



MINISTRY OF HEALTH

THE MEASURES BEING IMPLEMENTED TO REDUCE ANTIMICROBIAL RESISTANCE (AMR)

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Global Action Plan on Antimicrobial Resistance (GAP)

2015



- Countries around the world reached a consensus on developing the framework for the "Global Action Plan on Antimicrobial Resistance - 2" during the 2015 General Assembly of the World Health Organization. This plan was finalized and approved under the leadership of the WHO, the Food and Agriculture Organization (FAO) of the UN, and the World Organisation for Animal Health (WOAH).
- Before the release of the Global Action Plan in 2015, the "WHO Global Strategy for Containment of Antimicrobial Resistance," issued by the WHO in 2001, was implemented. This strategy outlined the framework for response measures aimed at reducing the emergence and spread of antimicrobial resistance.

WHO approach

The "Global Action Plan on Antimicrobial Resistance," approved at the 2015 World Health Assembly, urged countries to establish national programs on antimicrobial resistance (AMR) based on the following key principles.



Үндсэн зарчим

- ❑ **Whole-of-Society Engagement, One health**
- ❑ **Prevention first**
 - Hygiene, sanitation, prevention of infection, control
- ❑ **Accessibility**
 - Ability to prevent and treat infections
- ❑ **Sustainability**
 - All countries were called upon to have a national action plan AMR by 2017.
- ❑ **Implement gradually and with specific objectives**
 - Each country is expected to implement it in different stages,

The global post-antibiotic era.....

The phrase "post-antibiotic era" signifies the end of modern medicine. Common symptoms such as a sore throat or a scraped knee in children could potentially lead to death once again.



Margaret Chan (WHO)

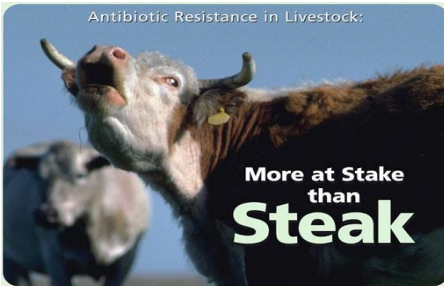
The 2016 UN declaration singles out resistance to antibiotics, including those used to treat tuberculosis as the “greatest and most urgent risk,”

Why AMR has become a global concern?



- The emergence and spread of antimicrobial-resistant organisms occur as microorganisms develop new mechanisms to adapt to antimicrobials. This resistance threatens our ability to treat common infections effectively.
- The discovery of new antimicrobials is currently unclear. In 2019, the WHO highlighted 32 antibiotic developments targeting specific pathogens identified on its priority list. However, only 6 of these candidates are in active development.
- The economic impact of antimicrobial resistance (AMR) is significant and should be emphasized, as it leads to various costs associated with healthcare. This leads to prolonged hospital stays due to untreated illnesses, requiring more expensive and intensive treatments. As a result, the productivity of patients and their families is negatively affected.
- Without improving effective preventive measures, ensuring adequate treatment for resistant bacterial infections, and enhancing the accessibility of existing and new quality-assured antimicrobial agents, the number of people experiencing treatment failures or fatalities due to infections will continue to rise.
- Surgical procedures, cesarean sections, cancer chemotherapy, and organ transplantation will become increasingly risky.

What accelerates the emergence and spread of AMR?



- AMR is a natural phenomenon that develops over time, often driven by genetic mutations.
- Organisms resistant to antimicrobial agents are found in humans, animals, food, plants, and the environment (including water, soil, and air). These resistant strains can spread through human-to-human, human-animal, and foodborne transmissions.
- The main factors contributing to the development of AMR include inappropriate and excessive use of antimicrobials; lack of access to clean water and sanitation facilities; inadequate hygiene and sanitation measures in both humans and animals; inadequate supply of quality-assured medications, poor infection prevention and control measures in healthcare facilities and animal breeding establishments; lack of public knowledge regarding AMR and insufficient enforcement of regulations.
- Disruptions in the supply of antibiotics impact health systems at all levels of development.

Inter sectoral planning - Steps

An intersectoral action plan for preventing AMR

Strategy for promoting the appropriate use of antibiotics and preventing the development of AMR

2013-2017

2017-2020



Evaluation

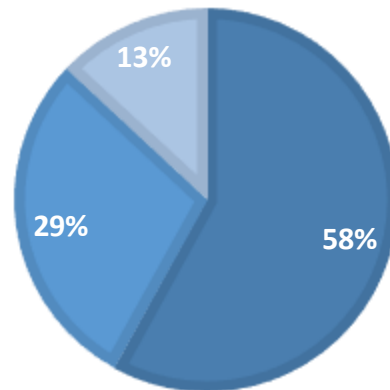
86,9%

2021

2022-2025



- Бүрэн биелсэн
- Хагас биелэлттэй
- Биелээгүй



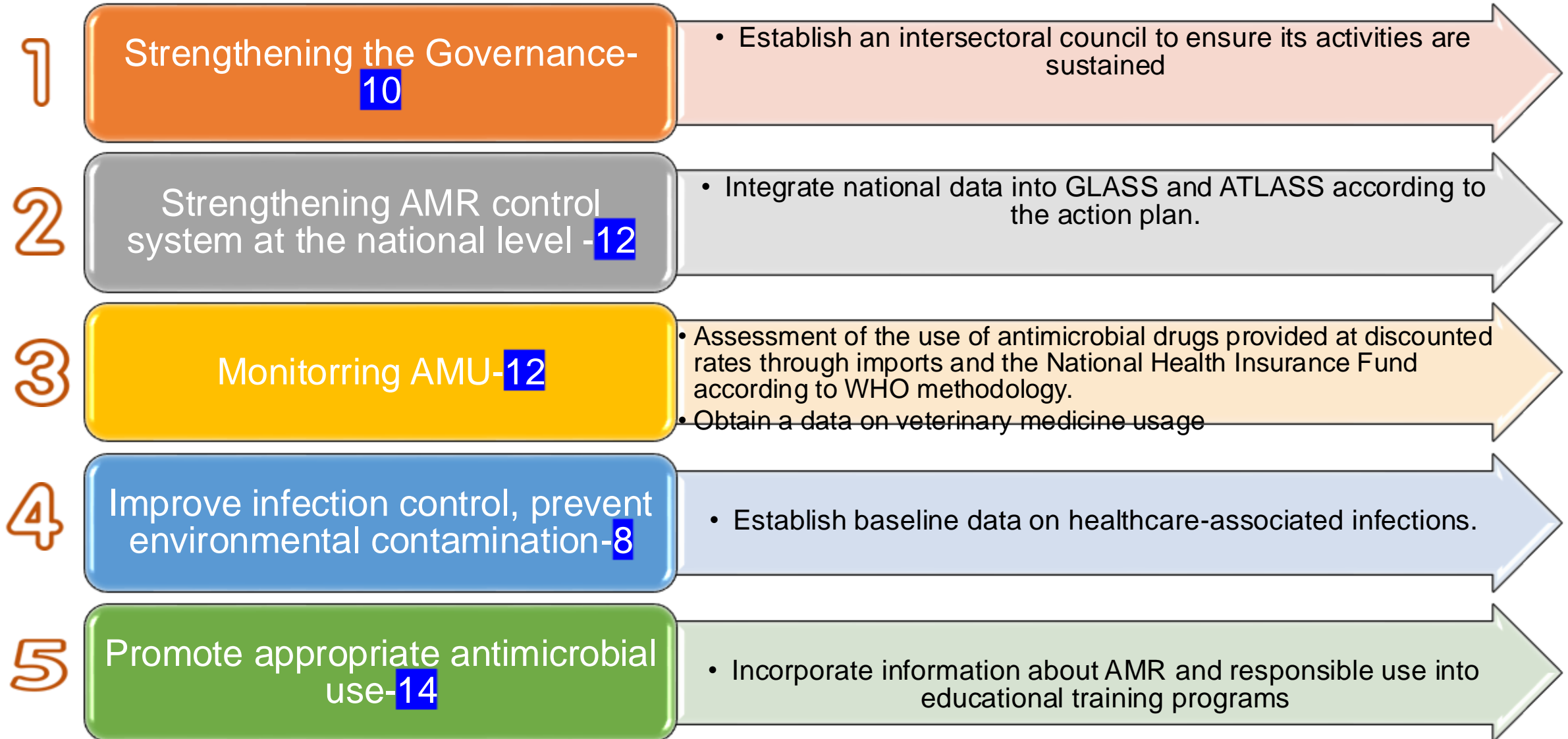
- Order A/72 of MoH – group group - MoH, MoFALI, MMRA, GAVS, WHO, FAO, NCCD, State central clinic
- ЭМЦ, ХХААХҮС А/255, А/137, 2022.05 сард батлагдсан
- 56 specific activities of the 5 objectives

Goal

The goal is to improve the detection of antimicrobial-resistant microorganisms affecting human and animal health, combat them, prevent infections, monitor the use of antimicrobials, and enhance the knowledge and attitudes of the population and health sector workers regarding antimicrobial resistance. This includes promoting the appropriate use of antibiotics.

Goal

Expected outcomes



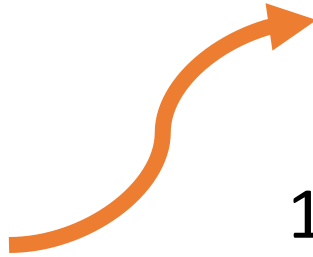
Potential partner organizations for implementing a collaborative plan

1. Medical organizations
2. WOAHA – World Organization for Animal Health
3. IVM – Institute of Veterinary Medicine
4. SCLVDT- State control laboratory for veterinary drug testing
5. FMFA - The Family medicine professionals association
6. NASM - The National Agency for Standardization and Metrology
7. NGO – Non-governmental organization
8. PPRI - The Plant protection research institute
9. SCVL – State central veterinary laboratory
1. Mongolian National University of Medical Sciences
2. MoECC
3. MoE
4. General Customs Authority
5. WHO
6. NCZD
7. National center for social health
8. MULS
9. UN FAO
10. MoFALI
11. ЭМДЕГ
12. MoH

A sectoral advisory council



- ❑ ЭМС, ХХААХҮС-ын хамтарсан А/521, А/331 дугаар тушаалаар 22 хүний бүрэлдэхүүнтэй батлагдсан. The joint orders А/521 and А/331 from the MoH and the MoFALI have established a council composed of 22 members.
- ❑ The operational procedures for the council have been approved as an annex.



The activities planned from 2022 to 2025

1. The council is expected to meet at least seven times
2. The human and animal health drug council will present and discuss the AMU and the outcomes of resistance at least four times during the operational period.
3. The implementation of the plan will include two scheduled evaluations
4. Organize a national conference during the years 2023-2025

Legal framework for pharmaceutical regulation

Government policies on pharmaceuticals in 2002 and 2014.



In 2017, the Government of Mongolia adopted the 'Policy on Health' which included a component specifically addressing pharmaceutical policy.

The revised draft of the Law on Medicines and Medical Devices includes a provision requiring health organizations to develop plans to combat antimicrobial resistance.

Policy to be followed in the Pharmaceutical sector - 2017

1	Strengthen the transparency and accountability of the pharmaceutical sector by establishing a unified regulatory body for medicines and ensuring its sustainable operation;
2	Prevent and control the development of antimicrobial resistance in antibiotics used in the health and agriculture sectors, and promote the responsible use of medicines;
3	Regularly conduct monitoring and research on the quality and safety of medicines available on the market;
4	Fully implement 'Good Manufacturing Practices' in pharmaceutical production;
5	Implement clinical pharmacy services tailored to the levels of medical assistance and healthcare services;
6	Implement an electronic registry and monitoring system for medication safety in the healthcare sector;
7	Implement measures to improve the efficiency of the procurement process for medicines, medical devices, and equipment in a phased manner;
8	Increase supply and accessibility by regulating the prices of medicines and medical devices;
9	Elevate the national production of medicines and medical devices to international standards and support the production and export of essential medicines that replace traditional herbal, animal, and mineral-based remedies

Law on Medicines and Medical Devices



МОНГОЛ УЛСЫН ХУУЛЬ

ЭМ, ЭМНЭЛГИЙН ХЭРЭГСЛИЙН ТУХАЙ
ШИНЭЧИЛСЭН НАЙРУУЛГА

НЭГДҮГЭЭР БҮЛЭГ
НИЙТЛЭГ ҮНДЭСЛЭЛ

2024 оны 05 сарын 05 өдөр

Төрийн ордон, Улаанбаатар хот

1 дүгээр зүйл. Хуулийн зорилт

1.1 Энэ хуулийн зорилт нь эм, эмнэлгийн хэрэгсэл үйлдвэрлэх-экспортлох, импортлох-ханган нийлүүлэх, худалдах, хадгалах, тусгах, эмийн зохистой хэрэглээг төлөвшүүлэх, эдгээрт хяналт тавихтай холбогдсон харилцааг зохицуулахад оршино.

2 дүгээр зүйл. Эм, эмнэлгийн хэрэгслийн үйлдвэрлэл, экспорт, импорт

Хяналт

Provisions included in the Law

One. The regulation of human and animal medicines, which was previously governed by a single law, has been separated, resulting in the separate regulation of human medicines and medical devices. In connection with this, the 'Law on Veterinary Medicines' has been enacted concurrently.

Two. Healthcare organizations will develop and implement a 'Program for the Prevention of Antimicrobial Resistance'.

79th Session of the United Nations General Assembly

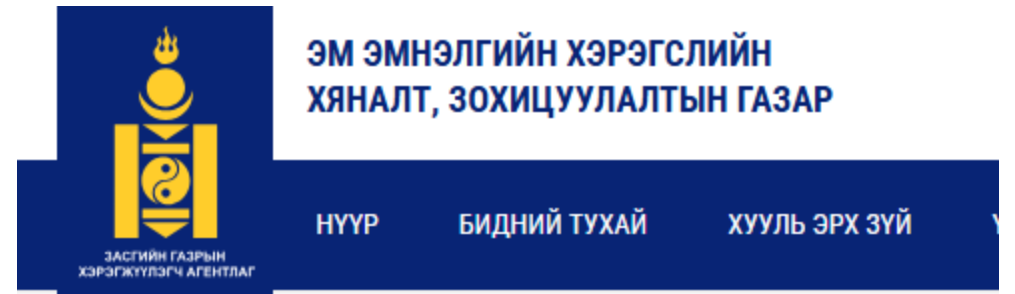
The Government of Mongolia has joined the initiative '**Accelerating the Fight Against Antimicrobial Resistance**' proposed by the World Health Organization and expressed its willingness to collaborate.



Regulation of Antimicrobial Agents

2021 онд Эм, эмнэлгийн хэрэгслийн хяналт, зохицуулалтын газрыг байгуулсан. In 2021, the Medicine and Medical Devices Regulatory Agency was established

- Registration;
- Special permission for production and importing;
- Market post-analysis and collection of safety information;
- Monitoring;
- Laboratory testing;

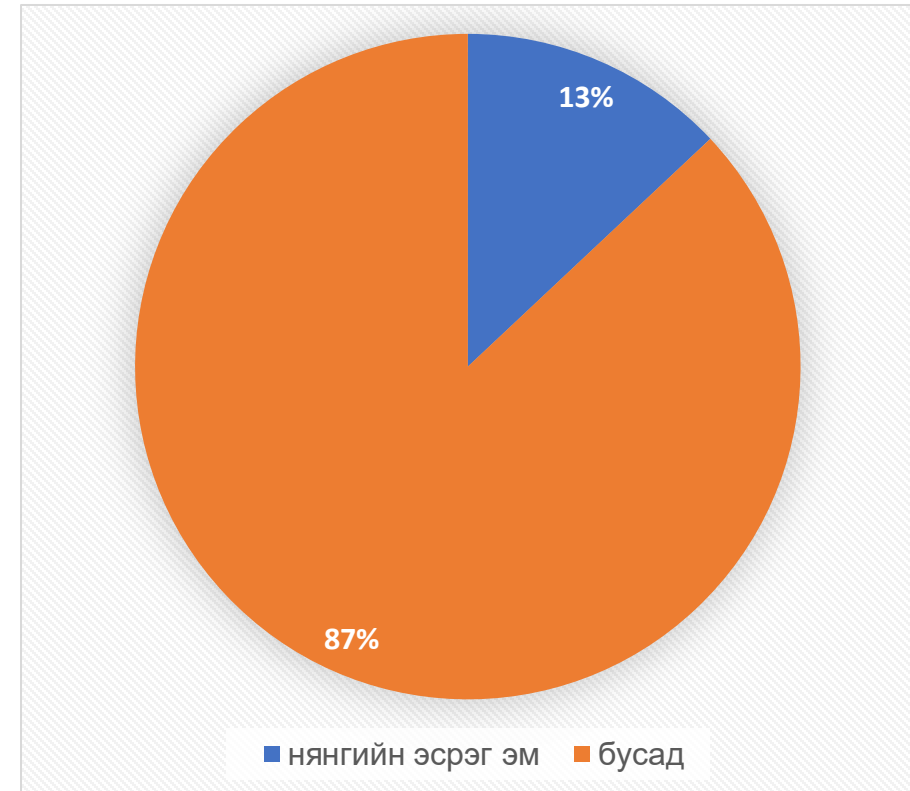


Accessibility

October 2024

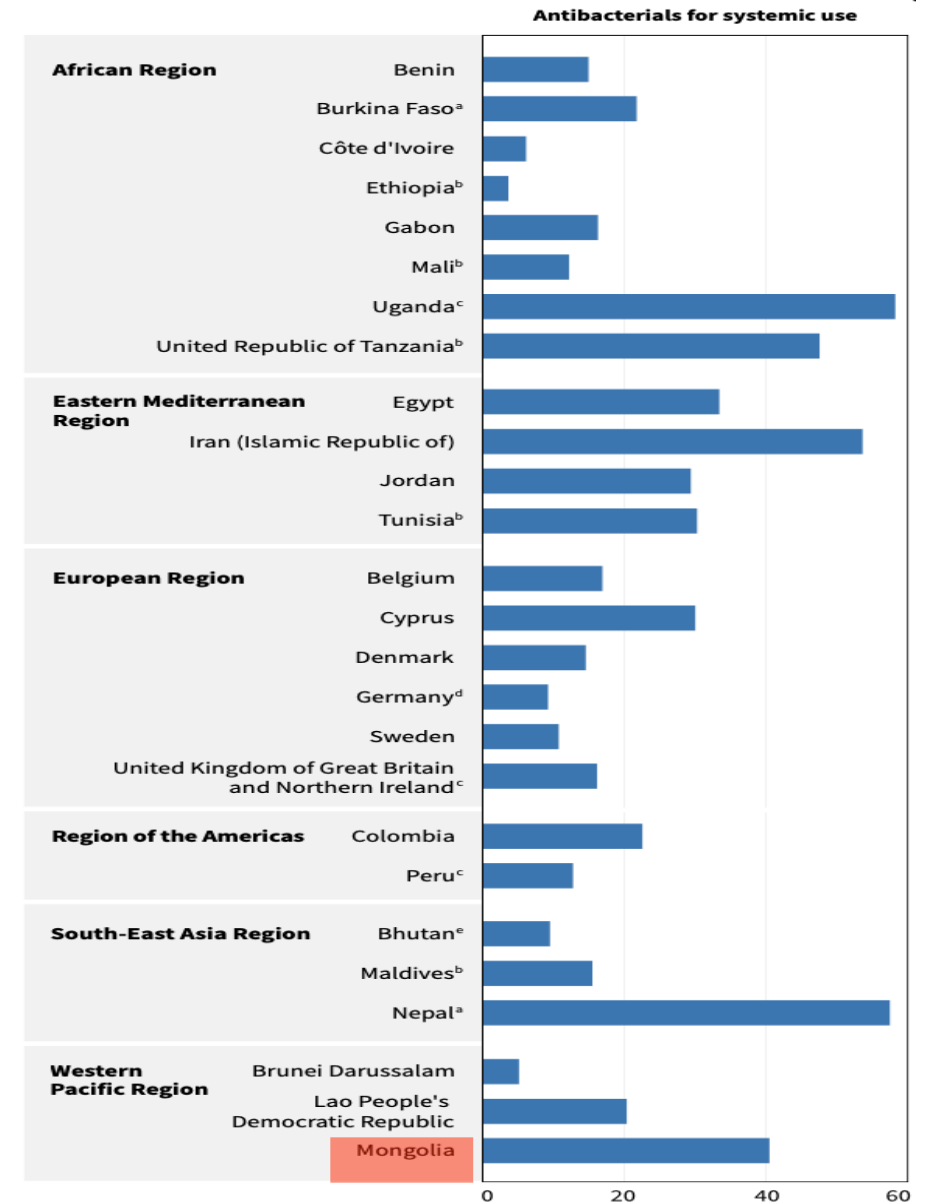
- About 80% of all medicines are imported.
- Out of over 4,110 registered medicines, approximately 13% are antimicrobials.
- Six domestic pharmaceutical manufacturers produce antibiotics in both oral and injectable forms..

Percentage



The use of antimicrobial agents in Mongolia

Report (1000 population/day, Θ TT)



The use of antimicrobial agents in Mongolia

Report (AWARE category)







AWARE ангилал	2015	2016	2018	2019	2020	2021
Хүртээмжтэй байлгах (Access)	71.72%	74.67%	62.54%	66.2%	78.8%	45.4%
Хянах (Watch)	28.7%	24.67%	23.24%	29.70%	18.3%	53.9%
Нөөц (Reserve)	0.00002%	0.001%	0.003%	0.03%	0.05%	0.01%
Бусад	0.21%	0.66%	14.22%	4%	2.8%	1.6%

- To maintain accessibility → the average over the last 6 years is 66.55%.
 - Usage of the monitoring group ↓ 2020, ↑ 2021 (2.9 times)
 - The usage of reserve group antibiotics has increased by 2,500 times.
- This group includes the drugs cefepime, cefpirome, and Fosfomycin.

/2015 → 2020/

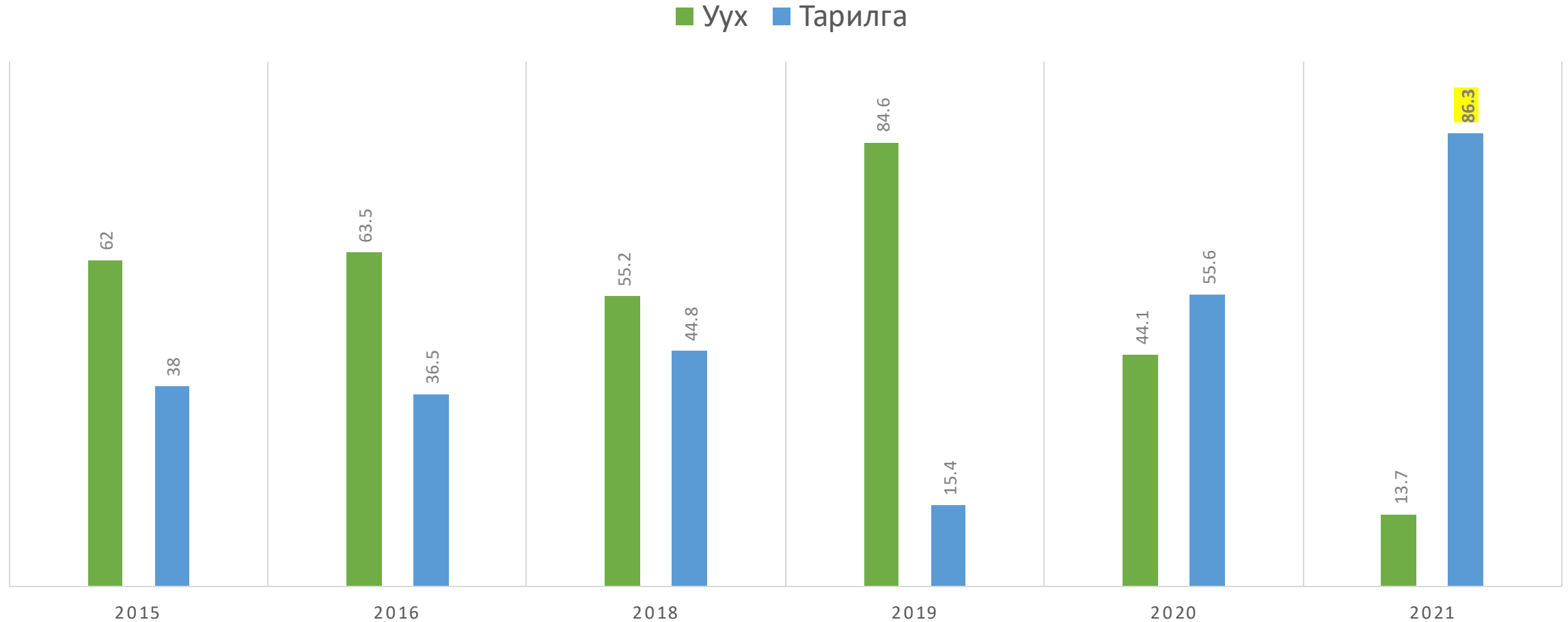
The use of antimicrobial agents in Mongolia

Report (Pharmaceutical classification, percentage)

Pharmaceutical classification	2021	2020	2019	2018	2016	2015
Aminoglycosides	0.12	8.2	0.11	 12.6	0.7	0.1
Tetracyclines	1.3	4.3	 7	3.1	2.7	2.6
Quinolones	2.9	8.8	 16.5	9.9	7.6	15.7
Macrolides, lincosamides and atreptogramins	2.3	5	9.7	5.4	 11.6	6.8
Other beta-lactames	 71.9	47.8	13.7	31.2	24.9	25.5
Beta-lactam antibacterials, penicilins	18.1	18.1	40.3	27.6	 44.3	33.2

The use of antimicrobial agents in Mongolia

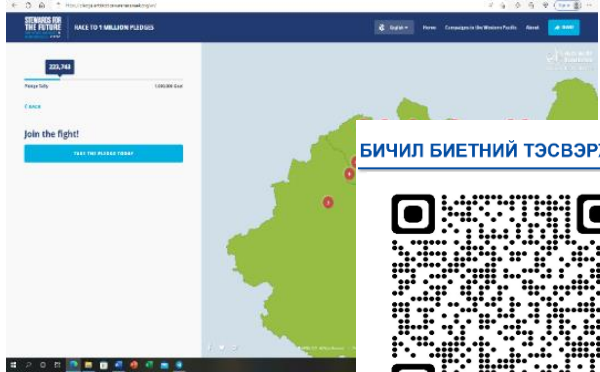
Report (route of administration, percentage).



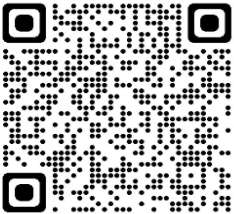
Dissemination of knowledge, attitudes, and practices



✓ Since 2015, "Antibiotic Awareness Week" has been organized to provide information to healthcare professionals and the public.



БИЧИЛ БИЕТНИЙ ТЭСВЭРЖИЛТЭЭС ХАМТДАА СЭРГИЙЛЬЕ



Бичил биетний эсрэг эмийг хариуцлагатай хэрэглэе

Дэлхий даяар нийгмийн эрүүл мэндийн тулгамдсан асуудлын нэг болоод байгаа бичил биетний тэсвэржилтийн тархалтыг бууруулахад хүн бүрийн оролцоо чухал.

Бидэнтэй хамт бичил биетний эсрэг эмийг хариуцлагатай хэрэглэх аянд нэгдэж доорх заавраар QR code уншуулж нэгдээрэй.



Утасныхаа камерийн QR код уншуулах хэсгийг идэвхижүүлнэ
Take the Pledge today-General public-Add pledge

Key initiatives being implemented

- ✓ Collaboration between the human and veterinary medicine sectors has intensified compared to previous years.
- ✓ The implementation of the "Program to Combat Antimicrobial Resistance" has begun in healthcare organizations.
- ✓ Efforts are underway to intensively send data to the global WHONET network to establish a national database on AMR.
- ✓ The national data from the AMC (Antimicrobial Consumption) will be sent to the WHO annually.

Thank you for your attention