

AMR Policy Update “Antimicrobial Resistance Countermeasures in Sweden”

A Case Study of Sweden's One Health Approach to Combating Antimicrobial Resistance

Introduction

Antimicrobial Resistance (AMR), in which antimicrobial agents become ineffective against microorganisms is spreading rapidly across the world. A landmark study published in *The Lancet* estimated that, in 2019, 1.27 million deaths were directly attributable to AMR.¹ In recent years, the spread of AMR has been referred to as a “silent pandemic” or “the next threat after COVID-19.” Furthermore, the development of new antimicrobial agents has been stagnant worldwide since the 1980s, and countermeasures are urgently needed. This report describes Sweden’s response to AMR and introduces Antibiotic Smart Sweden, a vision-driven initiative in Sweden to engage the whole society in the fight against antibiotic resistance².

Sweden's contribution to measures against antimicrobial resistance

Sweden held the Presidency of the Council of the European Union in the first half of 2023³ and played a leading role in the EU's AMR measures, including the adoption of a European Parliament resolution combating antimicrobial resistance. Sweden’s push for improved AMR measures traces back to the mid-1990s, when Sweden experienced an outbreak of penicillin-resistant pneumococci.⁴ This public health crisis was vital to the development of the promotion of stricter antibiotic regulation and highlighted how AMR represents an urgent public threat to human health. Health officers overseeing disease control thus began the transformation of Sweden’s health, accelerating the development of AMR countermeasures and increasing public risk awareness.

About Antibiotic Smart Sweden

The nation-wide coordinated innovation initiative ‘Antibiotic Smart Sweden’ began in 2019 and the initiative works towards the vision of “a society where everyone helps to keep antibiotics working and saving lives.”⁵ Antibiotic smart societies are societies with the ability to respond to the threat of antibiotic resistance by integrating infection control and antibiotic-related perspectives in to all levels of municipalities and regions management. The Antibiotic Smart Sweden project aims to arm citizens with knowledge about the consequences of antibiotic resistance, how to reduce the spread of infections and on the correct use of antibiotics⁶.

¹ Retrieved September 3, 2024 from <https://www.ox.ac.uk/news/2022-01-20-estimated-12-million-people-died-2019-antibiotic-resistant-bacterial-infections>

² <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/>

³ Retrieved September 3, 2024 from <https://www.government.se/government-policy/2024-swedish-presidency-of-the-nordic-council-of-ministers/>

⁴ ‘The Emergence of Antimicrobial Resistance as a Public Matter of Concern: A Swedish History of a “Transformative Event”’. (2018). Retrieved September 3, 2024 from <https://www.cambridge.org/core/journals/science-in-context/article/abs/emergence-of-antimicrobial-resistance-as-a-public-matter-of-concern-a-swedish-history-of-a-transformative-event/B9D962C8DE915EB0A38BB4162F8604F2>

⁵ ‘Antibiotic Smart Sweden’. Vinnova. Retrieved September 3, 2024 from <https://www.vinnova.se/en/p/antibiotic-smart-sweden/>

⁶ <https://www.ri.se/en/expertise-areas/projects/antibiotic-smart-sweden>

The Antibiotic Smart Sweden project is funded by Vinnova, the Swedish innovation agency within the “Vision-driven health” program, and is led by the Public Health Agency of Sweden (PHAS), RISE Research Institutes of Sweden, STRAMA - the Strategic Program Against Antibiotic Resistance and ReAct – Action on Antibiotic Resistance. Alongside the four key stakeholders forming the core team of the initiative, several municipalities and administrative regions are also involved⁷.

Antibiotic Smart Sweden works towards three overarching goals: Antibiotic Smart People, Antibiotic Smart Municipalities & Regions, and National and International Collaboration⁸.

- Explore ways to involve individuals more actively through community engagement, participatory processes and insights about behaviours.
- Support and promote engagement of Swedish regions and municipalities through the co-development and use of antibiotic-smart criteria. This structured approach helps integrate actions against antibiotic resistance in routines and everyday work.
- Provide a platform for networking and the exchange of ideas among Swedish stakeholders with an interest in antibiotic resistance. We also exchange learnings with international actors through meetings, workshops and collaborations.

Antibiotic Smart Sweden initiative and outcomes

To engage and support Swedish regions and municipalities in addressing antibiotic resistance, criteria have been developed together with stakeholders to demonstrate – in a practical way - how different parts of Swedish society can become “antibiotic-smart”. The criteria aim to: 1) encourage commitment, 2) provide inspiration, 3) serve as guidance, and 4) amplify and support existing good practices and guideline. Criteria for establishing antibiotic smart practices across sectors have been trialed at schools, pre-schools, primary care centers, hospitals, long-term care facilities and water treatment facilities across the country.⁹

Antibiotic Smart Sweden’s pilot program covers the period of November 2019 to November 2024¹⁰, with process of success criteria being evaluated in dialogue with relevant professionals and other stakeholders. After the initial pilot program, the criteria for municipalities were revised and officially launched in March 2024¹¹ and criteria for regions were launched later the same year in preparation for the next stage of the project. Interested organizations can now sign up to work with the criteria while receiving continuous support from Antibiotic Smart Sweden. Further expansion and development of the Antibiotic Smart Sweden is anticipated.

⁷ <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/>

⁸ <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/>

⁹ ‘Sweden: Towards an antibiotic smart society’. (2023). Retrieved September 3, 2024 from <https://www.reactgroup.org/news-and-views/news-and-opinions/2023-2/sweden-towards-an-antibiotic-smart-society/>

¹⁰ Retrieved September 3, 2024 from <https://www.vinnova.se/en/p/antibiotic-smart-sweden/>

¹¹ Retrieved September 3, 2024 from <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/antibiotic-smart-criteria/>

Examples of good practices in line with antibiotic-smart principles

Antibiotic Smart Sweden build on existing good practices, guidelines and educational materials, complemented by new tools developed throughout the process¹². Several local municipalities in Sweden have participated in piloting antibiotic-smart criteria. While doing this they have actively implemented AMR countermeasures such as strengthening management strategies and improving training and monitoring – all with a focus to prevent infections and promote responsible use of antibiotics. This section introduces some examples of good practices.

Municipality Based Practices

Tanum municipality

Tanum municipality, located in the southwest, has been a partner of Antibiotic-Smart Sweden from its launch. Tanum was involved in the development of the municipal management criteria, which can now be used by municipalities throughout Sweden.¹³ The management criteria include deciding on the municipality's commitment to the issue of AMR and spreading knowledge about the wise use of antibiotics among the population. The criteria also includes creating the conditions for the municipality's activities to prevent infections and the spread of infections.

Köping municipality

The central Köping municipality worked on the criteria related to participation in Swedish HALT. This is a measure of healthcare-associated infections and antibiotic use in long-term care facilities. The municipality works with hygiene self-monitoring including appointing hygiene officers and carrying out monthly infection registries. These are actions that were included in the criteria for Antibiotic-Smart long-term care facilities. The municipality has also implemented a presentation for staff in cooperation with the region on the prevention of urinary tract infections, which are very common in elderly care. An online hygiene training program has been integrated into an annual cycle so that staff remain updated on the topic.

Theme Based Practices

Environment: Water treatment systems

Water management is a vital part of AMR countermeasures as it represents a key channel through which antibiotics and antibiotic resistant bacteria may spread into the environment and impact both human and animal health. Antibiotic Smart Sweden's criteria for water and wastewater organizations are designed to encourage active work within the sector in several areas. These include "measurements, prevention of sewer overflow, sharing of knowledge and awareness raising among upstream operations/industries connected to the treatment plant."¹⁴ A pilot site within Antibiotic Smart Sweden addressing water treatment is Uppsala.¹⁵ Uppsala water treatment plant's pilot project aims to remove

¹² <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/antibiotic-smart-criteria/>

¹³ RISE. Retrieved September 3, 2024 from <https://www.ri.se/en/our-stories/antibiotic-smart-organisations-can-help-save-lives>

¹⁴ Retrieved September 3, 2024 from <https://www.folkhalsomyndigheten.se/antibiotikasmart-sverige/in-english/antibiotic-smart-criteria/water--wastewater/>

¹⁵ Retrieved September 3, 2024 from <https://www.euronews.com/health/2023/06/29/sweden-taking-a-stand-against-pharmaceuticals-in-water>

at least 80% of five types of pharmaceutical residue. This plan involves technology such as activated carbon and anion exchange.¹⁶

There are many challenges in addressing AMR in water treatment. Hospital wastewater is also connected to the city wastewater treatment system. Many wastewater treatment plants did not yet have a special focus on antibiotic resistance, and more effort and research on sludge management is desirable (since sludge water, after the treatment process is often used in agriculture). The 2021 report 'Waste water Treatment Pains' by the Swedish Water and Wastewater Association, suggests that the investment costs for advanced pharmaceutical waste water treatment at the Swedish waste water treatment plants is calculated at SEK 6 to 10 billion to upgrade 50–100 waste water treatment plants. In some municipalities, the water and waste water tariffs could amount to more than SEK 10,000–15,000 per family and year.¹⁷ Such increases in financial burden are also considered to be a challenge for the future.

Social Design: Antibiotic Collection System in Pharmacies

Staff at pharmacies play an active role by providing patients with antibiotics adapted to their prescription and by counseling patients on appropriate medication use. Swedish pharmacies have systems to collect medical waste, where all kinds of medicines are collected and sent for destruction, with no special focus on antibiotics.¹⁸

¹⁶ Retrieved September 3, 2024 from <https://pubs.acs.org/doi/full/10.1021/acsestwater.0c00141>

¹⁷ Retrieved September 3, 2024 from https://vattenbokhandeln.svensktvatten.se/wp-content/uploads/2021/03/Wast-water-treatment-pains_SvensktVatten_M150.pdf

¹⁸ Björkman et al. Swedish Efforts to Contain Antibiotic Resistance in the Environment—A Qualitative Study among Selected Stakeholders. (2022). Retrieved September 3, 2024 from <https://www.mdpi.com/2079-6382/11/5/646>

Examples of on-going challenges for cross-sector engagement on AMR

1. Finding effective ways to educate the general public

- In Sweden, the municipalities have an important role to relay information, update on guidelines and follow up on antibiotic prescription at prescriber level.
- The majority of counties still need to raise awareness of the health threats posed by AMR, and specifically the role of medical providers in informing their patients.¹⁹

2. Knowledge about One Health

- Beyond government officials and experts, more information about the concept of One Health needs to be disseminated so that community collaboration and joint efforts can be achieved.²⁰
- Individuals in different sectors (medical, pharmaceutical, waste management, agricultural etc.) do not yet have a shared and equal understand of One Health.²¹

Conclusion

The Antibiotic Smart Sweden project demonstrates a holistic approach to AMR public health measures in line with the One Health approach, including the integration of AMR goals to other existing health agendas which is inclusive of different fields. Through antibiotic smart criteria pilots in several schools, pre-schools, primary care centers, hospitals, long-term care facilities and water treatment facilities across the country, the project has emphasized the importance of diversity in participants and across sectors in addressing AMR. Alongside Sweden's commitment to engagement in international support and collaboration, the Antibiotic Smart Sweden project serves as an example of good practices that have made Sweden a global leader in the fight against antimicrobial resistance.

¹⁹ Preventing Antibiotic Resistance: Lessons Learned and Areas for Improvement. (2022). Retrieved September 3, 2024 from <https://his.diva-portal.org/smash/get/diva2:1759514/FULLTEXT01.pdf>

²⁰ Björkman et al. Swedish Efforts to Contain Antibiotic Resistance in the Environment—A Qualitative Study among Selected Stakeholders. (2022). Retrieved September 3, 2024 from <https://www.mdpi.com/2079-6382/11/5/646>

²¹ Swedish work against antibiotic resistance – a One Health approach. Retrieved September 3, 2024 from <https://www.folkhalsomyndigheten.se/contentassets/742d1cd73835416399eb55dee57cf2c2/swedish-work-against-antibiotic-resistance-webb.pdf>

Appendix

1: Sweden's AMR strategy and the corresponding departments and organizations

Multiple government agencies, health organizations, working groups and collaborative projects are active in the development and implementation of Sweden's national AMR strategy. The Swedish government has appointed to the Public Health Agency of Sweden (PHAS) and the Swedish Board of Agriculture to chair an intersectoral coordinating mechanism that brings together representatives from national authorities and organizations. This group, known as the Intersectoral Coordinating Mechanism (ICM), engages 29 governmental agencies and organizations working in human health, animal health, food, environment, research, trade and civil contingency planning, some of these are described below.

The Public Health Agency of Sweden (PHAS) is responsible for the "national monitoring of antibiotic resistance in humans, with support from local and regional experts".²² These results are communicated regularly to clinical microbiology laboratories, STRAMA groups, the healthcare sector, policy makers and the media. Examples of antibiotic resistant bacteria include: staphylococcus aureus resistant to methicillin (MRSA), streptococcus pneumoniae with reduced susceptibility to penicillin (PNSP), enterococcus faecalis and enterococcus faecium resistant to vancomycin (VRE), enterobacterales with ESBL (including AmpC) or ESBL-CARBA (ESBL with carbapenemase), reported separately.

- In 2024, a EUCAST Development Laboratory in Sweden has been appointed by the EU Commission to establish an EU reference laboratory (EURL) for antimicrobial resistance (AMR) together with two institutions in Denmark.
- Multiple surveillance systems are used in the monitoring of antibiotic resistance.
 - Svebar is a national system for early warnings and continuous resistance monitoring in humans. This system collects all culture results, including data on antibiotic resistance testing, from voluntary participating clinical microbiology laboratories daily.
 - SmiNet is a system for reporting diseases according to the Swedish Communicable Diseases Act. Data is collected from both treating physicians and laboratories report cases.

The Swedish Environmental Protection Agency conducts monitoring of antimicrobials in surface water and wastewater.

- The agency participates in international groups and networks: One-Health Network Register of Commission expert groups, European Environment Information and Observation Network on Antimicrobial resistance, Eionet Forum etc.
- Policy Relevant Indicators for Consumption and Environment (PRINCE) - a three-year project to explore ways to improve and expand the set of indicators used to estimate the environmental impacts linked to Swedish consumption, both within Sweden and abroad. Includes chemicals

²² Multisector Surveillance of Antibiotic Sales and Resistance. Retrieved September 3, 2024 from <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/antibiotics-and-antimicrobial-resistance/overview-of-swedens-one-health-response-to-antibiotic-resistance/swedish-work-against-antibiotic-resistance--a-one-health-approach/multisector-surveillance-of-antibiotic-sales-and-resistance/>

associated with agricultural production: veterinary antimicrobials and pesticides.²³ PRINCE phase 2 was one year add-on period to “further develop data and indicators in the areas of fisheries, tropical deforestation, biodiversity and chemicals”.

- Veterinary antibiotic use in Swedish production amounts to between 7 and 10% of the total consumption-based veterinary antibiotic use. This is due to very low veterinary antibiotic use in Swedish agriculture compared to all other nations.²⁴
 - Meat and dairy products produced in Sweden account for a majority of those consumed in Sweden.

The Swedish Research Council funds basic and clinical research related to the prevention of emergence, spread, diagnosis and treatment of drug-resistant infections and the development of antimicrobials.

- The SRC is the largest governmental research funding agency and manage the Swedish National Research Programme on Antibiotic Resistance.
- The SRC is the coordinator of the Joint Programing Initiative on Antimicrobial Resistance (JPIAMR) and will coordinate the future European Partnership on One Health AMR.

The Swedish Medical Products Agency focuses on areas such as new regulations of medicinal products and supporting EU pharmaceuticals legislation.

- Also inform about reported shortages and moderate the consequences of critical shortages in medicine.²⁵

The Swedish Knowledge Centre on Pharmaceuticals in the Environment (Medical Products Agency) disseminates knowledge and facilitate dialogue about the cycle of human and veterinary medicines.²⁶

- Aims to increase and spread knowledge about pharmaceuticals in the environment.
- Aims to strengthen the knowledge of sustainable manufacturing by reduction of emissions of active pharmaceutical ingredients during manufacturing.
- Aims to promote the development and use of criteria for environmental considerations. Methods involve voluntary information in the sale of non-prescription pharmaceuticals.

The Swedish Veterinary Association has a general antibiotics policy and animal specific guidelines.²⁷

- In general, the treatment of an individual animal with antibiotics is justified when there is a bacterial infection that is unlikely to heal without antibiotic treatment.

²³ Policy Relevant Indicators for Consumption and Environment (PRINCE). Swedish Environmental Protection Agency. Retrieved September 3, 2024 from <https://www.naturvardsverket.se/en/international/research/the-environmental-research-fund/research-efforts-community/policy-relevant-indicators-for-consumption-and-environment-prince/>

²⁴ New methods and environmental indicators supporting policies for sustainable consumption in Sweden. (2022). Retrieved September 3, 2024 from <https://www.naturvardsverket.se/4ac540/globalassets/media/publikationer-pdf/7000/978-91-620-7032-8.pdf>

²⁵ Swedres Svarm. (2022). Retrieved September 3, 2024 from <https://www.sva.se/media/ticcp2zu/swedres-svarm-2022-edit-230808.pdf>

²⁶ Swedish Medical Products Agency. (2021). Retrieved September 3, 2024 from <https://www.lakemedelsverket.se/en/about-the-swedish-mpa/our-environmental-policies#hmainbody3>

²⁷ Retrieved September 3, 2024 from <https://www.svf.se/forbundet/policydokument/antibiotikapolity/>

- In the case of large groups of animals, antibiotic treatment may be appropriate if the group shows signs of infectious disease and the risk of further spread of a bacterial infection is present.
- Antibiotic treatment may also be appropriate in cases with specific surgical interventions where the risk of bacterial infections is likely.
- When choosing antibiotics for food-producing animals, food hygiene aspects must be taken into account. The risk of residues in food should be considered and measures for preventing unrelated animals and food handling equipment from being contaminated with antibiotics should be taken.

Vinnova is the Swedish innovation agency. The agency creates collaborative opportunities for different parts of society, identifies important needs and finances research projects with the goal of sustainable development.

- The Antibiotic Smart Sweden project is one example of a project funded by Vinnova

ReACT was initiated in 2005, and is one of the first international independent networks to advocate about antibiotic resistance. ReAct has outlined four central goals:

1. Support countries to develop and implement national action plans.
2. Engage and collaborate with civil society organizations, researchers, governments and international organizations such as the WHO.
3. Work to ensure that global governance and coordination takes place in an efficient and inclusive way.
4. Promote the development new antibiotics with a focus on global public health needs, and that these benefit everyone who needs them, in a sustainable way.

STRAMA has been a key driver in the work against antibiotic resistance with early work in the subsections for veterinary and dental care.

- STRAMA was formed in 1995 as a voluntary network at the national and regional levels, with local groups.
- From 2000, STRAMA began receiving financial support from the Swedish government at the national level, and from the county councils at the local level.²⁸ It was formalised and incorporated into the Public Health Agency of Sweden in 2010.
- The regional level (the STRAMA Network) remains independent from the Agency but receives funding from the regions.

Sweden's role within the EU Strategy for the Baltic Sea Region (EUSBSR) is to encourage the implementation of measures aimed at decreasing the emission of pharmaceuticals to the environment.

²⁸ Retrieved September 3, 2024 from <https://www.reactgroup.org/toolbox/policy/examples-from-the-field/strama-swedish-model-for-work-against-antibiotic-resistance/>

Sweden is part of **JAMRAI 2** (funded under the EU4Health programme), supporting the creation of a European Antimicrobial Resistance Surveillance Network, dedicated to AMR surveillance in the environment.²⁹

Examples of other members of the Intersectoral Coordinating Mechanism (ICM) include:

- Swedish Work Environment Authority
- Swedish eHealth Agency
- Swedish Board of Agriculture
- Health and Social Care Inspectorate
- Swedish Chemicals Agency
- National Board of Trade
- Swedish Food Agency
- Swedish Civil Contingencies Agency
- National Board of Health and Welfare
- Swedish International Development Cooperation Agency
- Swedish University for Agricultural Sciences
- Dental and Pharmaceutical Benefits Agency
- Association of County Medical Officers for Communicable Disease Control
- County Administrative Boards
- Swedish Association of Local Authorities and Regions

2: Sweden's governance and medical care structure

Sweden is divided into 290 municipalities and 21 regional councils, The National Board of Health and Welfare (*Socialstyrelsen*) is a government agency under the Ministry of Health and Social Affairs that compiles information and develops standards to ensure good health, social welfare and high-quality health and social care for the whole population. Healthcare costs in Sweden general represent around 11% of annual Sweden's GDP. Both public and private providers of healthcare in Sweden have the same regulations. "When regional councils buy services from private healthcare providers, it is based on a model where the healthcare is financed by the council but carried out by the private provider."³⁰

The majority of primary care centres (and nearly all hospitals) are owned by the county councils. "Reforms are often introduced on the local level, thus the pattern of reform varies across local government, although mimicking behaviour usually occurs."³¹ Since 2012, hospital reform policy has focused on "reducing waiting times, continuity and coordination of care, and overall health system efficiency." The "main responsibility for financing, organizing and providing health care is delegated to

²⁹ Commission supports two new Health Union actions with €126 million from the EU4Health programme. European Commission. (2024). Retrieved September 3, 2024 from https://health.ec.europa.eu/latest-updates/commission-supports-two-new-health-union-actions-eu126-million-eu4health-programme-2024-02-13_en

³⁰ Healthcare in Sweden. Swedish Institute. (2024). Retrieved September 3, 2024 from <https://sweden.se/life/society/healthcare-in-sweden>

³¹ Sweden health system review. (2012). Retrieved September 3, 2024 from <https://pubmed.ncbi.nlm.nih.gov/22894859/#:~:text=The%20state%20is%20responsible%20for,owned%20by%20the%20county%20councils>

the 21 regions”, reflecting region independence. Regions have also changed the financial incentives to providers by “moving away from activity and P4P based payment models, towards fixed and/or capitated payment.”³²

The hospital environment department is responsible for creating lists of approved products to be used in the hospitals and some hospitals cooperate with the local STRAMA-group to reduce the use of substances such as fluoroquinolones (which had a long half-life). Another action that can be taken by hospitals is buying ecological meat was a way to support lower antibiotic usage in food-animal production³³.

3: Antimicrobial resistance in a post-pandemic era

Sweden’s medical system has continued to face stress carried over into the post-pandemic era, indicated by factors such as a “5% loss in Swedish intensive care unit (ICU) beds from 2019 to 2024.”³⁴ Alongside an unusually high number of nurses leaving the care sector during this time due to factors such as burnout during the pandemic³⁵, this has translated into a burden on the national health system which also impacts the ability for Sweden’s 21 regions to continue prioritizing AMR countermeasures.

In the future, the need for more resources and trained personnel will continue to challenge Sweden’s preparedness and the medical systems ability to effectively prevent antimicrobial resistance during times of global health and political instability.

³² Sweden: health system review 2023. World Health Organization. (2023). Retrieved September 3, 2024 from <https://eurohealthobservatory.who.int/publications/i/sweden-health-system-review-2023>

³³ Björkman et al. Swedish Efforts to Contain Antibiotic Resistance in the Environment—A Qualitative Study among Selected Stakeholders. (2022). Retrieved September 3, 2024 from <https://www.mdpi.com/2079-6382/11/5/646>

³⁴ Retrieved September 3, 2024 from <https://www.euractiv.com/section/health-consumers/news/swedens-declining-critical-care-beds-worry-icu-personnel/>

³⁵ Appelbom et al. (2024). Retrieved September 3, 2024 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11165371/>

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As an independent, non-profit, non-partisan private think tank, HGPI complies with the following guidelines relating to the receipt of grants and contributions.

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Regarding the independent nature of this report

This report has been compiled in HGPI's capacity as an independent health policy think-tank. It does not, in any capacity, represent the opinions of any participating expert, speaker, related party, or organization to which those parties are affiliated.

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Health and Global Policy Institute (HGPI) is a non-profit, independent, non-partisan health policy think tank established in 2004. In its capacity as a neutral think-tank, HGPI involves stakeholders from wide-ranging fields of expertise to provide policy options to the public to successfully create citizen-focused healthcare policies. Looking to the future, HGPI produces novel ideas and values from a standpoint that offers a wide perspective. It aims to realize a healthy and fair society while holding fast to its independence to avoid being bound to the specific interests of political parties and other organizations. HGPI intends for its policy options to be effective not only in Japan, but also in the wider world, and in this vein the institute will continue to be very active in creating policies for resolving global health challenges. HGPI's activities have received global recognition. It was ranked second in the "Domestic Health Policy Think Tanks" category and third in the "Global Health Policy Think Tanks" category in the Global Go To Think Tank Index Report presented by the University of Pennsylvania (as of January 2021, the most recent report).

About AMR Alliance Japan

AMR Alliance Japan was established in November 2018 as multi-stakeholder, collaborative organization dedicated to the improvement of public health through the promotion of AMR countermeasures. As of October 2024, its members include, in alphabetical order:

bioMérieux Japan Ltd., GlaxoSmithKline K.K., Himeji City, Japan Medical Association, Japan Pharmaceutical Association, Japan Pharmaceutical Manufacturers Association, Japanese Society for Pediatric Infectious Diseases, Japanese Society of Antimicrobials for Animals, Japanese Society of Chemotherapy, Japanese Society of Hospital Pharmacists, "Kodomo to Iryo" Project, Meiji Seika Pharma Co., Ltd., Merck & Co., Inc., Nippon Becton, Dickinson and Company, Ltd., Pfizer Japan Inc., Shimadzu Diagnostics Corporation, Shionogi & Co., Ltd., The Japanese Society for Medical Mycology, The Japanese Association for Infectious Diseases, The Japanese Society for Clinical Microbiology, The Japanese Society for Infection Prevention and Control, The Japanese Society of Pharmaceutical Health Care and Sciences, The Japanese Society of Therapeutic Drug Monitoring, The Pharmaceutical Society of Japan, Health and Global Policy Institute (HGPI) serves as Secretariat of the Alliance.



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