

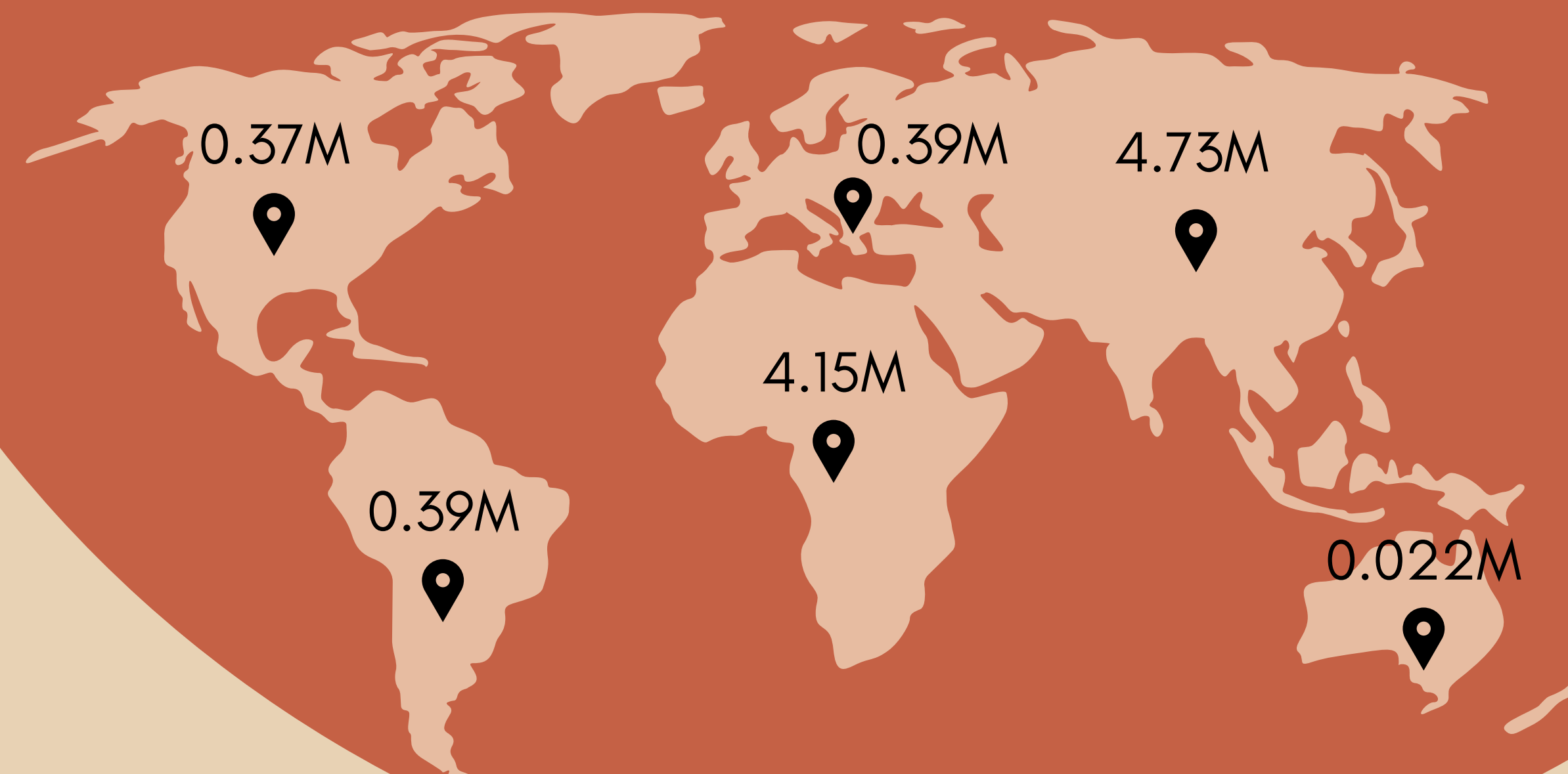
THE GLOBAL CRISIS OF ANTIBIOTIC RESISTANCE

DID YOU KNOW?

1.27
Million
Deaths in 2019

WERE CAUSED BY
ANTIBIOTIC RESISTANCE

AND IF NO ACTION WAS
TAKEN, BY 2050 THIS
NUMBER COULD REACH 10M.



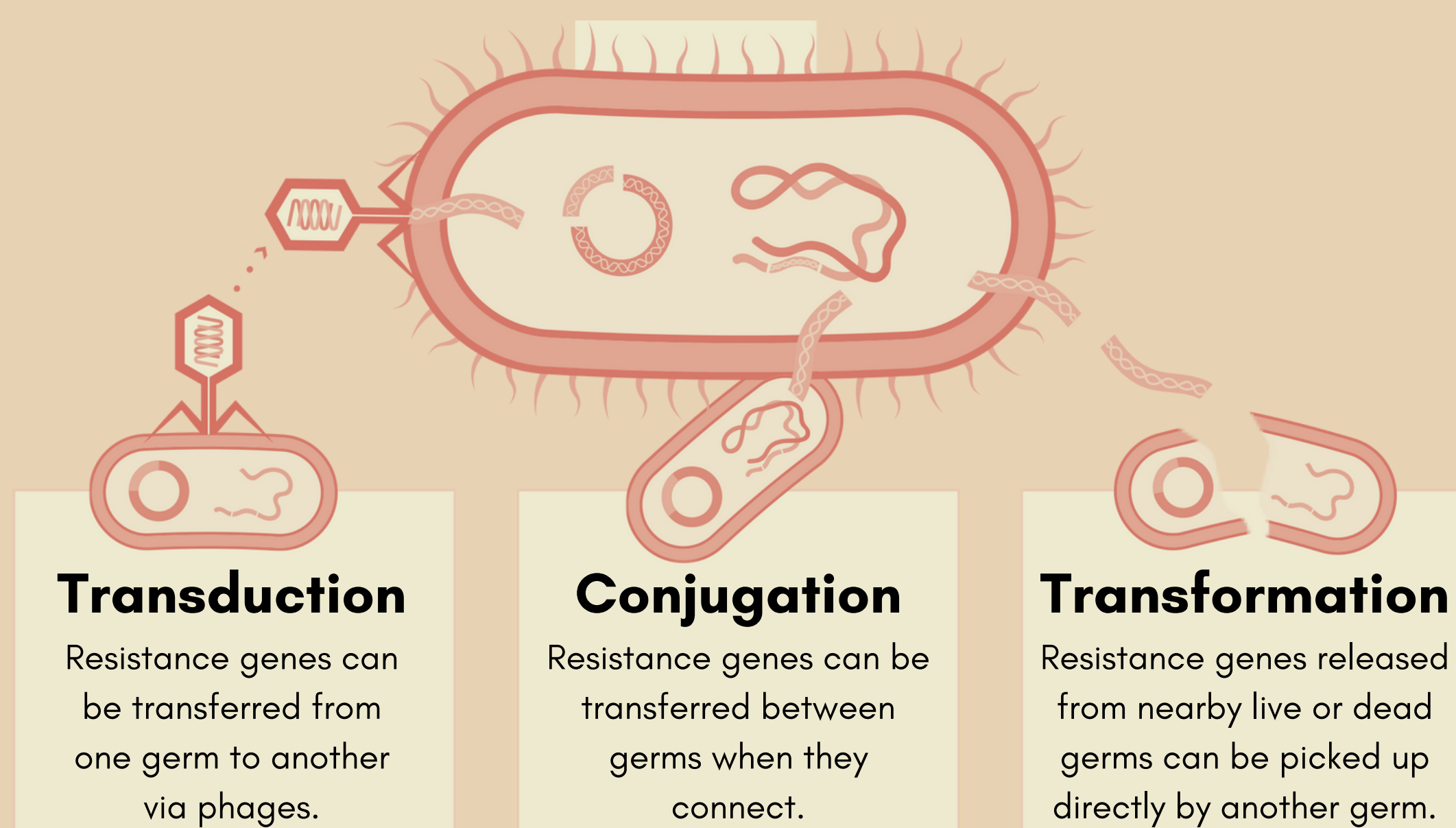
ABSTRACT

Antibiotic resistance has developed as one of the major urgent threats to public health causing at least 1.27 million deaths globally and approximately 5 million fatalities in 2019. If interventions to reduce its occurrence are not applied, resistant bacteria will spread everywhere leaving no single effective antibiotic.

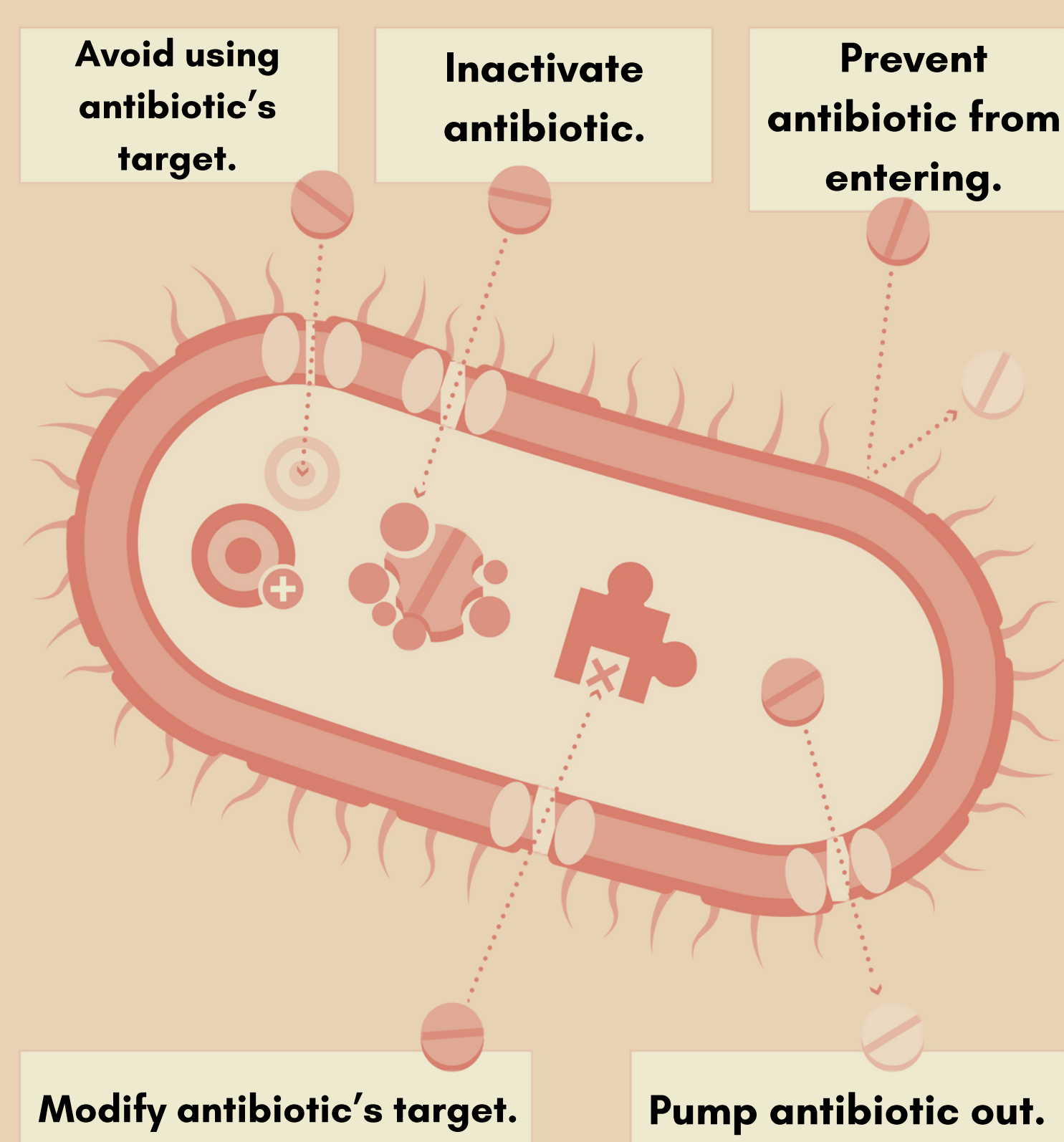
WHAT IS ANTIBIOTIC RESISTANCE ?

Antibiotics are medicines used to treat bacterial infections in both people and animals. Antibiotic resistance occur when bacteria mutate and change their genetic makeup in order to avoid being destroyed by antibiotic treatments, rendering antibiotic useless in treating infections.

HOW IS ANTIBIOTIC RESISTANCE TRANSFERRED ?



MECHANISMS OF ANTIBIOTIC RESISTANCE.



CAUSES OF ANTIBIOTIC RESISTANCE.

- Over prescribing of antibiotics.
- Inappropriate use of antibiotics.
- Inadequate infection control in health settings.
- Overuse of antibiotics in agriculture.
- Inadequate sanitation and hygiene.

MOST RESISTANT BACTERIA STRAINS IN UAE.

In a systematic published literature search from nine countries in the Arabian Peninsula it was shown that the following bacteria are the most resistant in the UAE:

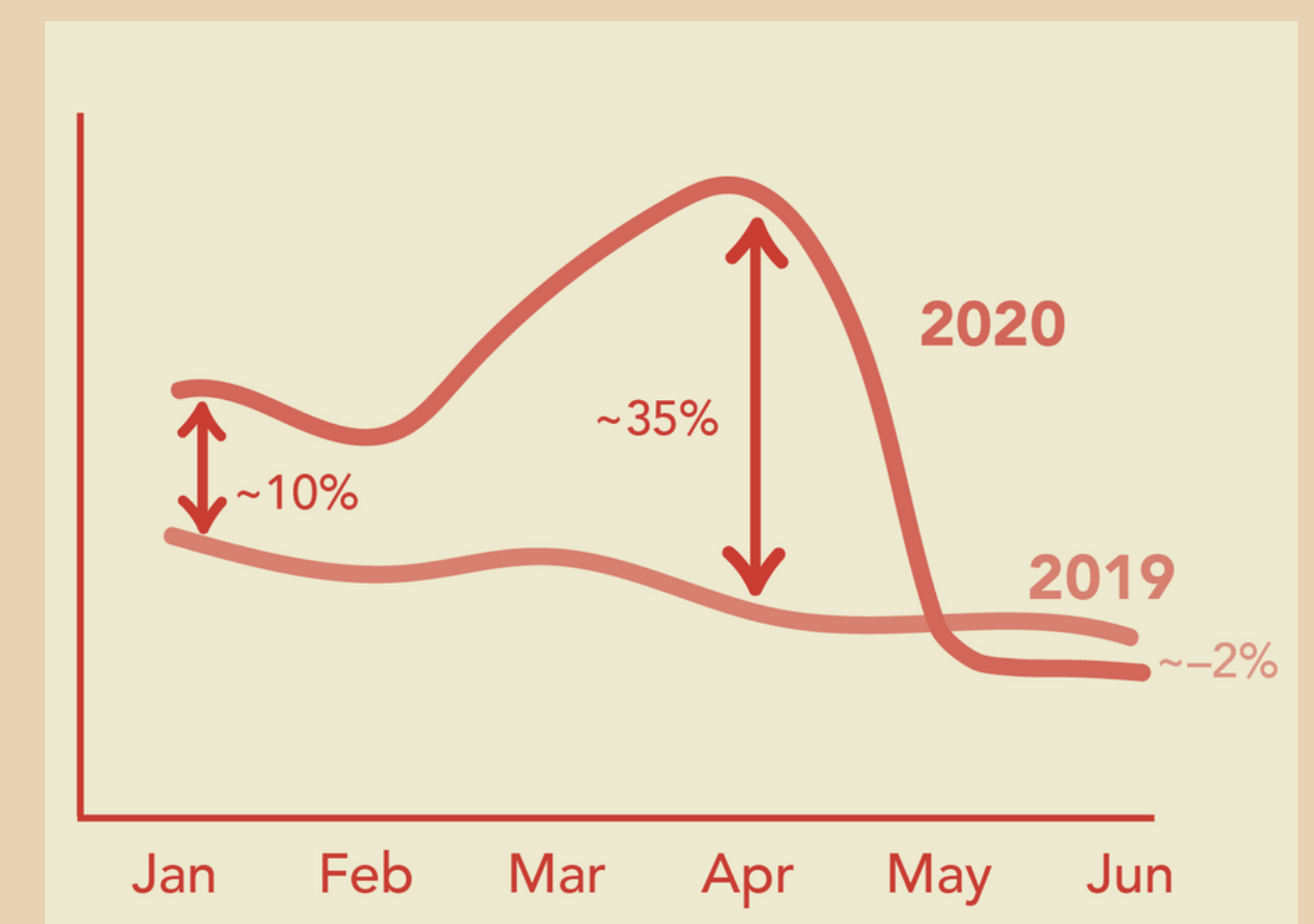
Acinetobacter baumannii

Mycobacterium tuberculosis

Staphylococcus aureus

ANTIBIOTIC RESISTANCE AND COVID19.

The CDC COVID-19 Impact on Antimicrobial Resistance, Special Report, concluded that the threat of antimicrobial-resistant infections is not only still present but has gotten worse specially after the misguided use of antibiotics in the beginning of the pandemic.



WHY SHOULD WE CARE ?

Antibiotic resistance is increasing to dangerously high levels. New mechanisms of resistance are spreading and threatening the ability to treat many infectious diseases.

So it is very important to control antibiotic resistance to avoid:

Prolonged hospital admissions.

High medical expenses.

Serious side effects.

More deaths.

ANTIBIOTIC STEWARDSHIP AND OUR ROLE AS PHARMACISTS.

Antibiotic stewardship is the effort to measure and improve how antibiotics are prescribed by clinicians and used by patients by using a set of core elements and guidelines to be followed.

Pharmacists can play a crucial role in preventing the spread of antimicrobial resistance by raising awareness, avoid dispensing antibiotics for non-bacterial infection, and provide counseling to the patients to ensure optimal use of antimicrobial agents.

Some counseling points we can use:

Take your antibiotic at the same time each day

Use antibiotic exactly as prescribed

Don't share antibiotics with others

Take the full course.

Together, these efforts will help save antibiotics and protect the health of patients today and for generations to come.

References:

2022. [online] Available at: <https://www.cdc.gov/drugresistance/about.html> [Accessed 27 September 2022].
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