarters in New York on 21 September 2016

Unprecedented level of attention.

For the first time, Heads of State committed to taking a broad, coordinated approach to address the root causes of AMR across multiple sectors, especially human health, animal health and agriculture.

Recognized "One Health" approach as overarching principle for addressing AMR and emphasized that this requires coherent, comprehensive and integrated multi-sectoral action

Recognized that human, animal and environmental health are interconnected



# Political Declaration of the high-level meeting of the UN General Assembly on antimicrobial resistance

21 September 2016, New York, USA

- Countries reaffirmed their commitment to develop national action plans on AMR, based on the Global Action Plan on Antimicrobial Resistance developed in 2015 by the World Health Organization (WHO) in coordination with the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE).
- UNGA called upon the Tripartite (and other intergovernmental organizations), to support the development and implementation of national action plans and antimicrobial resistance activities at the national, regional and global levels.
- Leaders at the UN meeting called on WHO, FAO and OIE, in collaboration with development banks such the World Bank other relevant stakeholders, to coordinate their planning and actions and to report back to the UN General Assembly in September 2018.

## 

More, More, More,

#### **G20 Leaders' Communique**

Hangzhou Summit, 4-5 September 2016

"We affirm the need to explore in an inclusive manner to fight antimicrobial resistance by developing evidence-based ways to prevent and mitigate resistance, and unlock research and development into new and existing antimicrobials from a G20 value-added perspective, ...."

#### **G7** Health Ministers' Communique

Kobé Meeting, 11-12 September 2016



"we encourage governments to consider the need for establishing a global clinical studies network on drug resistance that provides access to a large clinical research infrastructure for the design, coordination and conducting of clinical trials and studies in cooperation with the existing global experts networks to ensure the common benefit of the outcomes"

Shiozaki et al. Lancet. 2016;388(10051):1262-3.

## Industry Roadmap for Progress on Combating Antimicrobial Resistance

#### 20 September 2016, New York

"... we commit to:

Support the creation of open and sustainable clinical trial networks globally, with our expertise and experience. As proposed by the AMR Review, this would build on work started in Europe and US with the goal of improving the speed and efficiency of conducting clinical trials"

# Most significant attention **ever** from senior global political leadership in **2016**

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## Two world leaders and AMR advocacies will have disappeared



UK lost global AMR leadership in 2016

David Cameron calls for action on antibiotic resistance

2 July 2014 Last updated at 02:14 BST

Prime Minister David Cameron has called for global action to tackle the growing threat of resistance to antibiotics

Obama battles 'superbugs' with national plan

Updated 5:11 PM ET, Fri March 27, 2015













- The current tripartite arrangement among WHO, FAO and OIE offers promise but is unlikely to be sustainable given their other priorities.
- We need a new High-Level Coordinating Mechanism (HLCM).
- The HLCM should consist of WHO, FAO, OIE, the World Bank, relevant UN agencies and other international organizations, major multisectoral stakeholders, and global experts
- We need an organization leading this HLCM (Wellcome?)
- We need a G20 country taking forward the G20 recommendations (Germany?)

# ECRAID European Clinical Research Alliance on Infectious Diseases

## Our purpose and vision

Our purpose is to reduce the impact of infectious diseases on individual and population health.

Our vision is to efficiently generate rigorous evidence for new or improved diagnosis, prevention and treatment of infections and to better respond to infectious disease threats. This is facilitated by a European multidisciplinary clinical research network and innovative research approaches.

#### Focus on AMR and EID

## Antimicrobial resistance

- Fast completion of clinical studies;
- Largest need in bacterial infections (antibiotic resisitance)



Need for operational high quality largescale clinical research infrastructure with European coverage

Similar non-scientific barriers

Overlapping stakeholders

## Emerging Infectious Diseases

- Rapid initiation and completion of clinical studies;
  - Mostly virus infections



## **ECRAID Core Group**

#### **Coordination Team**



Herman Goossens
University Antwerp
Coordinator PREPARE



Marc Bonten
UMC Utrecht
Coordinator COMBACTE



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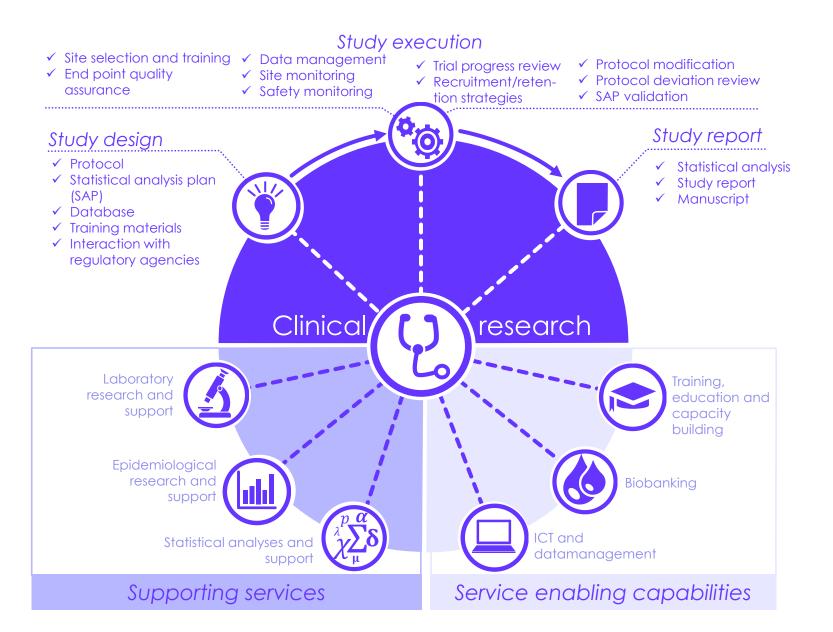


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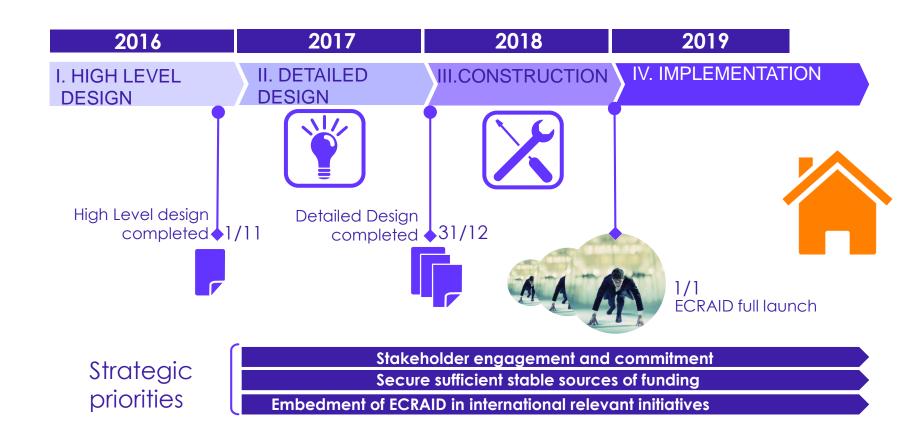
#### **Our services**



#### Clinical research

Phases: Phase I - IV **Scope:** Prospective and retrospective **Source:** industry-driven and investigator driven Pathogens: viruses, bacteria, protozoa Interventions: vaccines, diagnostics, therapeutics, medical devices, routine care, etc. Objectives: Prevention, treatment, diagnosis, screening, quality of life, health economic evaluation, epidemiological, etc. Types: randomized controlled trials, observational (analytical and descriptive), database, perpetual, platform trials, etc.

### **High-level Roadmap**



#### News

## 'European Antibiotics Awareness Day' wins 'European Health Award 2016' accolade

#### Eurosurveillance editorial team 1

1. European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden

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Article published on 29 September 2016



# WORLD ANTIBIOTIC AWARENESS WEEK

14-20 NOVEMBER 2016







**2016 CAMPAIGN TOOLKIT** 

#### **Examples of 2016 Activities**

#### Conversations:

 On Friday, 18 Nov: Join the <u>24-hour Global Twitter Chat</u> hosted by ECDC, WHO HQ, WHO Europe, and CDC

#### Sign up & Pledge:

- Sign <u>FAO's and WHO WPRO's AMR Pledge</u> ("I Use Antibiotics Responsibly");
- Become an <u>Antibiotic Guardian!</u> (Public Health England / WHO Euro / ECDC)

#### Events:

- On Monday, 14 Nov: <u>Teleclass</u> on new WHO recommendations to fight antimicrobial resistance; <u>Livestream</u> of FAO's "Antibiotics and You" awareness raising get together
- On Tuesday, 15 Nov: <u>CDC's webinar</u> on the "Core Elements of Outpatient Antibiotic Stewardship"; <u>Facebook Live event</u> hosted by Global Moms Challenge and Every Woman Every Child
- On Wednesday, 16 Nov: WHO-UN's World Antibiotic Awareness Week event:
   "Advocating for Appropriate Antibiotic Use."
- On Friday, 18 Nov: <u>Livestream</u> of EU-level launch event in Brussels

#### WWW.GEBRUIKANTIBIOTICACORRECT.BE

# ANTIBIOTICA GEBRUIK ZE GOED EN ENKEL ALS HET MOET!













**BAPCOC** 

ACCUEIL

QU'EST-CE QU'UN **ANTIBIOTIQUE?** 

UTILISEZ-LES **COMME IL FAUT** 

UNIQUEMENT **QUAND IL FAUT** 

**LES RISQUES** 

PARLEZ-EN

LIENS UTILES

**POUR LES ENFANTS** 

**POUR LES PROFESSIONNELS** 

#### LES **ANTIBIOTIQUES**

PRENEZ-LES COMME IL FAUT **ET UNIQUEMENT QUAND IL LE FAUT!** 



Une mauvaise utilisation des antibiotiques rend les bactéries plus résistantes. Par conséquent, les maladies graves ne peuvent plus être traitées correctement. Veillez donc à ce que les antibiotiques agissent encore lorsque vous en aurez réellement besoin













LISEZ "TANTE BIOTIQUE" EN LICNE



PARLEZ-EN À VOTRE MÉDECIN OU **VOTRE PHARMACIEN** 



**ÉCOUTEZ LES SPOTS** RADIO







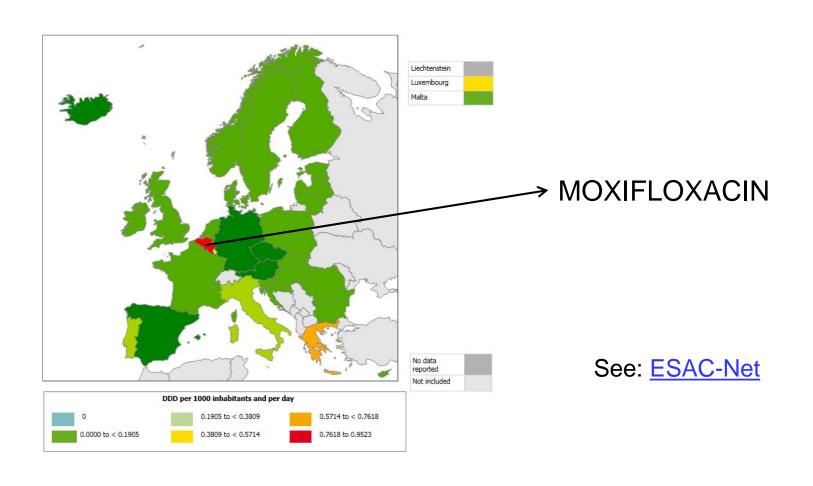


## BAPCOC National Action Plan 2014-2019 Achievements in 2016

- One health approach: integrated programmes and datasets on antimicrobial utilisation and resistance
  - Geintegreerde antibioticagids ambulante en ziekenhuissector. Online beschikbaar tegen 2018.
  - Project multi-resistentie door het mobile gen cfr-MUMOC
  - Prevalentie van colistin resistentie en plasmid-located mcr gene(s) bij enterobacteria van dier, mens en omgeving
- Targets for outpatients, inpatient and veterinary antibiotic use
  - Campagne sensibilisatie voor verantwoord antibioticagebruik bij dier en mens
  - E-learning module: preventie en behandeling van CA-UTI
  - Overleg FOD/RIZIV/BAPCOC targets ambulante praktijk (Hoofdstuk IV, Accreditatie, aflevering pillen i.p.v. verpakkingen...)



## Geographical distribution of the consumption of Third-Generation Quinolones (ATC group J01M) in the community and hospital sector in Europe, reporting year 2014



## BAPCOC National Action Plan 2014-2019 Achievements in 2016

- Quality measures/Audits
  - Audit antibioticaprophylaxe in de chirurgie (eind 2016)
  - ECDC en Global-PPS doel: elk ZH zal aan één van de twee protocollen deelnemen in 2017
- Education and Training
  - Cours interuniversitaire gestion de l'antibiothérapie UCL/ULB/ULG
- Engage with stakeholders
  - PAQs en VIP<sup>2</sup>
- Develop methods to monitor effects of antimicrobial stewardship strategies, policy and guidance interventions across the healthcare economy
  - UWI subgroep: UWI surveillance in ziekenhuizen begin 2017

#### **Budget 2016 (18 November 2016)**

- Sensibilisatiecampagne ter promotie van het verantwoord antibioticagebruik
  - winter 2016-2017 [RIZIV : 400.000€]
- Campagne handhygiëne [BFM B4: 125.000€]
- Financiering antibiotherapiebeleidsgroepen [BFM B5: 4.346.371€]
- Financiering ziekenhuishygiëne [BFM B4]:
  - verpleegkundigen: 9.748.327€
  - artsen: 6.968.890€
- Financiering regionale platformen [BFM B4: 22.310€]
- Financiering Noso-info [BFM B4: 35.000€]
- Studie PPS MDRO in WZC [RIZIV art 56: 125.135€]
- Updaten guidelines ziekenhuisgeneeskunde BVIKM [RIZIV art 56: 50.000€]
- Sensibilisatiecampagne AMCRA [RIZIV art 56: 38.600€]

#### Message of the 7th campaign

### All together, we can prevent infections!









#### Reflections of past year's initiatives and activities

- Very dedicated chairs and members of the BAPCOC working groups: THANK YOU!
- Very dedicated FOD staff: THANK YOU!
- Good financial support
- Lot's of frustrations
- Many problems and obstacles:
  - Burocratic country and regions
  - Lack of accountability
  - Rules, rules, rules
  - Structures, structures, structures
- But we will not give up.

## Thank you

www.antibioticguardian.com/dutch - www.antibioticguardian.com/french