MINISTRY OF HEALTH

SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness

Hanoi, November 15, 2024

Number: 3465 /QD-BYT

DECISION

Approval of the "Action Plan for Prevention and Control of Antimicrobial Resistance"

in healthcare in the period 2024-2025"

MINISTER OF HEALTH

Pursuant to Decree No. 95/2022/ND-CP dated November 15, 2022 of the Government stipulating the functions, tasks, powers and organizational structure of the Ministry of Health;

Pursuant to Decision No. 1121/TTg-CP dated September 25, 2023 of the Prime Minister on approving the National Strategy on Antimicrobial Resistance Prevention and Control for the 2023-2030 period, with a vision to 2045;

At the request of the Director of the Department of Medical Examination and Treatment Management - Ministry of Health.

DECISION:

- **Article 1.** To issue with this Decision the "Action Plan for Prevention and Control of Antimicrobial Resistance in Healthcare for the 2024-2025 Period".
- **Article 2.** This Decision comes into force from the date of signing and promulgation.
- **Article 3.** The following persons: Chief of Office of the Ministry, Chief Inspector of the Ministry, Director of the Department of Medical Examination and Treatment Management, Directors of Departments and Bureaus under the Ministry of Health, Directors of Hospitals under the Ministry, Health Departments of ministries, branches, Departments of Health of provinces and centrally run cities, are responsible for implementing this Decision.

Recipient:

- As Article 3;
- Prime Minister (for report);
- Deputy Prime Ministers (for report);
- Government Office (for report);
- Minister (for report);
- Ministry of Agriculture and Rural

Development, Ministry of Natural Resources and Environment;

- Department of Health of provinces and cities under the Central Government;
- Save: VT, KCB.

KT. MINISTER DEPUTY MINISTER

Signed

Tran Van Thuan

ACTION PLAN TO PREVENT AND CONTROL ANTI-IMMUNE RESISTANCE IN HEALTHCARE 2024-2025

(Issued with Decision No. 3465/QD-BYT day November 15, 2024 of the Minister of Health)

I. PROBLEM STATEMENT

Antimicrobials — which include antibiotics, antivirals, antifungals and antiparasitic drugs — are medicines used to prevent and treat infections in humans, animals and plants. Resistance occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to antimicrobial drugs, making infections harder to treat and increasing the risk of spreading the disease, becoming seriously ill and dying. As a result, the drugs lose their effectiveness and the infection persists in the body, increasing the risk of spreading to others. Bacteria that are resistant to most antibiotics, known as super-resistant bacteria, have emerged around the world. Many factors have accelerated the threat of resistance worldwide — including the overuse and inappropriate use of drugs in humans, livestock and agriculture, as well as poor access to clean water and sanitation.

Antimicrobial resistance is a global health and development threat, requiring urgent multi-sectoral action to achieve the Sustainable Development Goals (SDGs) . In 2011, on World Health Day, April 7, the World Health Organization took the theme of global antimicrobial resistance: "No action today, no cure tomorrow" and called on countries to have timely plans to deal with antimicrobial resistance .

In response to antibiotic resistance in Vietnam, the Minister of Health signed and issued Decision No. 2174/QD-BYT dated June 21, 2013 approving the National Action Plan on Antibiotic Resistance Prevention and Control for the period 2013-2020. The National Action Plan has been implemented to respond to antibiotic resistance. Public awareness of antibiotic resistance has been enhanced, the Antibiotic Resistance Surveillance System has been established and strengthened; the infection control surveillance network, professional capacity on antibiotic resistance surveillance, and antibiotic resistance data management have been improved; many policy documents, laws, and professional guidelines on microbiological testing, testing quality management, etc. have been issued and implemented. Currently, Vietnam continues to face increasing antibiotic resistance. Antibiotic resistance prevention and control requires the participation of ministries, localities, and the entire society. In the face of the above situation, it is necessary to develop a National Strategy on Antimicrobial Resistance Prevention and Control for the period 2022-2030 to enhance proactive participation and coordination among sectors from central to local levels, People's Committees of provinces and cities, in the fields of human health, veterinary medicine, environment and industry and trade.

On September 25, 2023, the Prime Minister signed Decision No. 1121/QD-TTg approving the National Strategy on Antimicrobial Resistance Prevention and Control in Vietnam for the period 2023-2030, with a vision to 2045. The Strategy emphasizes the importance of rational and responsible use of antibiotics in humans, animals and plants. The promulgation of the Strategy is Vietnam's commitment to the fight against antimicrobial resistance, enhancing proactive participation and coordination between sectors from central to local levels, People's Committees of provinces and cities, in the fields of human health, veterinary medicine and the environment. The Strategy sets four specific goals: (1) Raising awareness of local authorities and understanding of medical and veterinary staff and people about antimicrobial resistance prevention and control; (2) Strengthen the antimicrobial resistance surveillance system to provide timely warnings about the emergence, spread, level and trend of antimicrobial resistance in microorganisms; (3) Reduce the spread of microorganisms and infectious diseases; (4) Use antimicrobials in humans and animals rationally, safely and responsibly.

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The National Strategy on Antimicrobial Resistance represents the efforts of the Government of Vietnam, in collaboration with the World Health Organization (WHO) and other international partners, to combat the rise of antimicrobial resistance. The Strategy provides solutions to strengthen surveillance, promote responsible use of antibiotics in health and agriculture, and raise public awareness of the consequences of misuse and overuse of antimicrobials in both humans and animals; develop a Common Action Framework as a foundation for multi-sectoral cooperation, coordination, implementation, and monitoring of actions according to the specific responsibilities of each sector; Develop and implement action plans for each sector of health, agriculture, environment, industry and trade to address the causes of antimicrobial resistance in their respective sectors.

Based on the National Strategy on Antibiotic Resistance Prevention in Vietnam for the period 2023-2030, with a vision to 2045, based on the results achieved, difficulties, and gaps in implementing the National Action Plan on Antibiotic Resistance Prevention and Control for the period 2013-2020, the Ministry of Health has developed an "Action Plan on Antibiotic Resistance Prevention and Control in Healthcare for the period 2024-2025" and will soon develop one for the period 2026-2030.

II. OBJECTIVES

1. General goals

Slow down the development of drug resistance and prevent and control the spread of drug-resistant microorganisms and infectious diseases, while ensuring the continuous availability of antimicrobial drugs and the rational use of antimicrobial drugs to effectively treat infectious diseases in humans and animals, contributing to the protection, care and improvement of human and animal health, environmental protection and socio-economic development of the country.

2. Specific goals and targets by 2025

- 2.1. Objective 1: Raise awareness of local authorities and understanding of health workers, veterinarians and people about preventing and combating drug resistance.
- a) Indicator 1: The rate of provinces and centrally-run cities with plans to prevent and combat drug resistance for the 2023 2030 period approved by the Provincial People's Committee and allocated budget for implementation reaches 100%.
- b) Indicator 2: The rate of correct understanding of antibiotic resistance prevention and control among adults and mothers is at least 50% and among health workers is at least 60%.
- 2.2. Objective 2: Strengthen the antimicrobial resistance surveillance system to provide timely warnings about the emergence, spread, level and trends of antimicrobial resistance in microorganisms.
- a) Target 1: 50% of hospitals under the Ministry of Health and at least 01 hospital in each province and city participate; improve capacity for 03 national reference laboratories on antibiotic resistance and deploy surveillance of antibiotic resistance of microorganisms in the community by 2025.
- b) Indicator 2: At least 90% of staff participating in the national surveillance system on antibiotic resistance are professionally trained in culture techniques, identification and antibiogram, and in the use and management of antibiotic resistance surveillance data.
- c) Target 3: National surveillance reports on antibiotic resistance are published annually from 2023.
- 2.3. Objective 3: Reduce the spread of microorganisms and infectious diseases.
- a) Indicator 1: Proportion of hospitals ¹that set targets and implement plans to control the level of antibiotic resistance of common hospital-acquired pathogens; assess compliance with good practices in infection prevention and control and biosafety reach at least 40%.
- b) Indicator 2: Proportion of hospitals implementing microbiological techniques for diagnosis, treatment and monitoring of drug resistance: reaching at least 40% of hospitals under ministries, provincial and municipal hospitals; reaching at least 15% of district and county hospitals.
- c) Indicator 3: Proportion of hospitals implementing active surveillance of healthcare-associated infections and implementing interventions to reduce the rate of these infections: reaching at least 50% of hospitals under ministries, provincial and municipal hospitals, reaching at least 20% of district and county hospitals.
 - 2.4. Goal 4: Use antimicrobials in humans rationally, safely and responsibly.

¹ Not including district hospitals

- a) Indicator 1: The rate of hospitals implementing antibiotic use management programs reaches at least 30%.
- b) Target 2: Establish a national surveillance system for antibiotic use and consumption in humans.

III. OPERATION PLAN

STT	Work	Focal point	Time of execution
1.	Interdisciplinary coordination		
1.1	Develop a written agreement on inter-sectoral commitment on antimicrobial resistance prevention and control for the period 2023-2030 between ministries and relevant partners as a foundation for multi-sectoral cooperation, coordination, implementation, and monitoring of actions according to specific responsibilities . belong to each central sector	Ministry of Health	2024-2025
1.2	Develop an action plan to prevent and combat drug resistance in healthcare for the period 2024-2025 and submit it to the Ministry of Health's leaders for consideration and promulgation.	Ministry of Health	2024
1.3	Develop an action plan to prevent and combat drug resistance in healthcare for the period 2026-2030 and submit it to the Ministry of Health's leaders for consideration and promulgation.	Ministry of Health	2025
1.4	Develop a local plan to implement drug resistance prevention and control based on the objectives, tasks and solutions of the Strategy, integrate into local socio-economic development targets and tasks, the plan is approved by the People's Committee of the province or city (hereinafter referred to as the People's Committee) and is allocated a budget for 100% implementation.	People's Committee	2024-2025
1.5	Establish and maintain an inter-sectoral steering committee on antimicrobial resistance with a working charter developed to oversee and coordinate policy decisions for antimicrobial resistance-related activities across all sectors in line with public health goals related to antimicrobial resistance.	Ministry of Health People's Committee	2024-2025
1.6	Establish and maintain an Inter-Agency and Partnership Technical Group on Antimicrobial Resistance with a working charter developed to review and synthesize solutions and initiatives to respond to antimicrobial resistance and	Ministry of Health	2024-2025

STT	Work	Focal point	Time of execution
	provide technical recommendations to the Inter-Agency Steering Committee on Antimicrobial Resistance.		
1.7	Establish and maintain the working group on antimicrobial resistance in healthcare with a working charter developed to review and synthesize solutions and initiatives to respond to antimicrobial resistance and provide technical advice to implement the Action Plan on antimicrobial resistance in healthcare	Ministry of Health	2024-2025
1.8	Improve capacity for staff of relevant agencies, units and organizations to implement activities on prevention and control of drug resistance.	Ministry of Health Provincial and City Health Department	2024-2025
		KBCB Facility	
2.	Communication, education to raise awareness		
2.1	Develop communication materials that are appropriate to the communication method and target groups, focusing on developing key and new messages about antibiotic resistance to have a strong impact on society, in diverse forms such as print, video, radio, focusing on social media platforms about the causes of antibiotic resistance, consequences of antibiotic resistance and measures to prevent and combat antibiotic resistance.	Ministry of Health Ministry and sector health Provincial and City Department of Health KBCB Facility Health Education	2025
2.2	Develop a curriculum framework and lecture	Center or Center for Disease Control School of health	2025
	content on antibiotic resistance, control and prevention of hospital-acquired infections in continuous medical update training programs, integrated into formal training programs at health sector training institutions.	ministry of Health Ministry and sector health	
		Provincial and City Department of Health KBCB Facility	
2.3	Organize seminars and talks to disseminate knowledge on drug resistance prevention, policies and laws for healthcare workers, mothers, women, students, etc.	Ministry of Health Ministry and sector health	2024-2025

STT	Work	Focal point	Time of execution
		Provincial and City Department of Health	
		KBCB Facility	
		Other relevant agencies	
2.4	Organize events in response to World	Ministry of Health	2024-2025
	Antimicrobial Resistance Awareness Week in accordance with actual conditions every year.	Ministry and sector health	
		Health service	
		KBCB Facility	
2.5	Organize training for health workers on	Ministry of Health	2024-2025
	communication skills to prevent and combat drug resistance.	Ministry and sector health	
		Health service	
		KBCB Facility	
2.6	Conduct a survey of knowledge about	Ministry of Health	2024-2025
	antimicrobial resistance prevention and control among adults, mothers and health workers by 2025.	Health service	
	Building a survey questionnaire		
3.	Strengthening the surveillance system for antimicrobial resistance, use and consumption in humans		
3.1.	Strengthening the drug resistance surveillance system		
3.1.1	Develop technical procedures and professional	Ministry of Health	2024-2025
	guidance on culture methods, identification, and antibiotic susceptibility testing.	KBCB Facility	
3.1.2	Survey on the capacity of microbiological techniques of KBCB facilities	Ministry of Health	2024-2025
	techniques of KBCB facilities	Health service	
3.1.3	Training, coaching and direct support for KBCB facilities on clinical microbiology, microbiological test indications, culture techniques, identification, antibiotic/mycotoxin testing and test quality control; management of drug resistance surveillance data; development of cumulative antibiotic resistance reports;	Ministry of Health Health service	2024-2025

STT	Work	Focal point	Time of execution
	prevention, early detection and treatment of outbreaks; use of drug resistance data in developing antibiotic use guidelines; diagnosis and treatment guidelines.		
3.1.4	Update reporting forms on drug resistance surveillance and unify implementation in medical examination and treatment facilities nationwide.	Ministry of Health	2024-2025
3.1.5	Strengthening the national data portal on surveillance of antimicrobial resistance in health care and developing a national report on surveillance of antimicrobial resistance	Ministry of Health	2024-2025
3.1.6	Share data and reports on drug resistance	Ministry of Health	2024-2025
	surveillance through workshops, conferences, and meetings to provide evidence for policy	Health service	
	development and interventions.	KBCB Facility	
3.1.7	Regularly review and update the list of priority microorganisms in the drug resistance surveillance list in medicine.	Ministry of Health	2024-2025
3.1.8	Develop and maintain a mechanism for sending microbial strains from participating KBCB facilities in the National Antibiotic Resistance Surveillance System to the Reference Microbiology Laboratory for Antibiotic Resistance Surveillance.	Ministry of Health	2024-2025
3.1.9	Participate in and maintain international reporting systems: Maintain the Global Antimicrobial Resistance Surveillance System (GLASS) from 2024 and maintain the Antimicrobial Resistance Self-Assessment Survey (TrACSS) from 2023	Ministry of Health	2024-2025
3.2	Strengthening the surveillance system for the use and consumption of antimicrobial drugs in humans		
3.2.1	Develop guidelines, information infrastructure, and pilot the establishment of a national database on antibiotic use monitoring (AMU) at a number of medical examination and treatment facilities.	Ministry of Health	2024-2025
3.2.2.	Developing guidelines for implementing antibiotic consumption monitoring (AMC)	Ministry of Health	2025

STT	Work	Focal point	Time of execution
3.2.3.	Develop training programs, materials and organize training on AMU data collection and use	Ministry of Health Health service	2025
4.	Reduce the spread of antibiotic-resistant microorganisms and infectious diseases		
4.1	Update professional guidelines on infection prevention and control; diagnosis and treatment, appropriate use of antibiotics, and guidelines for detecting and responding to microorganisms residing in patients.	Ministry of Health Health service	2024-2025
4.2	Review and gradually develop policies, laws, standards, technical regulations, and professional guidelines on waste management and treatment of medical examination and treatment facilities to control antibiotic residues and drug-resistant microorganisms.	Ministry of Health Health service	2025
4.3	Review, update and finalize guidelines for implementing healthcare-associated infection surveillance	Ministry of Health Health service	2025
4.4	Develop training programs and materials, organize continuing education, training, and provide technical support to health workers on diagnosis and treatment of infectious diseases, management and use of antibiotics in hospitals, infection control, and implementation of interventions to reduce hospital infection rates.	Ministry of Health Health service	2025
4.5	Developing guidelines for implementing antibiotic use management in the community	Ministry of Health Health service	2025
5	Rational, safe and responsible use of antimicrobials in humans		
5.1	Review, supplement and update content on antibiotic use management in teaching and training programs of schools training in human health.	Ministry of Health SYT	2025
5.2	Review and update the Guidelines for the use of antibiotics, guidelines for the management of antibiotic use, and guidelines for the diagnosis and treatment of infectious diseases.	Ministry of Health	2024-2025

STT	Work	Focal point	Time of execution
5.3	Assessment of the quality and implementation status of antibiotic management and use	Ministry of Health Health service	2025
	programs at KBCB facilities	KBCB Facility	
5.4	Improve clinical pharmacy capacity, improve	Ministry of Health	2025
	antibiotic management and use programs at healthcare facilities, manage prescriptions and	SYT	
	sell prescription drugs	KBCB Facility	
5.5	Enhance research capacity on drug use	Ministry of Health	2025
	assessment, drug resistance, especially research on multidrug-resistant bacteria, and	SYT	
	implement interventions to promote rational	KBCB Facility	
	use of antibiotics.	Research facility	
5.6	Review, research, and complete policies and laws on management and sale of prescription antibiotics at drug retail establishments.	Ministry of Health	2025
5.7	Develop training programs, materials,	Ministry of Health	2025
	communications and organize training, coaching, and dissemination of knowledge for	Health service	
	pharmacists at drug retail establishments on compliance with prescription antibiotic sales.	The facility has appropriate training functions.	
5.8	Conduct an assessment of compliance with	Ministry of Health	2025
	prescription antibiotic sales at retail pharmacies	Health service	
5.9	Check and monitor prescription implementation, especially at private clinics	Ministry of Health Health service	2025

IV. MONITORING AND EVALUATION FRAMEWORK

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
•	Raise awareness of local authorities a rug resistance	nd understanding of health wo	orkers, veterinar	ians and peop	le about preventing and
Indicator 1:	Percentage of provinces and centrally-run cities with plans to prevent and combat drug resistance for the period 2023 - 2030 approved by the Provincial People's Committee and allocated budget for implementation	Numerator: number of provinces and centrally run cities with plans to prevent and combat drug resistance for the period 2023 - 2030 approved by the Provincial People's Committee and allocated budget for implementation.	0, 2023	100%	Annual report of provincial and municipal health departments
		Denominator: number of provinces and cities (63)			
Indicator 2a.	Rate of correct understanding of antibiotic resistance prevention and control among adults and mothers	Numerator: number of adults and mothers with correct knowledge about preventing and combating antibiotic resistance	16.9% in adults, 20.13% in mothers	, 50%	Survey results, 2025 and 2030 Department of Health Care Management Provincial and municipal
		Denominator: total number of people surveyed			health departments
Indicator 2b.	Rate of correct understanding of drug resistance prevention and control among health workers	Numerator: number of health workers with correct knowledge about preventing and combating drug resistance	49.5%	60%	Survey results, 2025 and 2030 Department of Health Care Management

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
		Denominator: total number of people surveyed			Provincial and municipal health departments
_	Strengthen the antimicrobial resistan f antimicrobial resistance in microorg	_	de timely warni	ings about the	emergence, spread, level
Indicator 1a	Number of hospitals in each province and city participating in the national surveillance system for human drug resistance	Hospitals participate in and report on antimicrobial resistance surveillance data on the National Surveillance System for Human Antimicrobial Resistance	56 Hospitals/ 25 provinces	1	Report on the national surveillance system on antimicrobial resistance of the Ministry of Health, 2025 and 2030 Report of the provincial and municipal Department of Health
Indicator 1b	Number of central hospitals participating in the national surveillance system for human drug resistance	Hospitals participate in and report on antimicrobial resistance surveillance data on the National Surveillance System for Human Antimicrobial Resistance	13	50% central hospital	Report on the national surveillance system on antimicrobial resistance of the Ministry of Health, 2025 and 2030
Indicator 1c	Capacity of 03 national reference laboratories on drug resistance			Consolidate	BV Report, 2025 and 2030
1d indicator	Number of new laboratories recognized as national reference laboratories for antimicrobial resistance	The new laboratory has been recognized by the Ministry of Health as a national reference laboratory for antimicrobial resistance surveillance.	0	3	Decision of the Ministry of Health to recognize reference laboratories, 2025 and 2030

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
Target 1 point	Community-based surveillance of antimicrobial resistance	Research on community-based antimicrobial resistance surveillance is underway.	0	Deployment	Report on the results of community-based drug resistance surveillance by the Department of Health Care Management, 2025 and 2030
Indicator 3a	Percentage of staff participating in the national surveillance system for antimicrobial resistance in the health sector who have received specialized training in culture techniques, identification and antibiograms, and use and management of antimicrobial resistance surveillance data	Numerator: staff participating in the national surveillance system on antimicrobial resistance are professionally trained in culture techniques, identification and antibiograms / use, and management of antimicrobial resistance surveillance data Denominator: Number of staff participating in the national surveillance system for antimicrobial resistance		90%	Report of the Department of Health Care Management 2025 and 2030 Report of the provincial and municipal Department of Health
Indicator 4	National surveillance report on antimicrobial resistance published	National surveillance report on antibiotic resistance approved by the Ministry of Health	01 report issued in 2023	Annual	national surveillance report on antibiotic resistance is published annually.
Goal 3: Red	uce the spread of microorganisms and	infectious diseases.		1	
Indicator 1a	Percentage of hospitals under the Ministry Health care sets targets and implements plans to control the level of antibiotic resistance of common	Numerator: Number of hospitals under the Ministry of Health that set targets and implement plans to control		40%	Hospital reports and accompanying documents: (1) Setting targets; (2) Implementation plan to

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
	pathogens in hospitals; assesses compliance with good practices in infection prevention and control and biosafety	the level of antibiotic resistance of common hospital-acquired pathogens and assess compliance with good practices in infection prevention and control and biosafety Denominator: Number of hospitals under the Ministry of Health			control the level of antibiotic resistance of common pathogens in hospitals; (3) Results of assessment of compliance with good practices on infection prevention and control and biosafety 2025, 2030
Indicator 1b	Percentage of provincial and municipal ² hospitals that set targets and implement plans to control the level of antibiotic resistance of common hospital-acquired pathogens; assess compliance with good practices on infection prevention and control and biosafety	Numerator: Number of provincial and municipal hospitals that set targets and implement plans to control the level of antibiotic resistance of common hospital-acquired pathogens and assess compliance with good practices in infection prevention and control and biosafety Denominator: Number of provincial and municipal		40%	Reports and accompanying documents of the hospital and DOH: (1) Setting targets; (2) Implementation plan to control the level of drug resistance of common pathogens in the hospital; (3) Results of assessment of compliance with good practices on infection prevention and control and biosafety 2025, 2030
Indicator 1c	district hospitals that set targets and implement plans to control the level of antibiotic resistance of common	Numerator: Number of district hospitals that set targets and implement plans		20%	Reports and accompanying documents of the hospital and DOH: (1) Setting

²Not including district hospitals

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
	hospital-acquired pathogens; assess compliance with good practices in infection prevention and control and biosafety	to control the level of antibiotic resistance of common hospital-acquired pathogens and assess compliance with good practices in infection prevention and control and biosafety Denominator: Number of district hospitals			targets; (2) Implementation plan to control the level of drug resistance of common pathogens in the hospital; (3) Results of assessment of compliance with good practices on infection prevention and control and biosafety 2025, 2030
Indicator 2a	Percentage of hospitals ³ perform microbiological techniques for diagnosis, treatment and monitoring of drug resistance	Numerator: number of hospitals perform microbiological techniques for diagnosis, treatment and monitoring of drug resistance Denominator: total number of hospitals		40%	List of microbiological techniques (essential) for diagnosis, treatment and monitoring of drug resistance: Department of Health Management Report of KBCB facilities on implementation of microbiological techniques for diagnosis, treatment and monitoring of drug resistance 2025, 2030
Indicator 2c	Percentage of district hospitals performing microbiological techniques for diagnosis, treatment and monitoring of drug resistance	Numerator: number of district hospitals performing microbiological techniques for diagnosis, treatment and drug resistance monitoring		15%	Report of medical facilities and health facilities on implementation of microbiological techniques for diagnosis, treatment and

³Not including district hospitals

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
		Denominator: total number of district hospitals			monitoring of drug resistance 2025, 2030
Indicator 3a	Percentage of hospitals ⁴ Implement active surveillance for healthcare-associated infections and implement interventions to reduce the incidence of these infections in hospitals.	Numerator: number of hospitals implementing active surveillance for healthcareassociated infections and implementing interventions to reduce the incidence of these infections in hospitals		50%	Ministry of Health Guidelines for Active Surveillance of Healthcare- Associated Infections, 2025 Report of KBCB facilities, SYT results of implementing interventions
		Denominator: total number of hospitals			to reduce hospital infection rates 2025, 2030
Indicator 3b	Percentage of district hospitals implementing active surveillance for healthcare-associated infections and implementing interventions to reduce the rate of these infections in hospitals	Numerator: number of district hospitals implementing active surveillance for healthcare- associated infections and implementing interventions to reduce the rate of these infections in hospitals		20%	Report of KBCB facilities, DOH results of implementing interventions to reduce this infection rate in hospitals 2025, 2030
		Denominator: total number of district hospitals			
Goal 4: Use	antimicrobials in humans and animals	rationally, safely and respons	ibly .		,
Indicator 1	Percentage of hospitals implementing antibiotic stewardship programs	Numerator: number of hospitals implementing antibiotic stewardship programs		30%	Report of KBCB facility, SYT results of antibiotic use management program implementation of Department of Health Care

⁴Not including district hospitals

Target	Index/target name	Concept/definition (how to calculate the index)	Baseline (value, year)	Short-term targets 2024-2025	Data sources and frequency, responsibility for implementation
		Denominator: total number of hospitals			Management synthesized from hospital reports, 2025, 2030
Indicator 3a	Establish a national surveillance system for human antibiotic use and consumption	Guidelines for monitoring antibiotic use and consumption in humans approved by the Ministry of Health system for human antibiotic use and consumption established		Establish	Guidelines for monitoring antibiotic use and consumption in humans issued by the Ministry of Health in 2025 Establish a national surveillance system for antibiotic use and consumption in humans by 2025

V. IMPLEMENTATION COSTS

Funding sources include the state budget and other legal sources.

VI. RESPONSIBILITIES AND IMPLEMENTATION ORGANIZATION

- 1. Department of Medical Examination and Treatment Management
- Is a permanent member of the Steering Committee on prevention and control of drug resistance.
- Preside over and coordinate with relevant agencies and units to deploy, direct, guide, inspect, supervise and implement the Plan.
- Preside over and coordinate with relevant agencies and units to organize assessment, reporting, interim and final review of the implementation of the Plan.
- The focal point synthesizes and submits to the Ministry of Health for approval the annual activities of the Departments, Divisions, and Public Service Units under the Ministry.
- 2. Department of Preventive Medicine
- Coordinate the implementation of other tasks according to functions and duties.
- 3. Department of Drug Administration
- Coordinate national data collection on AMU, AMC.
- Coordinate the implementation of other tasks assigned by the Ministry of Health's leaders according to functions and duties.
- 4. Department of HIV/AIDS Prevention and Control
- Focal point for collecting data related to HIV drug resistance nationwide.
- Monitoring, surveillance, and evaluation of HIV drug resistance in patients undergoing treatment and in newly infected HIV-infected people not yet receiving ARV treatment.
- Implement measures to enhance the capacity of HIV testing laboratories.
- Coordinate the implementation of other tasks assigned by the Ministry of Health's leaders according to functions and duties.
- 5. Department of Science, Technology and Training
- Preside over and coordinate the integration of content on prevention, diagnosis and treatment of infectious diseases, rational and safe use of antibiotics; use of priority antimicrobial drugs in human health care; monitoring resistance, use and consumption of antimicrobial drugs into training programs at universities, colleges and intermediate schools training health workers.

- Preside over the proposal for the Ministry of Health to have a policy to attract human resources in clinical pharmacy, microbiology and infection control.
- Preside over proposals, support, and prioritize research and transfer of new techniques in infectious disease diagnosis and microbiological testing.
- Preside over the proposal for the Ministry of Health to have a policy to enhance continuous training with appropriate forms at home and abroad to improve the qualifications of medical staff.
- Coordinate the implementation of other tasks assigned by the Ministry of Health's leaders according to functions and duties.

6. Department of Planning and Finance

- The budget for implementing the Action Plan is guaranteed by the state budget according to the annual budget balance capacity according to the current budget decentralization, arranged in the expenditure estimates of agencies and units assigned to perform the tasks according to the provisions of the State Budget Law and from other legal funding sources.
- Based on decisions approving tasks, annual operating plans and proposals
 of the unit, the Department of Financial Planning is responsible for
 synthesizing the budget and reporting to the Ministry's leaders to submit to
 the Ministry of Finance for appraisal and budget arrangement according to
 regulations.
- Coordinate with the Department of Medical Examination and Treatment Management (the focal unit of the program) to inspect and monitor the implementation of tasks according to assigned functions and authorities.

7. Health ministries and branches

- Be the focal point for directing, disseminating, guiding, inspecting, monitoring, evaluating, reporting, summarizing, and concluding the implementation of the Plan in the Ministry and sector's Health.
- Develop and advise competent authorities of ministries and sectors to promulgate or integrate plans for implementing drug resistance prevention and control into sectoral development programs, and propose priority allocation of annual funding for implementation.
- 8. Department of Health of provinces/cities under central authority:
- Focal point for directing, disseminating, guiding, inspecting, monitoring, evaluating, reporting, summarizing, and concluding the implementation of the Plan at the local level.
- Direct and guide relevant agencies and units according to their authority to develop and approve the content of activities according to regulations.

- Develop and advise the People's Committee to promulgate or integrate the plan for implementing drug resistance prevention and control into the local socio-economic development program, and allocate annual budgets to implement the program according to the provisions of the Budget Law. For provinces and cities, the approved drug resistance prevention and control plan: continue to implement, review, and adjust if necessary.
- Take the lead in implementing activities to deploy a group of indicators on monitoring the sale of prescription antibiotics at drug retail establishments in the area.
- 9. Medical examination and treatment facilities
- Organize the implementation of monitoring, evaluation, reporting, interim and final review of the Plan implementation in accordance with the actual situation of the facility.
- Allocate resources for activities to prevent and combat antibiotic resistance: upgrade microbiology laboratories, strengthen infection control; monitor and inspect the irrational use of antibiotics, etc.
- Improve the capacity of doctors, microbiologists, pharmacists, nurses, infection control and related staff of the facility in the prevention, diagnosis and treatment of infectious diseases, rational and safe use of antibiotics; use of priority antimicrobial drugs in human health care; monitoring of resistance, use and consumption of antimicrobial drugs.
- Conduct reports on antibiotic resistance surveillance, use and consumption at the facility according to regulations.
- 10.Related pharmaceutical business establishments: Report on production, trading and use of antibiotics according to regulations.
- 11.General responsibility of agencies and units: based on the approved implementation plan for the period 2024-20230, develop a detailed implementation plan of year of implementation with operational budget submitted to competent authority for approval as basis The financial authority shall arrange the annual budget according to the provisions of the Law. Budget.