ANTIBIOTIC RESISTANCE, A MAJOR GLOBAL HEALTH CHALLENGE

Antibiotic-resistant infections are becoming increasingly common, and if we don’t change course, it is estimated that by 2050, antibiotic-resistant infections will kill 10 million people per year worldwide – that’s roughly one person dying every three seconds!

The GW Antibiotic Resistance Action Center (ARAC) is a group of committed scientists, clinicians, communicators and policy experts working together to fight antibiotic resistance through cutting-edge research, science-based policy, evidence-based practice, and strategic communications. ARAC’s interdisciplinary team is navigating a world in transition to curb the threat of antibiotic resistance.

HIGHLIGHTS FROM OUR WORK

Cutting-edge Research

We use the latest genomic technologies in large-scale studies to understand the spread of antibiotic-resistant bacteria and apply our findings to develop new solutions to prevent, diagnose, and treat infections.

- **Stopping the spread of superbugs in the food supply**: ARAC is using advanced genomics to trace the spread of antibiotic-resistant bacteria from livestock to people and finding new ways to stop them.
- **Harnessing the untapped power of the human microbiome**: ARAC is developing strategies to block the spread of superbugs using beneficial bacteria that live naturally in and on our bodies.
- **Developing new tools to diagnose and prevent antibiotic-resistant infections**: ARAC is working with an international team of big-data scientists to develop rapid systems for recognizing superbugs.
Evidence-based Policy and Practice

As our society changes what it demands for health care and food, we work with industry, governmental, and non-profit partners to provide better options for consumers while improving how antibiotics are used in human medicine and food production.

• **Curbing unnecessary antibiotic prescriptions**: The dynamic expansion of consumer-driven health care—such as urgent care, retail care, and telemedicine—means that people can get antibiotics more easily than ever. ARAC is working with the CDC, national trade associations, and industry partners to develop the first urgent care industry-wide standards that could impact 80-100 million urgent care visits each year.

• **Making responsibly produced meat accessible to more people**: ARAC is working to make better meat options available to more people through our expansion of our Certified Responsible Antibiotic Use (CRAU) label. Right now, the CRAU standard is used by some of the largest chicken and turkey producers in the U.S. for their institutional buyers. We are now expanding CRAU to other proteins and will bring it to your grocery store soon!

Communications and Outreach

We are a source of accurate scientific information for a broad audience.

• **Making scientific information more accessible**: ARAC has a team of communications experts dedicated to translating the latest antibiotic-resistance research into clear and simple summaries for the general public, policy-makers, and journalists.

• **A go-to source for journalists**: ARAC has become a trusted source of information on antibiotic resistance for many top journalists from the largest newspapers, journals, and news programs.