



AMR in Livestock Could Threaten Food Security for Two Billion by 2050

(Source: An article by Ayenat Mersiefor Devex Newswire)

A new study finds that superbugs arising from drug resistance could threaten not just human health but the global food supply if swift action is not taken to thwart the threat.

Antimicrobial resistance is drawing increasing global attention, with world leaders making concrete commitments to tackle the crisis at a high-level meeting of the United Nations General Assembly.

Under a business-as-usual scenario, in which no action is taken to stop the increase, the losses to livestock production are equivalent to the consumption needs of 746 million people annually, with annual gross domestic product losses of US\$40 billion — or a cumulative US\$575 billion by 2050, according to a new report series called EcoAMR.

In a more pessimistic scenario in which drug resistance doubles for diseases inflicting livestock, the report finds that global GDP losses could amount to nearly US\$1 trillion and put the food supply of about 2 billion people at risk.

Drug resistance in humans, along with the potential spread of resistant pathogens from animals to humans, could add more than US\$1 trillion more in GDP losses.

Swift action could make all the difference. Just a 30% reduction in animal antimicrobial use within five years could cumulatively raise global GDP by US\$120 billion by 2050 compared to the business-as-usual forecast.

“The threat of drug-resistant infections to human health is widely recognized, but the impact of AMR on the health of animals, our environment and our economy cannot be overlooked,” Emmanuelle Soubeyran, director-general of the World Organization for Animal Health, or WOAAH, said in a press release.

Many farmers could stand to drastically reduce antibiotics use: A 2019 WOAAH study showed that around one-fifth of antimicrobials used in animals were considered the highest priority and critical for human health. However, the World Health Organization recommends that high-priority antimicrobials not be used for the treatment of livestock with infectious diseases because it's crucial to protect their ability to treat humans.

The research series was developed by WOAAH, the Institute for Health Metrics and Evaluation, and the Center for Global Development. The other reports in the series also forecast the potential fallout from AMR in terms of its impacts on the global economy and human health.

Farmers first began using antibiotics to protect their livestock from illness in the 1940s. In many countries, their use was unregulated and did not require a prescription. Soon, scientists discovered that antibiotics also helped livestock grow bigger more quickly, which further encouraged their overuse.

Since then, some countries have begun to restrict the use of antibiotics on livestock, especially their use as growth promoters. Sweden led the way in 1986, the European Union implemented its own ban in 2006, and the United States announced restrictions in 2017 — although critics argue that U.S. farmers still use them in this way thanks to legal loopholes.

Indeed, global use of antibiotics in livestock rearing has actually declined by 13% in the last three years alone. But these figures overlook

(continued on Page 2)

Around the Globe...

- ◆ US drone maker **Zipline** and the government of Nigeria have struck a deal that will see the company take a central role in moving medical products such as blood and vaccines around the country. The partnership will “raise the quality of healthcare services available to all Nigerians,” said Nigerian health minister *Ali Pate*, as part of the announcement on the sidelines of the U.N. General Assembly. Zipline has broken through as one of the largest players in Africa. Valued at US\$4 billion by Silicon Valley investors, it began using drones to deliver medical products in Rwanda in 2014 and has extended its presence to Ghana, Kenya and Côte d'Ivoire. In 2022, it began deliveries of non-medical products for online retailer Jumia in Ghana. As part of the overall project, IFPW Foundation will sponsor an implementation of STEP 2.0 to strengthen change management and leadership skills within a cohort of public health professionals that will be interfacing with the expanded drone network. This instance of STEP will also include more technical information on the Zipline systems and technologies themselves. Please contact IFPW Foundation if your organization would be interested learning more about the associated private sector coaching opportunities.

- ◆ The **Fight the Fakes Alliance (FTFA)** announced the publication of a white paper on [Identifying Critical Enablers in the Prevention, Detection, and Response to Substandard and Falsified Medicines](#) (click for link), and available on FTFA's website here. The report assesses the current challenges in the global fight against SFs, and offers actionable solutions to address what is one of the fastest growing criminal enterprises in the world responsible for over one million deaths annually, including: (1) advocating for the expansion of education and awareness among all stakeholders, in particular consumers, healthcare providers, and policymakers, regulators, and custom officers; (2) facilitate collaboration and coordination on all levels, leveraging existing platforms and legal instruments; (3) advance the development of anti-SFs initiatives at global, regional, and national levels; and, (4) strengthen law enforcement, infrastructure, and capabilities to prevent

(continued on Page 2)

Over 1.3 Million Deaths Averted in 2023 Due to Gavi Supported Vaccination Programs

(Source: A Gavi The Vaccine Alliance Press Release)

Over 1.3 million future deaths were averted in 2023 thanks to vaccination programs supported by Gavi, the Vaccine Alliance. This achievement, which translates to over 2 lives saved every minute of the day, is highlighted alongside historic progress in the battle to prevent cervical cancer through HPV vaccinations and a record level of co-financing from the countries Gavi supports in Gavi's 2023 Annual Progress Report which is published today.

With 69 million children immunized in 2023, the second highest number of children immunized in one year ever, the report details that the number of children that have now been protected with routine childhood vaccines since Gavi was founded in 2000 has now exceeded 1.1 billion. The economic benefits of these vaccinations to Gavi-supported countries

(continued on Page 2)

AMR (cont.)...

a broader trend in which their use is decreasing in some regions such as the EU, and increasing in others, especially in lower- and middle-income countries.

The scale of the problem of AMR in livestock is already being seen in lower-income countries: A study published in 2023 found that almost all pork and poultry products collected from leading Kenyan retailers had high levels of bacteria, almost 40% of which were multidrug resistant.

Despite the alarming figures, WOAHA offered several recommendations to mitigate the potential impacts of AMR in livestock. These include prioritizing infection prevention health interventions for animals (including vaccines); enforcing formal prescription practices; phasing out the use of antimicrobials for growth promotion; strengthening and institutionalizing surveillance systems that document the spread of AMR; better quantifying the relationship between AMR in livestock and its impacts on human health; and improving education and awareness among farmers.

Technological innovations can also have a role to play. Artificial intelligence, for example, can help farmers monitor herd health in real-time, surveilling parameters like weight, temperature, and variations in gait which can help detect diseases early. That means farmers can employ a more targeted approach to medicine distribution and limit disease transmission.

Ensuring there's adequate funding for proactive initiatives will be paramount. Still, it is vital to ensure that the public funding allocated to AMR takes a holistic view of the problem and does not focus solely on human health while neglecting animal health.

Gavi (cont.)...

since 2021 stands at US\$52 billion, the report says.

Other highlights of 2023 for the Alliance include major progress against cervical cancer, with 14 million girls vaccinated against HPV through Gavi support. This number is greater than the previous ten years combined. Gavi has now helped prevent over 600,000 future deaths from cervical cancer alone and is on track to reach 86 million girls by the end of 2025.

In a sign that Gavi-supported countries increasingly recognize the importance of immunization programs, the amount of domestic resources mobilized in 2023, US\$215 million, was the largest ever. This level of financial ownership – a key component of Gavi's approach to sustainability and country ownership – was reaffirmed as 55 vaccination programs that were initially launched with Gavi funding are now fully financed by national governments as of 2023.

"By vaccinating children and the vulnerable, we not only enable millions of people to lead healthier, more fulfilled lives, we contribute to families' prosperity, to strong and more stable communities and to economic development that is already translating into countries' paying more towards their immunization programs than ever before," said José Manuel Barroso, Chair of the Gavi Board.

"Gavi countries are on the front line of climate change, with many vulnerable to economic instability and geopolitical tension: for them to be able to immunize more children, not to mention expand important programs such as HPV, deserves recognition," said Dr Sania Nishtar, CEO of Gavi, the Vaccine Alliance. "Fully funding Gavi for its next five-year period will be crucial in expanding these hard-won gains and helping countries further along the pathway to fully sustaining their own immunization programs."

More than halfway through its current strategic period, Gavi is on track to meet the majority of its mission indicators. This includes reaching

300 million children between 2021 and 2025; reducing under-five mortality by 10%; helping to prevent 7–8 million future deaths; reducing the overall health burden on countries that vaccine-preventable diseases impose; and delivering economic benefits of US\$80–US\$100 billion.

However, the Vaccine Alliance remains behind its 2025 target of reducing the number of 'zero-dose' children – those who have never received a single vaccine – by 25%. While many countries are reaching more children than ever, the COVID-19 pandemic, an increasing birth cohort combined with the challenges of climate and fragility are making it harder to reach the most vulnerable, and in 2023 the number of zero-dose children rose to 11 million.

Achieving the Alliance's ambitious goal will require global health partners, working with governments and communities, to collaborate and innovate.

As Gavi looks towards its next strategic period from 2026–2030, meeting its funding target of US\$ 9 billion will be essential to expand protection against more diseases, ensure the most vulnerable populations are not left behind and protect the world against future disease outbreaks and pandemics.

Around the Globe (cont.)...

SFs to enter the supply chains of medical products and to ultimately reach consumers.

- ♦ The **World Health Organization (WHO)** announced that it had officially granted its first approval for the use of a vaccine against mpox (formerly known as monkeypox) in adults. The organization hailed this as a significant step towards controlling the disease, particularly in Africa where the virus has been more widespread. The vaccine, developed by Danish manufacturer **Bavarian Nordic A/S**, received WHO's authorization, allowing global health agencies such as **Gavi**, **the Vaccine Alliance**, and **UNICEF** to purchase and distribute it. However, WHO cautioned that supplies remain limited, as Bavarian Nordic is currently the sole producer of the vaccine. South Africa's president on Tuesday called for the urgent deployment of vaccines and medical countermeasures to combat the growing threat of mpox, particularly in Africa. Speaking at the UN General Assembly in New York, *Cyril Ramaphosa* highlighted the dangers posed by pandemics and endemics, including mpox, which has been spreading rapidly across the continent.

- ♦ Global pharmaceutical companies are ramping up a push for early cancer detection as a key step to enhance treatment of the disease across Africa. **AstraZeneca**, Chinese genomics first **BGI Genomics**, and the **World Health Organization (WHO)** have all rolled out major early detection programs on the continent in recent months. Africa faces one of the world's highest cancer mortality rates with 88.9 deaths per 100,000 incidences, according to the WHO. The number of annual cancer deaths in Africa is projected to double to more than one million by 2030, unless urgent action is taken.

- ♦ African leaders met on the sidelines of the **UN General Assembly** and called for a concerted effort to avert a funding crisis in the fight against malaria. The African continent is facing significant funding gaps due to the ongoing global financial crisis and the impact of climate change. Meeting host, **The African Leaders Malaria Alliance**, said if malaria funding continues to shrink, there will be an expected additional 112 million cases and some 280,000 deaths by the year 2029. Africa already accounts for an estimated 95% of the global cases — and 97% of deaths. Nigeria accounts for nearly a third of that burden.

(Sources: Associated Press, MSN, Press Releases and Voices of Africa)