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# Antimicrobial Resistance

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# Objectives

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At the end of this briefing, participants will be able to:

- Define Antimicrobial Resistance
- Describe the global burden of AMR with a focus on Asia Pacific
- Recall the economic burden of AMR

# What is Antimicrobial Resistance?

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- AMR occurs when Germs (like bacteria, viruses, etc) develop the ability to overcome the drugs (antibiotics) designed to fight them



# But how significant is AMR?

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- The consequences of AMR are many:
  - Difficult/impossible to treat infections like pneumonia, blood infections, sepsis in babies and adults
  - Inability to deliver modern medical care: Advanced surgeries, chemotherapy for cancers, organ transplantation etc become too dangerous to perform as all of those are complicated by infections-Now impossible to treat
  - Simple ailments become life-threatening- A broken leg could require amputation, a small skin wound could require multiple surgeries to clean it and could lead to death

# The Global Burden of AMR

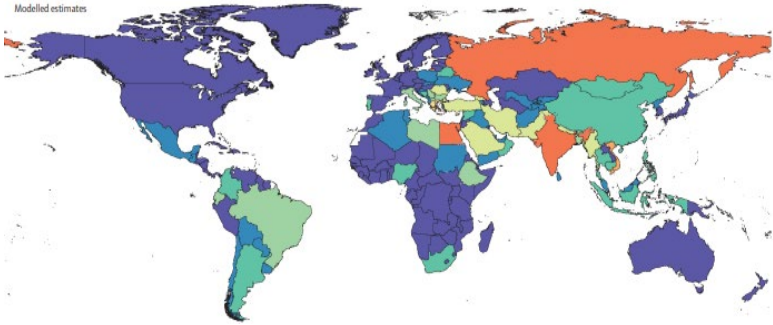
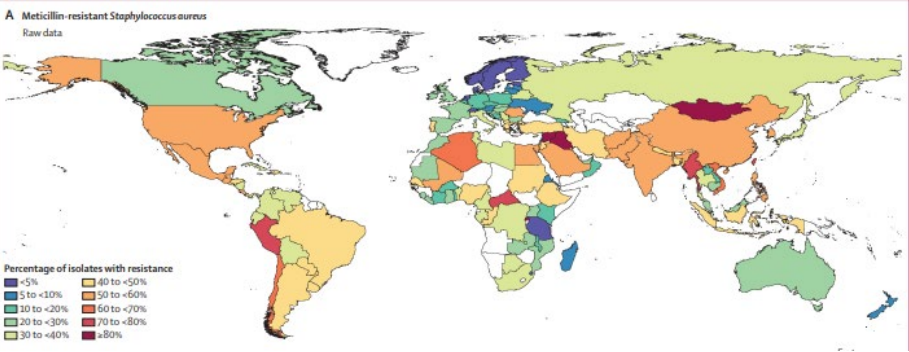
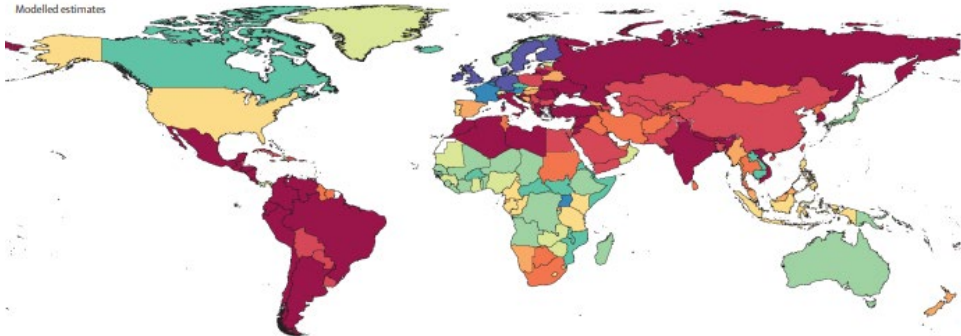
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- In 2019, 4.95 million deaths associated with bacterial AMR
- Highest burden-> Sub-Saharan Africa at 27 deaths per 100,000
  - Asia: 389 000 deaths
- Lower respiratory infections: >1.5 million deaths

[Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis Murray, Christopher J L et al.](#)  
[The Lancet, Volume 399, Issue 10325, 629 - 655](#)

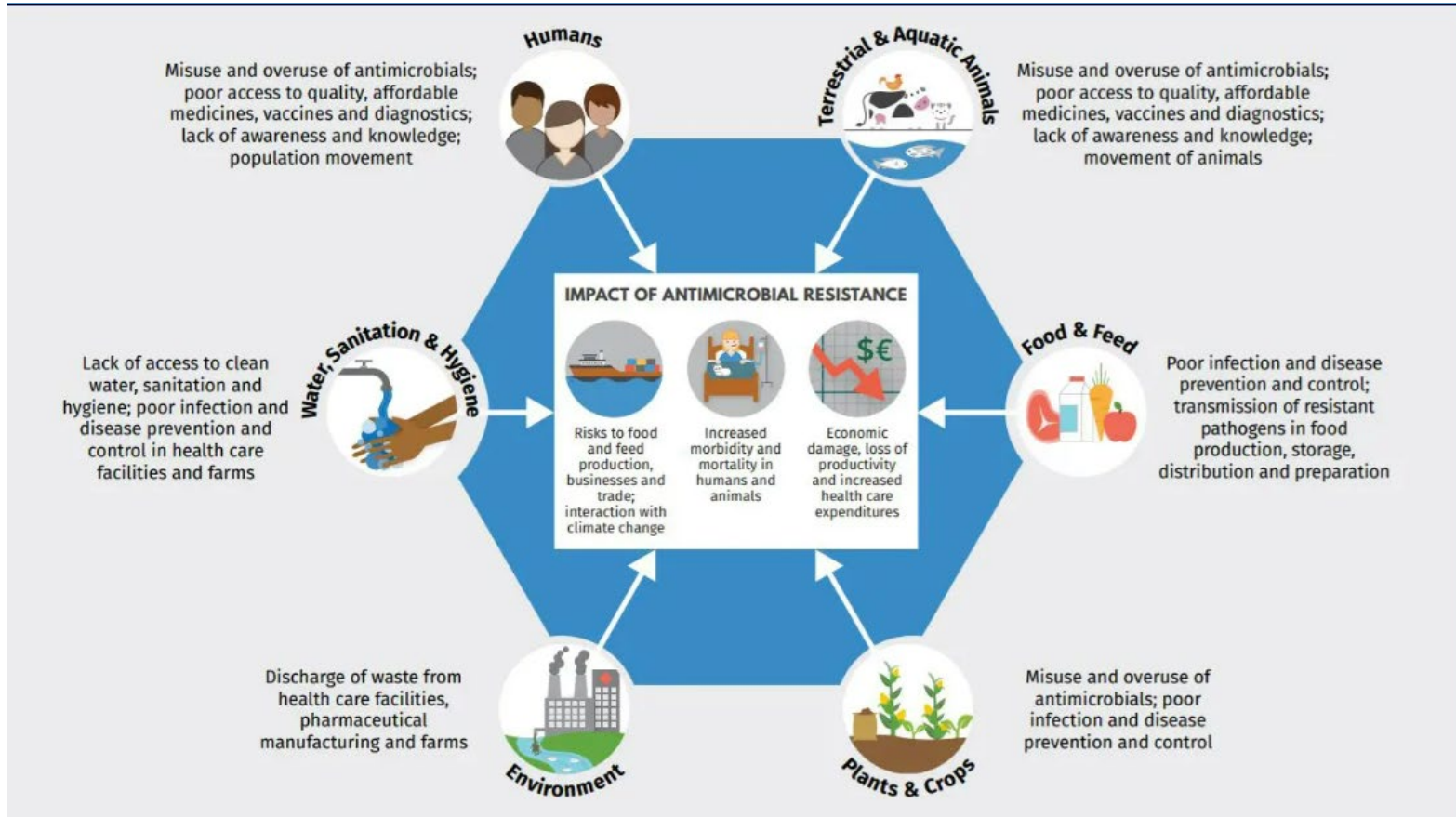


# The Global Burden of AMR



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# Drivers of AMR



# Financial burden of AMR

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- AMR will cause 3 trillion USD of GDP loss by 2030
- 1 trillion additional healthcare costs by 2050

# UN high level meeting

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- 2<sup>nd</sup> UN high level meeting on AMR in New York in September
- Resolution being negotiated currently
- Immediate national and global action is necessary

**Questions?**

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