



# Stop AMR Global Media Monitor

29 August – 4 September 2020

[www.stopamr.eu](http://www.stopamr.eu)

## United Nations Sustainable Development Goals on Antimicrobial Resistance

AMR impacts the Sustainable Development Goals (SDGs) for greater health, economic growth, and inequality. 40% of the indicators (90/244) relate to AMR. One-way AMR disrupts Goal 1 (No poverty) is that AMR might force an additional 24 million individuals into poverty by 2020.

To prevent costs by 2030, it is vital to take AMR seriously. However, when the 2030 goals and indicators were formulated, AMR was ignored. The main argument for not including AMR as a global threat was that the issue "lacks specificity". In other words, AMR was evaluated for its relevance to the 17 goals but wasn't considered an important indicator due to "limited data availability".

In May 2019, the UN Secretary General stated: "*Antimicrobial resistance is a global threat to health, livelihoods and the achievement of the SDGs*". But, even if AMR impacts children, adults, the elderly, animals, the environment, the climate, etc., resistant infections due to antibiotics are "on hold for future reviews" as they lack specificity for inclusion.

Source: [McKinsey and Company, 2018](#), [\(WHO, 2017\)](#), [European Commission \(Annex 5\), 2020](#), [ReAct, 2019](#)

## Interview with Pew and Global Antibiotic Research & Development Partnership (GARDP)

In an interview by Pew with Dr. Manica Balasegaram, Executive Director of the Geneva-based non-profit Global Antibiotic Research & Development Partnership (GARDP), he explains how non-profits have an important role to play in the fight against AMR by mobilizing public-private partnerships that supply funds to smaller companies, and providing a public health perspective and technical expertise to help accelerate

development of novel antibiotics. He also highlights that although no single sector can solve the challenges of antibiotic resistance, governments are uniquely positioned to address the currently broken antibiotic market system.

Dr. Balasegaram also commented on the effects of the COVID-19 pandemic on AMR action: "*Going forward, we must think of the fight against superbugs as an essential part of pandemic preparedness. I hope that COVID-19 has created a greater sense of urgency to act now. If we do, we'll save lives and save money.*"

Source: [PewTrusts](#), 3 September 2020

## A wearable, portable invention offers options for treating antibiotic-resistant infections

A new paper in the journal *Frontiers in Bioengineering and Biotechnology* by a team of innovators from Purdue University has developed a wearable solution that allows a patient to receive treatment without leaving home.

"*We created a revolutionary type of treatment to kill the bacteria on the surface of the wound or diabetic ulcer and accelerate the healing process*," said Rahim Rahimi, an assistant professor of materials engineering at Purdue. "*We created a low-cost wearable patch and accompanying components to deliver ozone therapy.*"

Ozone therapy is a gas phase antimicrobial treatment option that is being used by a growing number of patients in the U.S. In most cases. The ozone treatments require patients to travel to a clinical setting for treatment by trained technicians. "*Our breathable patch is applied to the wound and then connected to a small, battery-powered ozone-generating device*," Rahimi said. "*The ozone gas is transported to the skin surface at the wound site and provides a targeted approach for wound healing. Our innovation is small and simple to use for patients at home.*"



**From:** [Medical X Press](#), 3 September 2020  
**Source:** [Frontiers in bioengineering and Biotechnology](#), 19 May 2020

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#### **4th AMR Conference pushes for action on AMR**

From 24-28 August, around 450 international experts ranging from medium-sized companies in biotech and big pharma to human and veterinary medicine experts, came together (virtually) during the 4th edition of the AMR Conference, organised by scientific publisher BIOCOM AG. Through high-level panels and expert sessions, all these international players in the field of AMR were able to discuss the latest trends and developments.

One of the most important issues on the agenda were the effects of COVID-19 on the AMR ecosystem, which participants highlighted was another brewing pandemic crisis that has long been there but doesn't get the same attention. Discussions also took place around the need for policy measures that improve the market conditions that at the moment critically challenge companies in the field, such as new pull incentives governments can use to boost demand.

Source: [European Biotechnology](#), 1 September 2020

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#### **Treating COVID-19 may increase antibiotic resistance**

Experts at the Journal of Antimicrobial Chemotherapy found that the use of antibiotics in individuals with COVID-19 may result in increased AMR. The majority of patients in the U.K. with COVID symptoms were prescribed antibiotics, in case the patient had an overlying bacterial infection.

Further research revealed that the increased use of antibiotics during the pandemic may also be placing an added burden on wastewater treatment works. This could lead to raised levels of antibiotics within the U.K.'s rivers and coastal waters, which may in turn result in a rise in AMR.

A professor at the School of Biomedical Sciences concluded that: "it is clear that mass prescribing of

antibiotics will lead to increased levels in the environment, and we know that this can select for resistant bacteria. Studies like this are essential so that we can plan how to guide antibiotic prescription in future pandemics."

Source: [Medical News Today](#), 29 August 2020

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#### **Research highlights the promise of bacteriophage therapy**

A new paper in *Open Forum Infectious Diseases* lays out some of the lessons learned from cases of antibiotic-resistant infections treated with bacteriophage therapy. For the paper, researchers with the Center for Innovative Phage Applications and Therapeutics (IPATH) at the University of California, San Diego, reviewed nearly 2 years of consult requests for bacteriophage therapy and examined outcomes from the first 10 cases at the center treated with intravenous (IV) bacteriophage therapy.

Of the 785 requests from patients and physicians, 82% were for treatment of bacterial infections, primarily those caused by *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Mycobacterium abscessus*. Bacteriophage therapy was administered to 17 of 119 patients in whom it was recommended, and the median time from request to administration was 170 days. Review of the first 10 cases, seven of which had successful outcomes, showed that administration of IV and nebulized bacteriophage therapy appears safe, may be safely administered by outpatients, and can be used to suppress infections. The review also found that bacterial resistance to bacteriophage therapy can develop but can be overcome with new phages, that combining phages and antibiotics can lead to successful outcomes despite the presence of in vitro antibiotic resistance, and that treatment failure can occur despite in vitro phage susceptibility.

"In conclusion, our experience with BT [bacteriophage therapy] for a variety of indications highlights the promise of BT for multiple clinical indications," the authors of the paper wrote.

Source: [CIDRAP](#), 27 August 2020

From: [Open Forum Infectious Diseases](#), 27 August 2020

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