

Antimicrobial Resistance in the Western Pacific Region

A Review of Surveillance and Health Systems Response



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Table of Contents

Al	brev	ations	ii
Introduction			
_	CT I D	AND AND OF ANTEN HOPODAY PROJECTANOS	2
1. —		VEILLANCE OF ANTIMICROBIAL RESISTANCE	3
	1.1	AMR surveillance and external quality assurance in the Western Pacific Region	6
	1.2	Proposed regional AMR surveillance system	10
	1.3	Quality assurance strategies for AMR surveillance	18
	1.4	Governance and ownership of AMR surveillance data	20
	1.5	Surveillance to support containment of AMR	20
2.	MO	NITORING OF ANTIMICROBIAL USE	23
	2.1	WHO recommendations for monitoring antimicrobial use	25
	2.2	Proposed regional system to monitor antimicrobial use	26
	2.3	Global systems for monitoring antimicrobial use	28
	2.4	Presentation and dissemination of surveillance data	29
	2.5	Challenges for monitoring antimicrobial use in the Region	31
	2.6	The way forward	32
3.	HEA	LTH SYSTEM RESPONSE TO SUPPORT CONTAINMENT OF	
	ANI	MICROBIAL RESISTANCE	33
	3.1	Regional-specific challenges	35
	3.2	Improving regulations	38
	3.3	Strengthening infection, prevention and control	41
Re	eferen	ces	47

Abbreviations

AGISAR Advisory Group on Integrated Surveillance of Antimicrobial Resistance

AMR antimicrobial resistance

APEC Asia-Pacific Economic Cooperation ASEAN Association of Southeast Asian Nations

AST antibiotic susceptibility testing

ATC Anatomical, Therapeutic and Chemical (classification system)
AVWG WHO Expert Working Group on Influenza Viral Susceptibility

CLSI Clinical and Laboratory Standards Institute

CSA country situation analysis

DDD defined daily dose EaP Eastern Partnership

EARS-Net European Antimicrobial Resistance Surveillance Network ECDC European Centre for Disease Prevention and Control

EQAS External quality assurance system

ESAC-Net European Surveillance of Antimicrobial Consumption Network

EU European Union

EUCAST European Committee on Antimicrobial Susceptibility Testing
FAO Food and Agriculture Organization of the United Nations
GASP Gonococcal Antimicrobial Surveillance Programme

GFN Global Foodborne Infections Network

GISRS Global Influenza Surveillance and Response System

GMP good manufacturing practices GPP good pharmacy practice

GPRIM Global Plan for Insecticide Resistance Management in Malaria Vectors

GPSC Global Patient Safety Challenge (of WHO)

HAI health-care-associated infection

HCF health-care facility

IPC infection prevention and control

MDR multidrug-resistant

MIC minimum inhibitory concentration MRSA methicillin-resistant *Staphylococcus aureus*

NPS National Prescribing Service

OECD Organisation for Economic Co-operation and Development

OIE World Organisation for Animal Health

OTC over the counter

POLHN Pacific Open Learning Health Net PPTC Pacific Paramedical Training Centre

REQAP Regional External Quality Assurance Programme RCPA Royal College of Pathologists of Australasia

RCPAQAS Royal College of Pathologists of Australasia Quality Assurance Programmes

ReLAVR Latin American Network for Antimicrobial Resistance Surveillance

STGs standard treatment guidelines

TB tuberculosis

UK NEQAS United Kingdom National External Quality Assessment Service

TWG technical working group
VINARES Viet Nam Resistance (project)
VRE vancomycin-resistant enterococci

WePARS Western Pacific Antimicrobial Resistance Surveillance (network)

WHO World Health Organization XDR extensively drug-resistant

Introduction

Antimicrobial resistance (AMR) is a global public health threat of high concern in the Western Pacific Region. The 2014 World Health Assembly resolution WHA67.25 stresses the need for urgent action to combat AMR. In the Western Pacific Region, priority actions to contain AMR were identified by the World Health Organization (WHO) in consultation with Member States. These actions are outlined in the *Action Agenda for Antimicrobial Resistance in the Western Pacific Region* which was endorsed by the sixty-fifth session of the Regional Committee for the Western Pacific. The action agenda provides a background to AMR in the Region and highlights challenges in addressing this public health threat.

Antimicrobial Resistance in the Western Pacific Region: A review of Surveillance and Health Systems Response provides an in-depth situational review and technical discussion in three main areas for the containment of AMR in the Region:

- (1) Surveillance of AMR in the Western Pacific Region.
- (2) Monitoring of antimicrobial use in the Western Pacific Region.
- (3) Health systems response to support containment of AMR in the Western Pacific Region.

Part 1 describes the progress in the Region on surveillance of AMR and the gaps in laboratory capacity and methodologies. Part two highlights the need to monitor antimicrobial use through common methodologies and indicators, in addition to surveillance of AMR, to inform important policy changes to contain AMR. The health systems response to AMR also varies across the Region. Part three highlights the urgent need to strengthen regulation of pharmaceutical systems, antimicrobial stewardship and infection prevention and control (IPC) to contain AMR in the Region.



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