Photo: sasint, Pixabay

STRATEGIC PLAN

2019-2023

ReAct

Action on Antibiotic Resistance

CONTENT

Text: ReAct - Action on Antibiotic Resistance Graphic design: Therese Holm, ReAct Print - KPH, Uppsala, Sweden 2019

ReAct - Action on Antibiotic Resistance

Created in 2005, ReAct was one of the first international networks established to tackle antibiotic resistance. It was one of the first actors to articulate the complex nature of the problem and its drivers and promote a holistic view of the challenges and solutions that needs to engage all segments of society.

ReAct believes that access to affordable and effective treatment and prevention of bacterial infections is a core component everyone's right to health. The core focus of ReAct's work is on developing sustainable solutions to tackle antibiotic resistance with a focus on low- and middle-income countries.

ReAct seeks to tackle antibiotic resistance by influencing the policies and practices of non-governmental organizations, social movements, governments, the pharmaceutical industry and scientific, medical and local communities that grapple with the drivers and consequences of antibiotic resistance.

ReAct focuses particularly on antibiotic resistance, which even within the broader international response to antimicrobial resistance has been identified as the most pressing public health concern.

ReAct generates change through evidence-based advocacy, by translating scientific evidence into policy. We share information generated through our on-the- ground partnerships, pilots and programs. We also convey strategic information gathered from our extended network - including our active engagement and collaboration with international institutions and civil society.

ReAct seeks to provide information based on up-to-date scientific evidence to our networks and partners. We believe that addressing antibiotic resistance in a sustainable and environmentally appropriate manner requires fundamental changes in both the behavior of people and governments. This includes fundamental changes in both management and use of antibiotics in health care and food production systems.

Photo: Stevebp, Pixabay

ANTIBIOTIC RESISTANCE
- a threat to sustainable development

Effective antibiotics are critically important for providing basic healthcare and treating common infections such as pneumonia and gonorrhea. Bacteria becoming increasingly resistant threaten the continued effect of antibiotics. Without effective antibiotics, modern medicine – cancer treatments, surgery, care of preterm babies – will also be threatened and the world could risk reversing important advances in global public health achieved over the last 70 years.

Antibiotic resistance is not a future threat. The world already faces certain infections that are completely resistant to all existing types of antibiotics. Every year antibiotic resistance, including drug-resistant tuberculosis, claims more than 750,000 lives.

While antibiotic resistance affects all of us, people living in low- and middle-income countries will feel the consequences the most. The World Bank has estimated that antimicrobial resistance (including bacterial infections, HIV and malaria) can cause countries to lose more than 5% of their GDP which may push up to 28 million people into poverty by 2050. A loss of effective antibiotics would also seriously threaten the achievement of several of the Sustainable Development Goals.

Antibiotic resistance cannot be eliminated – it can only be managed, as all antibiotic use drives resistance. Achieving progress hinges on the issue being given a high level of political priority so that the world can move from words on paper to sustained action.

54 Billion

USD per year is the cost of suboptimal use of antibiotics. This is 0,9% of global health expenditures.

Photo: Shutterstock

ANTIBIOTIC RESISTANCE at a glance

Antibiotic resistance kills. 214,000 newborns are estimated to die every year from blood infections caused by resistant bacteria. In low- and middle-income countries, around 40% of community-acquired sepsis in newborns was shown to be caused by pathogens resistant to currently recommended WHO regimens.

Antibiotic resistance spreads silently across the world. More than 60% of the populations in some areas carry multidrug-resistant bacteria in their normal bacterial flora.

Antibiotic resistance is costly. The median additional cost to treat a resistant bacterial infection in India is around 700 USD, equal to over one year's wages for a rural worker. Novel treatments for multidrug-resistant infections can cost up to tens of thousands of dollars, making them unaffordable for many.

The poor are most affected. People living in poverty in low- and middle-income countries will be hit harder by increasing costs of medical treatment due to the spread of antibiotic resistance.

Underuse of antibiotics still claims more lives than resistance to antibiotics. If effective treatment for pneumonia could be universally provided, close to half a million deaths of children under 5 could be avoided.

Multiple factors drives resistance. Antibiotic resistance is driven by many factors, ranging from the spread of infectious diseases and lack of water and sanitation, to overuse of antibiotics for both humans and animals.

Everyone can do something. The challenge of antibiotic resistance will have to involve people at all levels – policy makers, health professionals and the general public.

ReAct's role in the ABR landscape

Photo: Sanghamitra Sarker, Photoshare

ReAct was one of the first international networks established to tackle antibiotic resistance (ABR), and one of the first to articulate the complex nature of antibiotic resistance and its drivers, while calling for a holistic view of the problem and solutions that engage all segments of society.

From novel antibiotics to access for patients

Throughout its years of existence, ReAct has been a driving force behind many of the key advances in the field of antibiotic resistance. Early on, working with the European Medicines Agency and the European Centre for Disease Prevention and Control, ReAct documented the lack of novel classes of antibiotics in the research & development pipeline.

Later on, ReAct has also been one of the key actors to articulate the need to simultaneously address the dual challenges of over-use and lack of access to effective and affordable antibiotics. Starting already in 2011, ReAct has held several meetings on this topic and has been very vocal on the need to include perspectives from low- and middle-income countries.

ReAct also championed the concept of delinkage for the development of new affordable and responsibly managed antibiotics which was included in the UN Political Declaration on Antimicrobial Resistance adopted by the UN General Assembly in 2016.

Global and local – working together

One of ReAct's assets is its strong network across continents, which enables cross-talk between global and local processes. ReAct is able to bring an on the ground perspective to high-level processes, and bring back important issues to mobilize civil society and others around.

ReAct has worked closely with WHO, from advocating for the development of the WHO Global Action Plan on Antimicrobial Resistance adopted in 2015 to providing expert inputs into the Tripartite Monitoring and Evaluation Framework on AMR. ReAct has also worked directly with the WHO on numerous occasions, such as creating a stakeholder analysis of actors in the ABR field, analysing antibiotic marketing and promotional practices, developing a stewardship manual, co-organising a global design competition on antimicrobial stewardship in resource-limited settings and much more.

In countries, ReAct has been supporting governments in their policy processes but also with technical support. This has taken the form of both hands-on support in e.g. developing stewardship programs, but also through the development of an on-line resource repository, the ReAct Toolbox. Countries assisted include India (state of Kerala), El Salvador, Ghana, Zimbabwe, Zambia, Kenya and several other countries across sub-Saharan Africa. This work continues on as countries move further into implementing their National Action Plans.

It is about planetary health

Reframing the narrative of "war on bacteria" to a more appropriate one by addressing antibiotic resistance as an issue of planetary health has also been a signature approach taken by ReAct. This logically led to formulating antibiotic resistance as a development issue with clear relevance for achie-ving the Agenda 2030 on Sustainable Development. ReAct's white paper on AMR and the SDG was one of the first on the subject and has been referred to by many as a key document.

ReAct has championed a range of smaller innovative pilot projects on educational tools for behavioural change for thousands of school children and teachers in Ecuador. More recently, ReAct's work in southern India has been focusing towards reducing unnecessary antibiotic through championing concepts like "antibiotic-smart communities".

Coalition as a key policy voice

ReAct has been a key convener of civil society, technical agencies and go-vernments, both at the annual ReAct Africa Conference, at major conferen-ces on health and environment enga-ging indigenous community leaders across Latin America, and in a Bang-kok workshop focused on globalizing food campaigns and their response to AMR.

Recognizing the need to work across sectors, ReAct helped to found the Antibiotic Resistance Coalition, comprised of more than 25 civil society organizations from North and South. Now serving as the Secretariat for the Coalition, ReAct has organised a civil society strategy meeting with the South Centre and Third World Network in 2018, organised the WHO-NGO dialogue on antimicrobial resistance several years in a row and coordinated ARC input to several processes such as the Global Development and Stewardship Framework and the UN Interagency Coordination Group on Antimicrobial Resistance.

A unique global network on antibiotic resistance

Today, ReAct continues to be one of very few fully ABR-dedicated net-works in the world. With its unique network-structure, and by being based on five different continents, ReAct is able to work at the local, national and international level and bring in relevant perspectives from high, middle and low-income countries.

By insisting on the combination of a high level of technical and scientific expertise and by focusing on addressing challenges and finding solutions for resource scarce contexts, ReAct fills a critical niche in a field with an increasing numbers of actors.

In the coming years, this work will serve as a strong foundation to enabling greater collective action that ensures sustainable and equitable access to effective antibiotics for all.

Photo: Kato James, Photoshare

A world free from fear of untreatable infections

Our vision

A world free from fear of untreatable infections.

Our mission

To enable collective action that ensures sustainable and equitable access to effective antibiotics for all.

Our values

We believe that sustainable access to effective antibiotics is part of everyone's right to health.

We view antibiotic effectiveness as an essential public good and as a non-renewable resource.

We encourage context-specific solutions to account for the diversity of systems of health care, cultural practices, resource availability, geography and other factors.

We promote an ecosystem approach to antibiotic resistance to replace the dominant war metaphor of bacteria as our 'enemy', with an understanding of the essential role of microbes and microbial ecology in the health of humans, animals and the planet.

We are independent of the pharmaceutical industry and do not accept any financial support from it.

Ways of working

Evidence and practice: We generate and translate evidence, including by identifying, innovating and sharing best practices.

Communication: We raise awareness through innovative communication strategies, movement and coalition building and by using our convening power.

Policy and advocacy: Through our own experiences and our work with others, we develop evidence-based policy and engage in advocacy toward governments, industry, institutions and other relevant stakeholders.

WE ALL NEED TO ACT TO PRESERVE EFFECTIVE ANTIBIOTICS.

Photo: Brendan Bannon, Photoshare

Linking the global with the local

ReAct Nodes

ReAct is based on five continents. Together we work to enable and inform global, national and local action on antibiotic resistance.

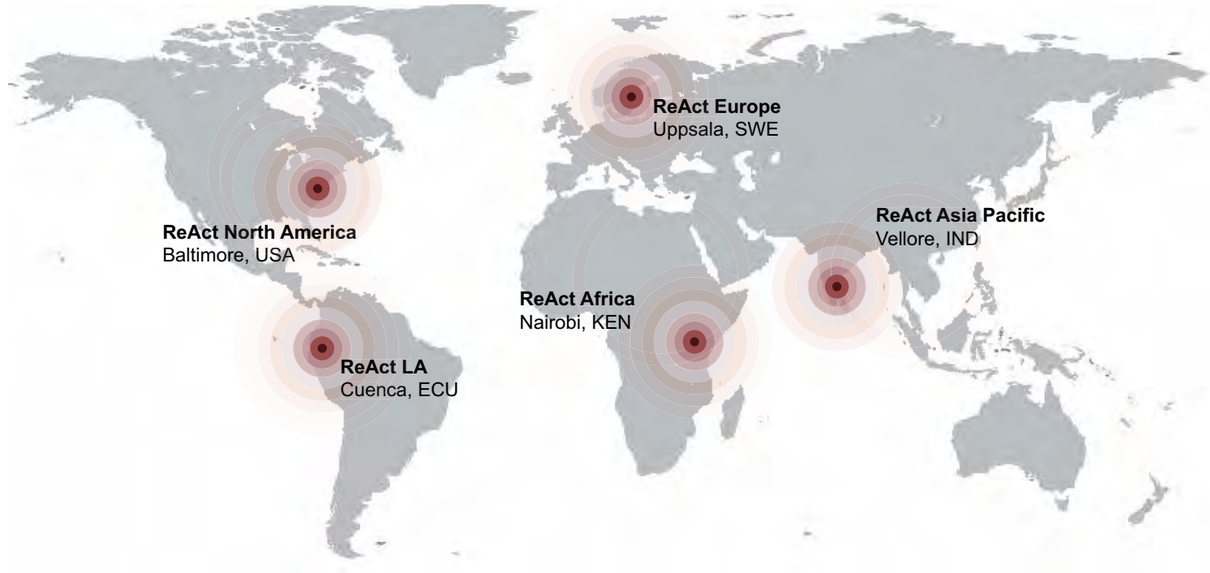
ReAct Europe, based at Uppsala University in Sweden, works across the world on science and policy issues related to antibiotic resistance and acts as the coordinating node for the network.

ReAct Asia Pacific, based at the Christian Medical College in Vellore, India, works to mobilize policy makers, healthcare providers and the public using a holistic perspective and encouraging locally appropriate and innovative initiatives to address antibiotic resistance.

ReAct Africa, based at the Ecumenical Pharmaceutical Network in Nairobi, Kenya, catalyzes African action on antibiotic resistance and engages sub-Saharan African countries in the development and implementation of National Action Plans.

ReAct North America, based at Johns Hopkins Bloomberg School of Public Health in Baltimore, United States of America, focuses on global strategic policy and supports the work of the Antibiotic Resistance Coalition, comprised of over 25 civil society groups.

ReAct Latin America, based at the Child to Child Foundation in Cuenca, Ecuador, mobilizes change at the local and grassroots level by focusing on changing the paradigm for how antibiotics are used.



4 STRATEGIC OBJECTIVES

Photo: Alan Castaneda, Photoshare

ReAct has for many years focused much effort on driving the issue of antibiotic resistance up the global political agenda. Today global political awareness about antibiotic resistance has reached unprecedented levels. This means adjusting our work to respond to the next challenge: to ensure that the long-awaited response is commensurate to meet the actual needs, in particular in low- and middle-income countries. To adress this new situation, ReAct will focus on the following four strategic areas in the coming five years:

#1
National Action Plans on AMR

#2
Movement building

#3
Globally coordinated governance

#4
Public health driven innovation

#1 NATIONAL ACTION PLANS ON ANTIMICROBIAL RESISTANCE

1# Countries develop and implement National Action Plans with respect to sustainable access to effective antibiotics, that are inclusive of civil society, local community views and based on situational analyses with ReAct's support.

78 million
new gonorrhea cases each year - some nearly untreatable due to resistance.

Photo: Shutterstock

Why?

More than 85 percent of the world's population live in countries that have either developed or is in the process of developing a National Action Plan on Antimicrobial Resistance. Many countries now face the task of implementing their plans and securing the financing to do so. However, only very few of the published National Action Plans in low- and middle-income countries are based on a situational analysis. Such plans often have little connection to the realities on the ground and may also lack the necessary political support.

Without robust local data on the burden of resistance and without a clear picture of the most significant drivers of resistance, prioritization of where to spend scarce resources is difficult. Devising interventions is further complicated by overuse and underuse of antibiotics occuring in low- and middle-income countriesat the same time. Underuse of antibiotics continues to cost more lives than resistance, although this may change in the future. Solutions will therefore have to carefully balance the need to ensure access while reducing misuse.

How can ReAct achieve change?

As a network present in low- and middle-income countries, ReAct can engage and support key actors at the national level that are charged with developing and implementing National Action Plans.

As an international network, ReAct can directly engage global institutions and financing agencies that provide technical, financial and human resources.

As an organization based in various geographical contexts, ReAct can support broad grassroots mobilization and advocacy when government implementation lags behind, thereby serving as a 'watch' over particular public health priorities.

Through these complementary approaches, ReAct can support, mobilize and hold relevant actors accountable to ensure that countries develop and implement National Action Plans in a manner that is inclusive, promotes sustainable access to antibiotics and integrates civil society and community views.

What do we want to see?

Low- and middle-income countries apply a One Health approach and prioritize interventions that tackle the local drivers of antibiotic resistance while ensuring sustainable access.

Policy shaping international actors adopt the concept of 'sustainable access' as a guiding principle for their policies and interventions.

Civil society and social movements across health, agricultural, and environmental sectors are formally included in processes to develop and implement National Action Plans.

Photo: Kato James, Photoshare

#2 MOVEMENT BUILDING

#2 Coalitions, communities of practice and movements are strengthened and extended to address antibiotic resistance through narratives and action that contribute to universal health coverage, poverty reduction, food justice and environmental sustainability.

445,000

Pneumonia deaths could be averted with universal access to antibiotics.

Photo: ReAct Africa

Why?

Structural and systematic change across the health, agricultural and environmental sectors over the last two decades, such as the global response to HIV and AIDS and the Paris climate change accords, have only been possible because of extensive, global mobilization of civil society.

It is unlikely that the current low-intensity response to antibiotic resistance can be expanded without a similar civil society mobilization. Unlike HIV/ AIDS or cancer, antibiotic resistance is not a disease and does not have dedicated patient organizations. Lack of data to document the severity of the problem and the complexity of the issue likely also contribute to the lack of a dedicated civil society movement.

Over the last five years some coalitions, communities and movements to address antibiotic resistance have emerged, including the Antibiotic Resistance Coalition (ARC), which was initiated with support from ReAct. Yet groups like this are few and far between, and are not yet of a size which sufficiently can respond to the multi-dimensional and global challenge that antibiotic resistance represents.

Multiple international organizations point to the lack of civil society engagement as one of the key threats to a long-term effective response to antibiotic resistance, including as actors that can drive change in behavior and social norms.

Furthermore, without effective civil society mobilization and participation, any response, whether robust or weak, will risk not taking into account the particular challenges that local communities face. This includes lack of access to basic health care and how antibiotic resistance negatively affects structural issues such as poverty, food justice and the environment.

How can ReAct achieve change?

By developing evidence-based narratives on how areas such as food justice, poverty reduction, the environment and universal health coverage are intimately tied to and impacted by antibiotic resistance, ReAct can encourage and inspire movements, organizations, individuals, professional societies and experts working on these issues to start addressing antibiotic resistance in their spheres of work.

As more organizations, movements and communities start to engage upon antibiotic resistance, ReAct will seek to use existing or create new forums that can facilitate the building of strategic connections and collective mobilization to address antibiotic resistance across sectors.

Finally, as the breadth of organizations working on antibiotic resistance grows and starts to formulate effective approaches to address the issue, governments, industry and international organizations will come under increased pressure to adopting solutions reflecting these intersectoral perspectives. The broader engagement by civil society will be crucial to holding key stakeholders true to the adopted principles, perspectives and commitments.

What do we want to see?

Concerns of low- and middle-income countries countries and their particular public health priorities are amplified in global and national level discussions.

Movements, communities and civil society groups working across multiple sectors can provide effective oversight of key actors and influence antibiotic resistance policy and practice.

Photo: ernestoeslava, Pixabay

#3 GLOBALLY COORDINATED GOVERNANCE

#3 Globally coordinated governance on AMR ensures a sustainable response that takes into account the needs, challenges and priorities of low- and middle-income countries.

11 million

antibiotic days could be avoided annually as a result of universal pneumococcal conjugate vaccine availability.

Photo: Pro4D, Pixabay

Why?

Establishing effective global governance will be critical to deliver a long-term, sustained and inclusive response to antibiotic resistance. The issue of globally coordinated governance is therefore expected to be a focus for many governments, foundations, companies and non-governmental organizations over the next decade.

Globally, the tripartite approach to tackle antimicrobial resistance by three UN agencies - the WHO, FAO and OIE - emerged alongside the adoption of the Global Action Plan in 2015. This tripartite collaboration has sought to encourage countries to take up a One Health approach in developing their National Action Plans. In addition, an ad-hoc UN Inter-Agency Coordination Group on Antimicrobial Resistance (IACG), was established in 2016 through the adoption of the UN Political Declaration on Antimicrobial Resistance. The IACG has been charged with assessing gaps and provide recommendations for a sustained global response.

While progressing, the work of the IACG has suffered from lack of sufficient financial and human resources. Furthermore, critical UN agencies beyond the tripartite have not yet been fully engaged and LMICs have not been able to sufficiently influence discussions in the policy fora that are formulating rules, principles and structures that will govern the international response.

As discussions about future global governance of antimicrobial resistance have now been initated by the IACG and will likely accelerate over the next five years, ReAct's challenge is to ensure that such discussions take into account the needs, challenges and priorities of low- and middle-income countries in a manner that ensures sustainable access to effective antibiotics.

How can ReAct achieve change?

ReAct will work with our partners, networks and through our academic host institutions to express values, principles and components that need to be included in future globally coordinated governance mechanisms.

To influence global discussions, ReAct will capture, generate and make relevant data transparent, while engaging and shedding light on the ongoing policy choices and policy discussions amongst governments, foundations and pharmaceutical companies.

By making such data and policy discussions transparent, ReAct can encourage policy makers to take approaches that does not undermine the public interest, accounts for low- and middle-income countries concerns and follows the principles established in the UN Political Declaration on Antimicrobial Resistance and the Global Action Plan.

What do we want to see?

Sustainable financing is informed by low- and middle-income countries data and established to support work on addressing antibiotic resistance in low- and middle-income countries.

Core UN agencies participate in, and ensure balanced representation and influence of low- and middle-income countries perspectives in global governance discussions and negotiations.

The process to create globally coordinated governance structures is transparent and inclusive in a manner that enables monitoring and evaluation for accountability.

Photo: Shutterstock

#4 PUBLIC HEALTH DRIVEN INNOVATION

#4 A public health driven and end-to-end approach to innovation that enables sustainable access to effective antibiotics in low- and middle-income countries is broadly supported.

404 million
antibiotic days could be avoided if we had an ideal diagnostic test.

Photo: Shutterstock

Why?

Public health driven R&D initiatives for the development of new antibiotics is emerging, and more entities are considering development of complementary medical tools to reduce the disease burden and the unnecessary use of antibiotics.

Yet these initiatives are still limited and dwarfed by a prevailing research agenda that too narrowly focuses on high-income country research priorities. While there is general consensus on the need to change the traditional drug development model, the implementation of such changes by R&D funders has not yet materialized. Other forms of innovation, within and beyond health care, that could contribute to reducing antibiotic resistance have largely been overlooked by funders so far.

Such innovations could include broader health care innovations, including vaccines and diagnostics, financial innovations to promote sustainable access to antibiotics and innovations in how to do stewardship. Innovation is equally needed within agriculture to replace or minimize the use of antibiotics and to develop more sustainable agricultural practices.

Finally, it is critical to encourage a range of social innovations that can influence perceptions and practices related to the use of antibiotics and to foster a better understanding of the human and planetary microbiome. Without a comprehensive, public health focused and balanced approach, many of the innovations that could benefit low- and middle-income countries will lag behind.

How can ReAct achieve change?

ReAct will work with partners to demand a public health driven research agenda that prioritize the particular needs of low- and middle-income countries, and that seek to fully separate the cost of research and development from the final product price and the volume of sales as recommended by the UN Political Declaration on Antimicrobial Resistance. In response to such demands, governments will start to prioritize the public interest and public health approaches to innovation, and seek to introduce pilots or incentives that ensure sustainable access to antibiotics.

As governments and funders launch public health oriented approaches to R&D, they should increasingly seek to collaborate through the WHO to establish an effective, ambitious and binding WHO Development and Stewardship Framework.

By conceptualizing an end-to-end approach for the development of, and sustainable access to, antibiotics, ReAct can encourage funders to take a broader innovation agenda, less focused only on drug development. This, in turn, can spur non-pharmaceutical advances to tackle antibiotic resistance, through the policies and investments launched by funders. It can also encourage entities in the public, not-for-profit and private sector to develop innovations that build upon existing or introduce new practices that improve the response to antibiotic resistance.

What do we want to see?

WHO Member States and core funders support an ambitious Global Development and Stewardship Framework that enables sustainable access to effective antibiotics in low- and middle-income countries.

Innovation efforts take a broader approach and address the need for innovation in clinical practice, sustainable animal husbandry and social sciences.

Governments undertake piloting of new approaches to ensure delinkage and models for controlled distribution and use of antibiotics.

Photo: Plabon Das, Photoshare

Understand ANTIBIOTIC RESISTANCE

What are antibiotics?

Antibiotics are important medicines for the treatment of bacterial infections in humans and animals. Since their introduction in the 1940's, antibiotics have saved countless lives and has made many medical techniques possible or safer. Antibiotics are special compared to other types of medicines given that the more antibiotics are used, the less efficient they become. This is because of bacterial resistance development.

What is resistance?

Antibiotic resistance is a natural phenomenon, and means that bacteria change and develop mechanisms that make them unaffected by antibiotics. When exposed to an antibiotic, only resistant bacteria will survive and will be able to increase in numbers.

What drives resistance and spread of resistant bacteria?

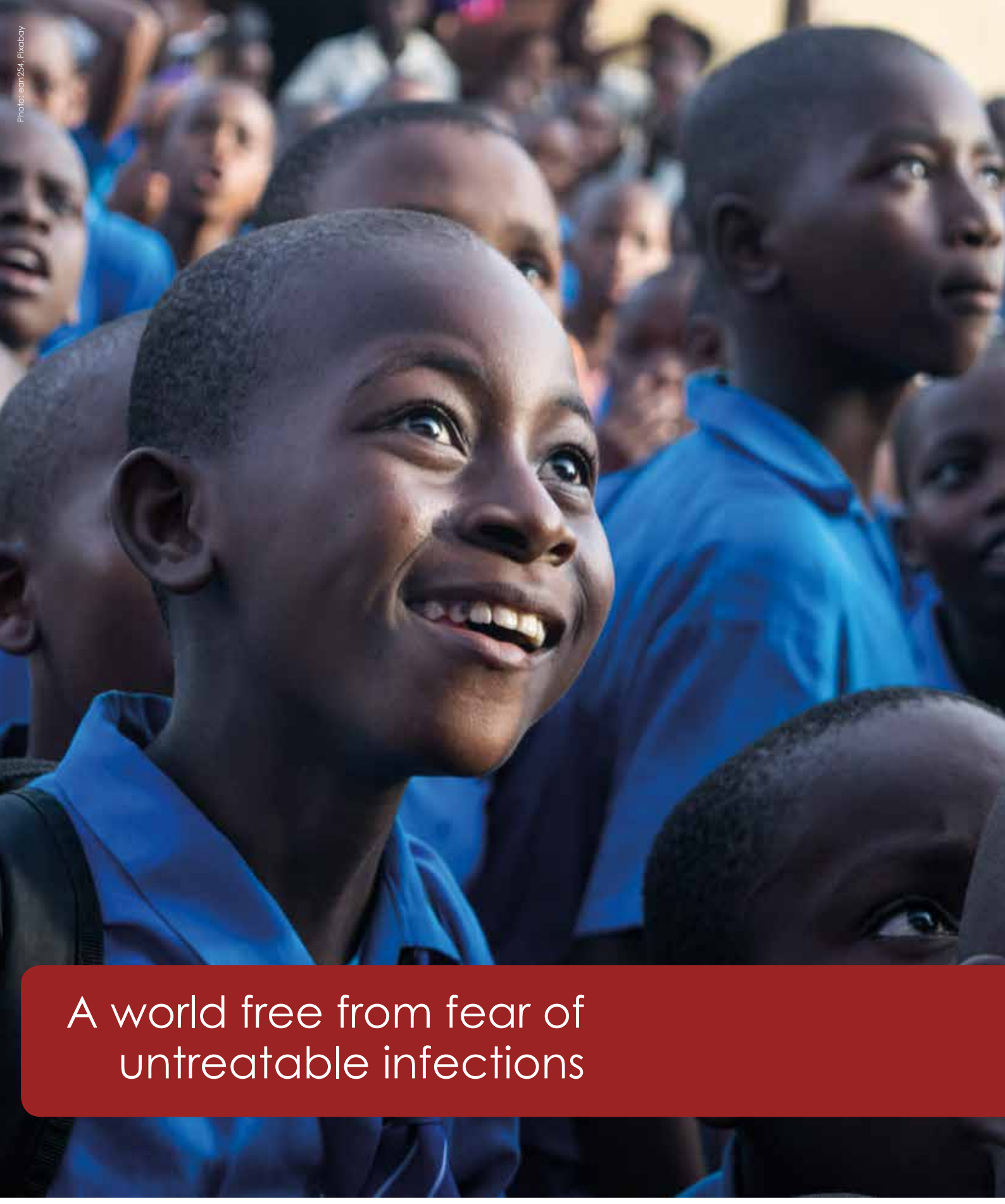
All antibiotic use, whether appropriate or not, drives resistance. This is why it is important to avoid all unnecessary use in both humans and animals.

Spread of resistant bacteria is increased by high prevalence of infectious diseases, lack of clean water and proper sanitation, and lack of infection prevention efforts such as vaccination. Bacteria know no boundaries and international traveling and trade help disseminate resistant bacteria across the world.

What is the difference between antibiotics and antimicrobials?

Antibiotics are a type of antimicrobial medicine alongside antivirals, antifungals and antiparasitic agents. Resistance development to all of these is what is known as antimicrobial resistance. ReAct focuses on antibiotic resistance, which also within the broader, international response to antimicrobial resistance has been identified as an urgent public health concern.

Photo: Shutterstock



A world free from fear of untreatable infections

www.reactgroup.org - subscribe to our newsletter!
Twitter: @reactgroup
Facebook: /reactgroup

ReAct
Action on Antibiotic Resistance