# Joint external evaluation of the International Health Regulations (2005) core capacities of

Samoa

**Mission report:** 30 October–3 November 2023



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# Abbreviations

AMR	Antimicrobial resistance
DAC	Disaster Advisory Committee
EHS	Essential Health Services
FAO	Food and Agriculture Organization of the United Nations
HCAI	healthcare acquired infections
HEOC	Health Emergency Operation Centre
IAEA	International Atomic Energy Agency
IHR	The International Health Regulations (2005)
INFOSAN	The International Food Safety Authorities Network
IPC	Infection prevention and control
JEE	Joint External Evaluation
NAPHS	National Action Plan for Health Security
NDMO	National Disaster Management Office
NEOC	National Emergency Operation Centre
NHS	National Health Services
OHS	Occupational Health and Safety
RCCE	Risk Communication and Community Engagement
POE	Points of Entry
PVS	Performance of Veterinary Services
RCCE	Risk communication and community engagement
SOPs	Standard operating procedures
SROS	Scientific Research Organization of Samoa
WASH	Water, Sanitation and Hygiene
WOAH	World Organisation for Animal Health

# Executive summary

The Joint External Evaluation (JEE) team would like to express its appreciation to Samoa for volunteering for a JEE, and for being among the first countries in the world to complete a JEE using the third edition of the JEE tool. Samoa was also the first country in the WHO Western Pacific region to complete a JEE following the end of the public health emergency of international concern (PHEIC) associated with the COVID-19 pandemic.

The revised third edition of the tool incorporates relevant lessons of the ongoing COVID-19 pandemic and other public health emergencies.

The JEE team sincerely appreciates Samoa's efforts to meet the requirements of the JEE process, and the warm hospitality that was offered to the JEE team. All countries that make the effort to undergo the JEE process should be commended, not least for their transparency in service of the shared goal of strengthening global health security.

### Findings from the joint external evaluation

During the JEE mission, which took place in Apia from 30 October to 3 November 2023, Samoa's capacities in 19 technical areas were evaluated through a peer-to-peer consultative process that brought together a multisectoral group of national subject matter experts and the multinational, multidisciplinary expert JEE team for discussion, interaction and selected site visits. After a week of collaborative talks this process led to consensus on scores and priority actions across the 19 technical areas, determined to improve implementation of the IHR (2005) and thereby to enhance health security and the resilience of the Samoan health system.

While those areas are addressed in the respective sections of this report, the evaluation also generated five wider, overarching recommendations that, if implemented, will consolidate Samoa's progress and remove bottlenecks that might impede the implementation of the agreed priority actions. These recommendations, outlined below, address cross-cutting challenges affecting Samoa's capacities across many of the different technical areas that were explored in greater depth in the JEE process.

#### **Overarching recommendations of the JEE**

1. Develop a five-year, risk-based, prioritized, costed and financed National Action Plan for Health Security (NAPHS), based on the recommendations of the JEE report, with clear roles and responsibilities for all relevant stakeholders. Implement the plan with a monitoring and evaluation (M&E) framework that includes regular exercises.

A NAPHS that considers the recommendations of this JEE and the Asia Pacific Health Security Action Framework (APHSAF), and which is aligned with national budgets, will promote national policy coherence and strengthen the efforts of the Samoan health sector to build and maintain core capacities under the IHR (2005). The NAPHS is not standalone document, and alignment with other sector-specific plans is critical to its success, as is the development and implementation of an monitoring and evaluation (M&E) framework.

# 2. Map and review the wider policy landscape and design a stepwise plan to streamline full implementation of any policies and plans relevant to public health.

This is necessary because Samoa has a wide range of IHR-relevant policies and plans that are not fully implemented. This initiative should focus on establishing coherence and ensuring formal endorsement and implementation of the many health policies and strategies that have been developed but not yet endorsed and/or implemented.

# 3. Establish a multisectoral body, or adapt and/or empower an existing body, to provide strong coordination of efforts to meet the requirements of the IHR (2005), not only during emergencies but also during preparedness and recovery phases and at all other times.

Responsibilities of this body should include, but not be limited to, developing and implementing an accountability framework and standard operating procedures for intra- and intersectoral coordination and communication between the health and non-health sectors – including the security sector, the private sector and civil society – across all areas of governance and administration in Samoa. The body should ensure implementation of a testing and exercising programme that incorporates simulation exercises and after-action reviews as per the monitoring and evaluation framework of the IHR (2005).

Samoa has developed several specific plans relevant to capacities under the IHR (2005), but the policy and governance landscape lacks clear articulation of the multisectoral, intersectoral and intragovernmental coordination mechanisms needed for whole-of-government action. The development and implementation of mechanisms to coordinate across all areas of government, using multisectoral and One Health approaches that rationalize and align existing preparedness and response plans, would create more harmonized, accountable action by everyone.

#### 4. Develop, finance and implement a One Health framework in Samoa.

Samoa would benefit greatly from reviewing the existing committees pertinent to One Health; determining which is most suitable to restructure and expand its scope and responsibility to lead One Health in Samoa; and developing a framework for implementing One Health that incorporates policy formulation, sustainable financing, programme development, knowledge sharing, multisectoral collaboration, and capacity strengthening.

#### 5. Develop and implement a coherent package of Human Resource policies, strategies and plans that mandates the strengthening of human resources for health security as per the recommendations from the JEE.

Challenges with human resource capacity and capability were found in almost all technical areas of the JEE, at all levels. There is a need for evidence-based strategic workforce planning and development strategies that include long-term goals, gap analyses, integrated programmes and multisectoral training opportunities.

\* \* \*

The external JEE team is very grateful for the open and honest discussions we had in Apia, and for our Samoan colleagues' warm and enjoyable company, and their willingness to engage with the team and with JEE process.

We sincerely thank all national participants in the JEE, and especially the JEE presenters and their teams, for their hard work in preparing and presenting, and for hosting the team.

# Samoa: scores and priority actions

Scores: 1=No capacity; 2=Limited capacity; 3=Developed capacity; 4=Demonstrated capacity; 5=Sustainable capacity.

Technical areas	Indicator number	Indicator	Score	Priority Actions					
Prevent									
P1.	P1.1.	Legal instruments	1	• Conduct mapping and assessments of health					
Legal in- struments	P1.2.	Gender equity and equality in health emergencies	2	<ul> <li>revise the legal instruments necessary for IHR implementation.</li> <li>Establish a legislative and administrative framework for legal surveillance across Ministrice ensuring regular reviews of all IHR-relevant legal instruments in Samoa.</li> <li>Prioritize capacity building initiatives for legal officers in the field of public health law.</li> <li>Implement the National Policy on Gender Equality and Rights of Women and Girls throug all relevant annual workplans.</li> </ul>					
P2. Financing	P2.1.	Financing for IHR implementation	3	<ul> <li>Ensure sufficient financing is provided to support the costed National Action Plan for Health</li> </ul>					
P:	P2.2.	Financing for public health emergency response	4	<ul> <li>Security (NAPHS).</li> <li>Implement a system to monitor the flexible funding received by the Government of Samoa for emergencies, and use any actual emergencies to determine a sustainable average amount of emergency response funding that will enable future emergency responses without recourse to routine funding.</li> <li>Develop cross-sectoral emergency procurement authorities or mechanisms to expedite purchasing during the initial stages of emergencies.</li> <li>Through the Public Service Commission, review policy regarding compensation and risk allowances for staff working in emergency</li> </ul>					
				responses, ensuring adequate risk-based compensation is provided for work in emergencies.					

1

Technical areas	Indicator number	Indicator	Score	Priority Actions
P3. IHR coordi-	P3.1.	National IHR Focal Point functions	2	• Develop and disseminate Terms of Reference for the national IHR focal point . Ensure that the office
nation, National IHR focal	on,P3.2.Multisectoralionalcoordinationfocalmechanisms	2	of the national IHR focal point is empowered and funded to carry out its functions, with regular staff training and testing of the office's functionality and coordination and communication	
point functions and advo- cacy	P3.3.	Strategic planning for IHR, preparedness or health security	3	<ul> <li>mechanisms.</li> <li>Develop and implement SOPs to ensure coordination with other non-health sectors, including the human, animal and environmental sectors; the private sector; and civil society/ Non-governmental organizations (NGOs). Test these mechanisms through simulation exercises and after-action reviews.</li> <li>Develop and implement mechanisms to increase awareness and advocacy for IHR implementation across all sectors and relevant stakeholders.</li> <li>Develop a consolidated, risk-based, multihazard National Action Plan for Health Security (NAPHS) that is prioritized, costed and implemented, and which outlines clear roles and responsibilities for all relevant stakeholders and an appropriate monitoring and evaluation framework. This plan should take into account all other disease- and hazard-specific plans, contingency plans, and IHR-relevant plans, and should be aligned with National Health Sector Plan and the Pathway for Development of Samoa.</li> </ul>
P4. Antimi-	P4.1.	Multisectoral coordination on AMR	2	<ul> <li>Fully cost and implement a two-year operational plan to apply the multisectoral National</li> </ul>
crobial resistance	P4.2.	Surveillance of AMR	3	Action Plan on AMR. Ensure that it includes an antimicrobial stewardship programme and takes a
(AMR)	P4.3.	Prevention of MDRO	3	• Review and update the 2016 Antimicrobial
	P4.4.	Optimal use of antimicrobial medicines in human health	2	Guideline for Human Health using available evidence, best practice and the guidance in WHO's People-centred approach to addressing antimicrobial resistance in human health (2023).
	P4.5.	Optimal use of antimicrobial medicines in animal health and agriculture	1	<ul> <li>Address identified gaps in the animal health sector, including but not limited to quality of prescribing, surveillance coverage and routine consumption audits, and identify and implement long-term solutions to provide veterinary expertise in Samoa.</li> <li>Integrate awareness of AMR into health promotion activities and ensure a One Health approach to the annual World AMR Awareness Week (WAAW), World Hand Hygiene Day and all other relevant advocacy activities.</li> <li>Finalize the Animal Production, Health and</li> </ul>
	P4.5.	Optimal use of antimicrobial medicines in animal health and agriculture	1	<ul> <li>Address identified gaps in the animal he sector, including but not limited to quality prescribing, surveillance coverage and reconsumption audits, and identify and im long-term solutions to provide veterinary expertise in Samoa.</li> <li>Integrate awareness of AMR into health promotion activities and ensure a One H approach to the annual World AMR Awa Week (WAAW), World Hand Hygiene Date other relevant advocacy activities.</li> <li>Finalize the Animal Production, Health a Welfare Bill (2021) by 2024.</li> </ul>

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Technical areas	Indicator number	Indicator	Score	Priority Actions
P5. Zoonotic	P5.1.	Surveillance of zoonotic diseases	1	<ul> <li>Review the existing committees pertinent to One Health and determine which is most</li> </ul>
disease	P5.2.	Response to zoonotic diseases	1	suitable to restructure and expand its scope and responsibility to lead One Health in Samoa. Give that committee responsibility to create and run an
	P5.3.	Sanitary animal production practices	2	<ul> <li>overarching mechanism that coordinates actions and ensures communication between all relevant sectors and technical areas (e.g. zoonoses, food safety, environment, AMR, neglected tropical diseases, etc.).</li> <li>Enhance the government's human resources and technical capacity to support investigation of zoonotic diseases using the One Health approach. This should include (but not be limited to) strengthening capabilities of government staff working on epidemiology, field investigation, sample collection and management, and laboratory testing.</li> <li>In the next year, and engaging all relevant sectors, (1) compose a joint list of priority zoonotic diseases; and (2) develop joint protocols and risk reduction strategies for managing those diseases using the One Health approach.</li> <li>Follow up on the outcomes of the JEE and Performance of Veterinary Services (PVS ) evaluations, including by conducting an IHR-PVS</li> </ul>
P6. Food	P6.1.	Surveillance of foodborne diseases and contamination	1	<ul> <li>Review all existing committees doing work pertinent to food safety with a view to consolidation into a single, cohesive platform that</li> </ul>
	P6.2.	Response and management of food safety emergencies	1	<ul> <li>facilitates coordination and communication on all food safety matters.</li> <li>Assess the current structure of the International Food Safety Authorities Network (INFOSAN ) in Samoa. Designate INFOSAN focal points in each relevant sector responsible for efficient coordination of responses to food safety incidents.</li> <li>Develop a comprehensive National Food Safety Emergency Plan to serve as a framework for managing and mitigating food safety incidents. Ensure the plan outlines protocols and delineates clear roles and responsibilities for all stakeholders involved.</li> <li>Conduct an assessment of the national food system with the ultimate goal of enabling timely national responses to food safety incidents. Ensure the assessment identifies needs and gaps related to surveillance, response mechanisms, laboratory capabilities, human and financial resources, capacity building, and infrastructure enhancements.</li> </ul>

Technical areas	Indicator number	Indicator	Score	Priority Actions
P7. Biosafety and biosecurity	P7.1.	Whole-of- government biosafety and biosecurity system is in place for human, animal and agriculture facilities	1	<ul> <li>Develop an all-of government, multisectoral, multidisciplinary national biosafety and biosecurity legal framework to govern implementation of national and international biosafety and biosecurity requirements commensurate to the level of risk.</li> <li>Establish a biosecurity council, committee or sub-</li> </ul>
	P7.2.	Biosafety and biosecurity training and practices in all relevant sectors (including human, animal and agriculture)	2	<ul> <li>committee, with clear terms of reference, to guide and monitor implementation of biosafety and biosecurity requirements.</li> <li>Develop and regularly update a national record and inventory of pathogens handled or stored in- country, including for short-term storage.</li> <li>Conduct regular bio-risk assessments to guide implementation of appropriate mitigation measures.</li> <li>Conduct a biosafety and biosecurity training needs assessment and develop and implement a comprehensive multisectoral training plan for all biosafety and biosecurity stakeholders.</li> </ul>
P8. Immuniza- tion	P8.1.	Vaccine coverage (measles) as part of national programme	3	<ul> <li>Increase Measles, mumps and rubella (MMR) D1 coverage for the 12-month-old population to 95%, with a corresponding rise in MMR D2</li> </ul>
	P8.2.	National vaccine access and delivery	5	epidemics. • Establish an immunization registry to enhance
	P8.3.	Mass vaccination for epidemics of vaccine-preventable diseases (VPDs)	4	<ul> <li>tracking of vaccinations.</li> <li>Ensure transport is available for vaccination outreach activities.</li> <li>Designate additional nurses for dedicated vaccination duties, to minimize disruptions and build better rapport with communities.</li> <li>In collaboration with the RCCE team, monitor closely for early signs of vaccine hesitancy and address them quickly.</li> </ul>
Detect				
D1. National	D1.1.	Specimen referral and transport system	3	• Define the laboratory tier system for Samoa, clearly stipulating expected diagnostic capacities
laboratory systems	D1.2.	Laboratory quality system	2	<ul> <li>system with health facility structures.</li> <li>Finalize the laboratory policy and develop and</li> </ul>
laboratory	D1.3.	Laboratory testing capacity modalities	3	implement a laboratory strategic plan and costed annual operational plans.
	D1.4.	Effective national diagnostic network	1	<ul> <li>Establish a multisectoral laboratory stakeholder coordination mechanism by setting up a laboratory technical working group with clear terms of reference (TOR s) and ensuring it meets regularly.</li> <li>Leverage existing capacities at The Scientific Research Organization of Samoa (SROS) to meet in-country needs for public health testing, following ISO15189 Medical Laboratories standards. Establish and implement clear collaboration and communication mechanisms between SROS, Ministry of Health and other stakeholders to provide efficient public health diagnostic support</li> </ul>

Technical areas	Indicator number	Indicator	Score	Priority Actions
D2. Surveil-	D2.1.	Early warning surveillance function	3	• Within a year, implement interim solutions to test human clinical samples for priority pathogens
lance	D2.2.	Event verification and investigation	3	<ul> <li>Public Health Laboratory to be operational.</li> <li>Fast track the implementation of an e-Health</li> </ul>
	D2.3.	Analysis and information sharing	3	<ul> <li>Management Information System to enhance data collection and analysis for surveillance.</li> <li>Recruit or train epidemiologists to develop epidemiological capability and capacity.</li> <li>Establish a One Health framework and approach to surveillance, risk assessment and response.</li> </ul>
D3. Human	D3.1.	Multisectoral workforce strategy	2	<ul> <li>Assess the human resources needs of the multidisciplinary public health workforce.</li> </ul>
reso urces	D3.2.	Human resources for implementation of IHR	2	<ul> <li>After the assessment is complete, define mechanisms to fill the gaps it identifies across sectors, including by accessing necessary capacity inside and outside Samoa.</li> </ul>
	D3.3.	Workforce training	2	<ul> <li>Conduct a training needs assessment then develop training plans and conduct regular</li> </ul>
	D3.4.	Workforce surge during a public health event	1	<ul> <li>multidisciplinary public health training, including on the One Health approach, epidemiology and surveillance.</li> <li>Develop and incentivize the public health workforce by (1) providing continuous professional education (CPE) for public health and surveillance officers; and (2) enhancing the roles of non- mandated professionals, including community health workers and other supporting workforces.</li> <li>Conduct a gap analysis of surge capacity. Based on the results, develop a multisectoral surge plan for public health emergency response that defines clear roles and responsibilities.</li> </ul>
Respond				
R1. Health emergency	R1.1.	Emergency risk assessment and readiness	4	• Complete the ongoing update of the National Disaster Management Plan (NDMP). Once complete, ensure the alignment of all other relevant sector specific plans
manage- ment	R1.2.	Public health emergency operations centre (PHEOC)	3	<ul> <li>Finalize the ongoing update of the National Risk Assessments Standard, taking into consideration lessons from the COVID-19 pandemic and other emergency responses, and in line with the who attracted for according risks (STAP)</li> </ul>
	R1.3.	Management of health emergency response	3	<ul> <li>Once the National Disaster Management Plan (NDMP) is updated, conduct a multisectoral simulation exercise to test national and</li> </ul>
	R1.4.	Activation and coordination of health personnel in a public health emergency	4	<ul> <li>subnational health emergency management core capabilities.</li> <li>Complete the training and standard operating procedures (SOP s) for the Samoa Emergency Medical Assistance Team (SEMAT), and add a public health complete the three series of 2025.</li> </ul>
	R1.5.	Emergency logistic and supply chain management	3	<ul> <li>Public nearth component by the end of 2025.</li> <li>Finalize the National Medicines Policy and ensure it includes the language on donations from the 2008 Medicines Policy and other updates</li> </ul>
	R1.6.	Research, development and innovation	1	related to the Essential Medicines List (EML), including the AWaRe (access, watch and reserve) classification of antibiotics.

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Technical	Indicator	Indicator	Score	Priority Actions
areas	number			
R2. Linking public health and security authorities	R2.1.	Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological, chemical or radiological event	2	<ul> <li>Develop an overarching Memorandum of Understanding (MOU) or other agreement, based on the National Security Policy and Strategy (2018), which outlines SOPs for a rapid, multisectoral response to any event of suspected or confirmed deliberate origin, covering all hazards. Ensure that it addresses roles, responsibilities, SOPs, focal point functions and information to be shared between public health, the Samoan Transnational Crime Unit (STCU) and other relevant national authorities and international stakeholders.</li> <li>Organize an annual simulation exercise related to</li> </ul>
				all hazards of suspected or confirmed deliberate origin, which covers Chemical, Biological, Radiological, and Nuclear (CBRN) events and which includes sharing information with security authorities.
				• Engage public health and security officers in joint training programmes to orient, exercise and institutionalize knowledge of the overarching Memorandum of Understanding (MOU)for a rapid, multisectoral response for any event of suspected or confirmed deliberate origin.
R3.	R3.1.	Case management	1	• Work with partners to develop an essential
Health ser- vices provi- sion	R3.2.	Utilization of health services	4	health services package and mechanisms to ensure their continuity, to be included in the National Epidemic and Pandemic Preparedness
51011	R3.3.	Continuity of essential health services (EHS)	1	<ul> <li>and Response Plan and the Health Emergency Operations Centre protocols.</li> <li>Identify and disseminate the roles and responsibilities of members of Multidisciplinary Teams (MDT) to ensure continuity in the delivery of essential health services.</li> </ul>
				<ul> <li>Convene the clinical governance committee to review, update, and implement clinical case management guidelines for IHR hazards.</li> </ul>
				<ul> <li>Map the current capacity of the health sector and other key stakeholders for emergency response and conduct a training needs assessment.</li> </ul>
				<ul> <li>Based on the results, and within the next 12 months, develop and implement a multidisciplinary training plan that includes documented multisectoral simulation exercises.</li> <li>Workwith the Upgeth Information Surfaces of the second sec</li></ul>
				<ul> <li>Work with the Health information Systems and Monitoring and Evaluation Division to design and implement a plan to collect and analyse key performance indicators and other interactions with health system (including outpatient presentations) to inform decision making and health service planning.</li> </ul>

Technical areas	Indicator number	Indicator	Score	Priority Actions
R4.	R4.1.	IPC programmes	3	• Complete the update of the National IPC
Infection prevention and control (IPC)	R4.2.	Health care acquired infections (HCAIs) surveillance	3	<ul> <li>Policy and Manual in line with the National IPC Action Plan, endorse it for use, and create and implement a plan for dissemination, implementation, and evaluation.</li> <li>Introduce IPC key performance indicators, including for hand hygiene, surgical site infections, healthcare associated bloodstream</li> </ul>
	R4.3.	Safe environment in health facilities	1	<ul> <li>infections, and multidrug resistant organisms, for heads of department. These should cover nurse managers and heads of all clinical departments and should be used to demonstrate evidence of adoption of IPC practices in clinical areas.</li> <li>Ensure that all IPC personnel receive specialist post-registration IPC training, and ensure IPC specialization is a clear professional pathway for health sector professionals.</li> <li>Implement a comprehensive hand hygiene programme, including recruitment of hand hygiene auditors across all health services and training of IPC staff to be gold standard auditors, and build in regular reporting and feedback of hand hygiene compliance.</li> <li>Share IPC Committee minutes (including clinical health service IPC surveillance and audit reports) with the Clinical Governance Committee to ensure that the Committee is accountable for improvements in IPC.</li> </ul>
R5. Risk com-	R5.1.	RCCE systems for emergencies	3	• Formalize a national RCCE committee comprising all relevant agencies/stakeholders responsible for
munication and	R5.2.	Risk communication	3	operationalizing the NDMP and an official RCCE function within the ministry of health. Review RCCE mechanisms every 24 months.
community engage- ment (RCCE)	R5.3.	Community engagement	4	<ul> <li>Work with the National Disaster Management Office (NDMO) and Ministry of the Prime Minister and the Cabinet focal points to ensure that RCCE is articulated as a core technical area of the NDMP.</li> <li>Use national and subnational simulation exercises, along with intra- and after-action reviews, to identify health related RCCE gaps. Based on the results, develop and implement actions to address those gaps.</li> <li>Develop a multihazard framework for capacity building in RCCE, including infodemic management.</li> <li>Working with the Ministry of Women, Community and Social Development (MWCSD ), build the capacity of District Councils to ensure that annual multisectoral District Development Plans include community engagement around preparing and</li> </ul>

Technical areas	Indicator number	Indicator	Score	Priority Actions
IHR related	hazards	and points of ent	try and	border health
POE: Points of entry and border	POE1.	Core capacity requirements at all times for POE (airports, ports and ground crossings)	4	• Update multisectoral contingency plans at designated POE, ensuring they address all public health risks, and undertake regular exercises to strengthen communication and coordination between stakeholders in responses to public
nearth	POE2.	Public health response at POE	3	<ul> <li>health emergencies.</li> <li>Provide regular training for border health staff</li> </ul>
	POE3.	Risk-based approach to international travel-related measures	3	<ul> <li>that includes methods of assessing capacities at POEs, to facilitate identification of areas for strengthening and implementation of corrective actions.</li> <li>National competent authorities should engage with the international community to share and receive information to support risk assessment and decision making in relation to travel health measures.</li> <li>Ensure that POE have dedicated health facilities providing initial assessment, quarantine and/ or isolation for sick travellers. Facilities should have dedicated transport access to minimize the possibility of sick travellers infecting others and facilitate safe transportation to other appropriate health facilities.</li> <li>Maintain and develop current designated POE to ensure they maintain core capacities during emergencies and at all other times.</li> </ul>
CE. Chemical events	CE1.	Mechanisms established and functioning for detecting and responding to chemical events or emergencies	2	<ul> <li>Re-establish the Chemical Committee, chaired by the Ministry of Natural Resources and the Environment, to coordinate agencies and sectors involved in management of chemical and hazardous waste.</li> <li>In a joint effort involving all relevant ministries, agencies and sectors develop national SOPs for</li> </ul>
	CE2.	Enabling environment in place for management of chemical event	2	<ul> <li>detection and assessment of, and response to, chemical emergencies and ensure alignment with the NAPHS development process recommended elsewhere.</li> <li>Within a year of developing these SOPs, the NDMO should run a simulation exercise for a chemical emergency that includes an after-action review.</li> <li>Revise the National Chemical Profile and the Chemical and Hazardous Waste Tracking System and ensure they are maintained and reporting to the Chemical Committee on implementation at least annually.</li> <li>Adapt WHO guidance for healthcare providers on the identification, treatment and reporting of suspected chemical exposures and injuries. This process should include formalizing agreements with National Poisons Centres in the region to access advice and assistance as required, and identifying arrangements for analysis of specimens.</li> </ul>

Technical areas	Indicator number	Indicator	Score	Priority Actions
RE. Radiation emergen- cies	RE1.	Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	1	<ul> <li>Develop national multisectoral SOPs for detection and assessment of, and response to, radiation emergencies.</li> <li>Within one year of developing these SOPs, the NDMO should run a simulation exercise for a radiation emergency that includes an after-action review.</li> </ul>
	RE2.	Enabling environment in place for management of radiological and nuclear emergencies	1	<ul> <li>Complete the review of X-ray protocols by the end of 2024 and provide dosimetry equipment and capacity to monitor radiological staff for exposure, thereby ensuring protection of employees and the public from radiation.</li> <li>Establish a mechanism for accessing international technical assistance, information and expertise for radiation emergencies.</li> </ul>

# Prevent



# P1. Legal instruments

### Introduction

The International Health Regulations (IHR) (2005) provide obligations and rights for States Parties. In some States Parties, implementation of the IHR (2005) may require new or modified legislation. Even if new or revised legislation may not be specifically required, States may still choose to revise some regulations or other instruments in order to facilitate IHR implementation and maintenance. Implementing legislation could serve to institutionalize and strengthen the role of IHR (2005) and operations within the State Party. It can also facilitate coordination among the different entities involved in their implementation. See detailed guidance on IHR (2005) implementation in national legislation. In addition, policies that identify national structures and responsibilities as well as the allocation of adequate financial resources are also important.

# Target

Adequate legal instruments for States Parties to support and enable the implementation of all their obligations and rights created by the IHR. The development of new or modified legal instruments in some States Parties for the implementation of the Regulations. Where new or revised legal instruments may not be specifically required under a State Party's legal system, the State may revise some laws, regulations or other legal instruments in order to facilitate their implementation in a more efficient, effective or beneficial manner.

# Level of capabilities

Samoa has successfully overcome two public health emergencies in recent years – an outbreak of measles in 2019 and the COVID-19 pandemic – and was particularly successful in stopping the latter with isolation and quarantine measures made legally possible by the 1959 Health Ordinance.

Samoa has not surveyed all relevant legal instruments to map the country's legal framework for preventing, preparing for and responding to public health emergencies. This effort is needed to reach the point at which mapping, assessment and surveillance of regulations needed for IHR activities can take place.

Partly because the Samoan legislative process is complicated, time-consuming and participatory at the local level, there is an understandable tendency to stick to existing structures; but since the world is constantly changing, and Samoa with it, it is important to carry out this legal mapping exercise, looking at instruments relevant to public health and extending beyond the health system. Laws are living documents and need to be renewed regularly to ensure preparation for future threats and continued protection of the people of Samoa.

Systematic assessment of gender gaps has been conducted and evaluated in immunization campaigns and a national policy on gender equality and rights of women and girls has been recently updated. At the time of the JEE the latter had not yet been converted into an action plan or incorporated into annual workplans.

# Indicators and scores

### P1.1. Legal instruments – Score 1

### Strengths

Especially since the 2019 measles epidemic and the COVID-19 pandemic response, Samoan
officials are very much aware of, and fluent with, relevant legislation and legal coordination for
public health emergencies, health powers and multisectoral response.









- Relevant sectors such as (for example) the Port Authority and the National Security Committee are familiar with the IHR (2005) and actively engage in IHR activities.
- The Ministry of Health coordinates an annual meeting of all sectors with a series of workshops to advocate for the IHR (2005).
- The Director General (DG) of health has the power to close private facilities (though closure of public facilities requires ministerial approval).
- Flight restrictions and quarantine can be conducted under the IHR (2005), using the Health Ordinance (1959).

#### Challenges

- No systematic process to map legislation has been conducted to date. A domestication process has been initiated for the IHR, and some partial mapping of relevant legislation has been done in different sectors. An updated mapping exercise is needed.
- Public awareness of the content of legal instruments is low.
- Samoa lacks sufficient legal capacity.

#### P1.2. Gender equity and equality in health emergencies – Score 2

#### Strengths

- Samoa has subsidized national universal healthcare services. Inequities in health are primarily related to access to specialist services (many of which are not available in-country), low health literacy rates among certain populations, people living in poverty, and lack of access to services in more rural areas.
- Samoa has a Ministry of Women, Community and Social Development.
- Samoa has a national policy on gender equality and rights of women and girls (2021-2031).
- Data are routinely disaggregated by sex, age, village of residence, and other relevant demographic variables.
- Gender, social inclusion, and issues pertaining to vulnerable groups are addressed at the implementation level (and specified in technical policies, strategies, etc.).

#### Challenges

- Gender-specific health equity issues have not been systematically assessed.
- There has been no systematic assessment of gender equity gaps in relation to IHR-relevant data collection.
- Data on other vulnerable groups and barriers to equity are needed.
- There is no existing action plan specific to gender and the IHR (2005).

### **Recommendations for priority actions**

- Conduct mapping and assessments of health laws and, where applicable, develop and revise the legal instruments necessary for IHR implementation.
- Establish a legislative and administrative framework for legal surveillance across Ministries, ensuring regular reviews of all IHR-relevant legal instruments in Samoa.
- Prioritize capacity building initiatives for legal officers in the field of public health law.
- Implement the National Policy on Gender Equality and Rights of Women and Girls through all relevant annual workplans.

# P2. Financing

# Introduction

The implementation of the IHR, including development of the core capacities, requires adequate financing. State Parties should ensure sufficient allocation of funds for IHR implementation.

# Target

States Parties ensure provision of adequate funding for IHR implementation through the national budget or other mechanisms. Country has access to financial resources for the routine implementation of IHR capacities and financial resources that can be accessed on time and distributed for readiness and response to public health emergencies, is available.

### Level of capabilities

The Government of Samoa has made good progress toward planning for IHR preparedness and response. Although the NAPHS process has not yet been conducted, Samoa has developed a National Health Sector Plan 2020-30.

The Ministry of Finance is part of the National Emergency Operation Centre (NEOC), which coordinates and distributes resources according to need during disasters or emergencies, including public health emergencies. The Ministry of Finance has flexibility to reallocate funds to respond to emergency needs.

The Ministry of Finance Policy and Planning Division monitors funding and activity using the Samoa Monitoring Evaluation Reporting Framework (SMERF). Key performance indicators have been developed and are reported in annual health reports.

Donor funding agreements require review and approval by the Cabinet and are implemented through bilateral and multilateral Memorandum of Understanding (MOU) and project agreements. The Health Program Advisory Committee (HPAC) is the coordination arm for programmes in which health priorities are discussed. Donor partners are included in those discussions.

### Indicators and scores

#### P2.1. Financing for IHR implementation- Score 3

#### Strengths

- IHR responsibilities are allocated to the National Health Surveillance/IHR Division of the Ministry of Health.
- IHR capacities are linked to the Pathway for Development of Samoa (PDS) 2021-26, stipulated under Key Priority Area 2: Improved public health in regard to infectious diseases.
- At national level the government sets aside a provision for national disasters and emergency purposes. This appears to be multisectoral and flexible enough to adjust for different events that may occur.
- At local level the Ministry of Health budget contains funding under the IHR and Disease Surveillance Division. This allows for a focus on routine surveillance that can facilitate responses to emerging diseases or clusters of cases emerging at local level.





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- It appears that national and local level budgets are reviewed periodically to adjust in response to changing public health needs.
- The majority of Ministry of Health funding comes from the Government of Samoa.

#### Challenges

- Samoa has set aside a small amount of funding for emergencies in different sector budgets. In the event of an emergency response, the majority of funding comes from reprogramming. It is not clear what proportion of funding is dedicated specifically to health security.
- There is no specific budget for IHR implementation. Instead, strengthening of IHR core capacities is funded through activities in support of programmatic performance measures.
- In some areas, donor funding may be greater than government funding. This can vary year to year. Donor priorities may also not be in line with government priorities.
- The Health Sector Coordination and Monitoring Division may need to work with programmatic areas to identify flexible funding (e.g. from the Pandemic Fund) that could support IHR capacity building.
- The Health Sector Coordination and Monitoring Division could work with donors to negotiate flexibility in donor funds that allows them to be used in the event of an emergency, with appropriate approvals.

#### P2.2. Financing for public health emergency response – Score 4

#### Strengths

- There appears to be adequate funding for public health emergency responses, through this is funding reprogrammed or repurposed within the Ministry of Health budget or provided by the NEOC or other sources.
- In case additional funding is needed or key performance indicators are not met within a given financial year, there is a process for requesting supplementary funding from a parliamentary committee.
- When there is underspending in certain budget lines, there is an opportunity to use unspent funds to support priority activities in public health emergencies. This process usually occurs in November of the current financial year but could presumably be done earlier in the event of an emergency.

#### Challenges

- It does seem that other sectors that support emergency responses may not be as well-resourced as health and could benefit from joint financial planning for IHR preparedness and response activities.
- The COVID-19 pandemic and related travel restrictions and trade disruptions contracted Samoa's GDP and inflation has increased due to an import-reliant economy and rising global prices. These financial factors may have impacted government funding for the health sector though at the time of the JEE it appears that the economy is recovering, and open borders have been re-established.
- In certain areas the government may be more dependent on donor funding to support different aspects of the health sector. Unfortunately, current donor funding is not flexible and comes with conditions.
- Compensation and insurance are currently allocated for staff working in responses to some emergencies, but not all. An NEOC and/or National Disaster Council (NDC) review of the policy regarding compensation and/or risk allowance for public health emergency response staff may be needed.

### **Recommendations for priority actions**

- Ensure sufficient financing is provided to support the costed National Action Plan for Health Security (NAPHS).
- Implement a system to monitor the flexible funding received by the Government of Samoa for emergencies, and use any actual emergencies to determine a sustainable average amount of emergency response funding that will enable future emergency responses without recourse to routine funding.
- Develop cross-sectoral emergency procurement authorities or mechanisms to expedite purchasing during the initial stages of emergencies.
- Through the Public Service Commission, review policy regarding compensation and risk allowances for staff working in emergency responses, ensuring adequate risk-based compensation is provided for work in emergencies.









# P3. IHR coordination, national IHR focal point functions and advocacy

#### Introduction

The effective implementation of the IHR requires multisectoral/multidisciplinary approaches through national partnerships for efficient alert and response systems. Coordination of nationwide resources, including the designation of a national IHR focal point (NFP), and adequate resources for IHR implementation and communication, is a key requisite for a functioning IHR mechanism at country level.

### Target

Multisectoral/multidisciplinary approaches through national partnerships that allow efficient, alert and response systems for effective implementation of the IHR Coordinate nation-wide resources, including sustainable functioning of a National IHR Focal Point – a national centre for IHR communications which is a key obligation of the IHR – that is accessible at all times. States Parties provide WHO with contact details of National IHR Focal Points, continuously update and annually confirm them. Timely and accurate reporting of notifiable diseases, including the reporting of any events of potential public health significance according to WHO requirements and consistent relay of information to the Food and Agriculture Organization of the United Nations (FAO) and OIE. Planning and capacity development are undertaken and supported through advocacy measures to ensure high-level support for implementation of IHR.

### Level of capabilities

The Office of the Director General of Health serves as the primary national focal point (NFP) for the IHR (2005). The National Health Surveillance/IHR Division functions as the practical and operational arm responsible for implementing the IHR core capacities, maintaining updated contact information for the IHR secretariat to ensure uninterrupted communication availability 24/7, as mandated in the IHR. During national disasters, the coordination of all agencies is led by the National Disaster Advisory Committee (DAC) under the guidance of the National Controller from the National Emergency Operation Centre (NEOC). The DAC offers advice to the National Disaster Council (NDC). The National Disaster Council (NDC), chaired by the Prime Minister, comprises all Cabinet Ministers and plays a pivotal role in decision-making in disaster situations.

The National IHR coordination system involves diverse stakeholders, each with specific responsibilities crucial to managing health emergencies and achieving and maintaining compliance with the IHR:

- The Office of the Attorney General plays a pivotal role by providing the legal framework to guide and regulate the system.
- The Ministry of Natural Resources and Environment, through the DAC and its National Disaster Management Office (NDMO), leads and coordinates emergency responses, collaborating closely with other lead ministries.
- The Ministry of Police and Public Safety is responsible for internal security and enforcement, including matters related to maritime security.
- The Ministry of Agriculture and Fisheries oversees animal health and quarantine measures.
- The Ministry of Customs and Revenue manages customs regulations.

- The Scientific Research Organization of Samoa (SROS) is responsible for laboratory testing.
- The Multi-Agency Partners Coordination is responsible for the National Security Committee, which comprises border security, shipping agencies, airlines, the shipping regulation committee (SRC), the Fire and Emergency Services Authority (FESA), the Ministry of Works, Transport and Infrastructure, the Ministry of Health, the Ministry of Agriculture and Fisheries, the Land Transport Authority (LTA), the Ministry of Police and Public Safety, the Ministry of Natural Resources and Environment, the Ministry of Foreign Affairs and Trade, the Ministry of Commerce, Industry, and Labor, the Tourism Control Unit (TCU), the Ministry of Finance, and various other relevant entities.

The joint work of these stakeholders ensures Samoa's compliance with the IHR and is critical to managing and responding to health emergencies.

#### Indicators and scores

#### P3.1. National IHR Focal Point functions – Score 2

#### Strengths

- The hierarchy from the Director General (DG) to the Deputy Director of Public Health (DDGPH) to the CEO of National Health Services (NHS)/IHR and its operational staff provides a clear chain of command, ensuring efficient communication and decision-making during public health emergencies.
- The DG and the Deputy Director of Public Health (DDGPH) are easily reachable by phone or email for urgent communication, enabling swift responses to emerging health threats.
- The system has established effective pathways for disseminating information, both through the Health Emergency Operation Centre (HEOC) and the DAC, ensuring that relevant stakeholders are informed and involved in response efforts. Ministry of Health representation on various government committees demonstrates a commitment to multisectoral collaboration that is crucial in addressing public health issues spanning multiple domains.
- The Health Ordinance (1959) grants the Director General (DG) the legal power to act during health emergencies, aligning well with the IHR (2005) and providing a strong legal foundation for response efforts.

#### Challenges

- A dedicated national IHR focal point centre has not been established. Establishing a dedicated national IHR focal point centre or office will facilitate communication with WHO and, among other benefits, enhance coordination and response capabilities during health emergencies.
- Because a dedicated national IHR focal point has not been established the current national focal point does not have TOR in accordance with the mandatory functions of the IHR (2005).
- Opportunities for staff development and learning are limited. There is a need to establish plans for continuous staff development and learning, to ensure that the system remains agile and responsive to evolving public health challenges.

#### P3.2. Multisectoral coordination mechanisms- Score 2

#### Strengths

- The ability of the Director General (DG) to take advice from the Communicable Disease Control Committee (CDCC) and communicate directly with the Cabinet means that efficient decision-making channels are in place for critical health matters.
- Samoa has shown successful coordination with relevant ministries in health emergencies, notably during measles and COVID-19 outbreaks in recent years.
- The existence of coordinating bodies like the Communicable Disease Control Committee, the National Vector Control Committee and the National Antimicrobial Resistance (AMR) committee demonstrates commitment to coordinating IHR-related information and activities even in non-emergency situations.







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#### Challenges

- While National Focal Point members have demonstrated effective communication with WHO and international experts, there is room for improvement in communication with other sectors and agencies within the country. Strengthening internal communication networks would enhance overall coordination.
- Effective coordination with relevant ministries during specific outbreaks should be institutionalized during "peacetime," to ensure consistent preparedness for, and collaboration in, all health emergencies. This could involve development of formalized interagency coordination mechanisms.

#### P3.3. Strategic planning for IHR, preparedness or health security – Score 3

#### Strengths

- Whole-of-government and whole-of-society approaches are integrated into existing policy frameworks.
- A national pandemic and epidemic preparedness and response plan is in place and village emergency response plans have been developed.
- The DAC, NEOC and HEOC have experience coordinating all stakeholders through previous states of emergency between 2019 and 2022.

#### Challenges

- There is a need for a multisector, multihazard national plan that brings together various sector specific plans and strategies under a common platform. This would improve coordination of health emergency preparedness.
- There is a need to review current policies and frameworks to incorporate contingency strategies, including by addressing the lack of human resources.
- Human, logistical, financial and other resources to implement plans are a major challenge in Samoa, as in most small island countries. There is a need for a national capacity and resource mapping project, the results of which could be used to build investment cases for sustained and predictable support.

#### **Recommendations for priority actions**

- Develop and disseminate Terms of Reference for the national IHR focal point. Ensure that the office of the national focal point is empowered and funded to carry out its functions, with regular staff training and testing of the office's functionality and coordination and communication mechanisms.
- Develop and implement SOPs to ensure coordination with other non-health sectors, including the human, animal and environmental sectors; the private sector; and civil society/Non-governmental organizations (NGOs). Test these mechanisms through simulation exercises and after-action reviews.
- Develop and implement mechanisms to increase awareness and advocacy for IHR implementation across all sectors and relevant stakeholders.
- Develop a consolidated, risk-based, multihazard National Plan for Health Security (NAPHS) that is prioritized, costed and implemented, and which outlines clear roles and responsibilities for all relevant stakeholders and an appropriate monitoring and evaluation framework. This plan should take into account the the Asia Pacific Health Security Action Framework (APHSAF), the recommendations from this JEE and all other disease- and hazard-specific plans, contingency plans, and IHR-relevant plans, and should be aligned with National Health Sector Plan and the Pathway for Development of Samoa.

# P4. Antimicrobial resistance (AMR)

### Introduction

Bacteria and other microbes evolve in response to their environment and inevitably develop mechanisms to resist being killed by antimicrobial agents. For many decades, the problem was manageable as the growth of resistance was slow and the pharmaceutical industry continued to create new antibiotics.

Over the past decade, however, this problem has become a crisis. Antimicrobial resistance is evolving at an alarming rate and is outpacing the development of new countermeasures capable of thwarting infections in humans. This situation threatens patient care, economic growth, public health, agriculture, economic security and national security.

# Target

A functional system in place for the national response to combat antimicrobial resistance (AMR) with a One-Health approach, including:

- a). Multisectoral work spanning human, animal, crops, food safety and environmental aspects. This comprises developing and implementing a national action plan to combat AMR, consistent with the Global Action Plan (GAP) on AMR.
- b). Surveillance capacity for AMR and antimicrobial use at the national level, following and using internationally agreed systems such as the WHO Global Antimicrobial Resistance Surveillance System (GLASS) and the OIE global database on use of antimicrobial agents in animals.
- c). Prevention of AMR in health care facilities, food production and the community, through infection prevention and control measures.
- d). Ensuring appropriate use of antimicrobials, including assuring quality of available medicines, conservation of existing treatments and access to appropriate antimicrobials when needed, while reducing inappropriate use.

### Level of capabilities

The full burden of AMR in Samoa is underreported and underappreciated. In 2019 Samoa had 29 deaths attributable to AMR and 109 deaths associated with AMR. To put this into context, the number of AMR deaths in Samoa is higher than deaths from chronic respiratory diseases, respiratory infections and tuberculosis, digestive diseases, neurological disorders, or unintentional injuries.

In Samoa the main drivers for AMR include the misuse and overuse of antimicrobials; lack of awareness and knowledge; need for greater coordination and collaboration; the need to enhance the veterinary workforce and veterinary services; and lack of enforcement of legislation.

Samoa has a multisectoral National AMR Committee that includes representatives from the Ministry of Health, the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Fisheries, the Ministry of Women, Community and Social Development, the Ministry of Foreign Affairs and Trade, the Ministry of Commerce, Industry, and Labor, the Ministry of Education, Sports and Culture, the SROS and various other professional associations, academic institutions, Non-governmental organizations (NGOs), and observers. This multisectoral committee was formed with the aim of:

"...adopting a One Health approach to ensure all relevant sectors and stakeholders are engaged [in] and contributing to the implementation of activities as outlined in the National Action Plan on AMR".









The National Action Plan for AMR has four main objectives:

- 1. Implement a costed multisectoral national action plan and increase AMR awareness across all sectors
- 2. Strengthen AMR surveillance and research
- 3. Strengthen infection prevention and control
- 4. Optimize use of antimicrobials.

There is a costed operational plan or budget for implementing the National Action Plan, with costs allocated to each stakeholder to address relevant components of the plan.

Laboratory capacity for testing antimicrobial resistant organisms is well established and there is a surveillance system to capture information on all tested human specimens. Arrangements are in place for reference testing at designated external laboratories to detect AMR pathogens that are beyond the capacity of the national laboratory. This includes arrangements through the Pacific Public Health Surveillance Network – LabNet.

Animal, food and environmental samples are processed at SROS. While testing for animal, food and environmental samples is available, it is not as well established as it is for human specimens, and there is no systematic data collection on infections caused by AMR pathogens in animals or the environment. There is no integrated surveillance system for human and animal health as there is no electronic reporting of the results of animal samples. No farms with livestock serve as sentinel sites for surveillance of infections caused by AMR pathogens in livestock, although sampling is done on egg farms and other random sites during inspections.

The National Antibiotic Guideline (2016) provides guidance on the appropriate use of antibiotics in humans. However, awareness of AMR is very limited among the public, most health professionals, farmers and agricultural extension workers. Access to antibiotics for use in humans requires a prescription, but it is acknowledged that non-prescription sales of antibiotics are common and that stockouts do occur. Antimicrobials for animal use can only be prescribed by a veterinarian and are banned for animal growth in Samoa.

While many initiatives to address AMR have been identified in Samoa, they remain incomplete and underresourced, and this technical area requires increased commitment, coordination, cooperation and accountability to ensure effective identification, reporting and monitoring of AMR in Samoa. To achieve the aim of the AMR National Action Plan, serious steps are needed to ensure that AMR is treated as a multisectoral issue deserving of urgent attention with a coordinated One Health approach.

#### Indicators and scores

#### P4.1. Multisectoral coordination on AMR – Score 2

#### Strengths

- There is political recognition of the need for action to combat AMR.
- There is an endorsed, costed national action plan for AMR based on the Global Action Plan on AMR.
- A coordination platform for AMR exists in the form of an established multisectoral AMR committee.
- There is an essential medicines list for human and animal health.

#### Challenges

- It has been difficult to ensure adequate human and financial resources to support the different areas of NAP implementation.
- Agencies are reluctant to share data and information with partners and stakeholders.

- Prevent
- A plan is required to strengthen multisectoral commitment to addressing AMR through attendance at regular meetings of the committee.
- Communication and coordination are needed to improve the exchange of information between stakeholders and partners.
- There is a need to improve awareness of the National Action Plan.

#### P4.2. Surveillance of AMR – Score 3

#### Strengths

- Laboratory surveillance for multidrug-resistant organisms (MDROs) is in place across all health facilities and includes application of standardized testing for AMR.
- A mechanism is in place to access laboratory capacity overseas when required.
- Reliable communication is in place for notification of multidrug-resistant organisms (MDROs)s identified through the clinical laboratory.
- A laboratory capacity and quality management system is in place and aligned to international guidance from the European Committee on Antimicrobial Susceptibility Testing (EUCAST).
- There is regular notification of identified multidrug-resistant organisms (MDROs)s from the clinical laboratory to relevant units.

#### Challenges

- There is a need to improve communication between clinical and public health teams for contact tracing and follow-up of patients with multidrug-resistant organisms (MDROs)s.
- Resources are subject to overly lengthy procurement processes.
- There is no robust digital platform for effective data management.
- There is a need to develop capacity for generating national reports detailing AMR levels over time.
- The limited monitoring of antimicrobial use and/or consumption in humans and animals needs to be addressed.
- There is a need to improve the generation and exchange of data by and between human, animal and environmental sources.
- Further human resources and capacity building are required to carry out laboratory surveillance in the One Health context.
- Animal health laboratories require strengthening and there is a need to designate sentinel sites for AMR surveillance in animals.
- There is a need for more effective use of data from laboratory surveillance to inform evidencebased interventions for community awareness of AMR.

#### P4.3. Prevention of multidrug resistant organism (MDRO) – Score 3

#### Strengths

- A clear plan for infection prevention and control (IPC) exists, along with numerous supporting policies and guidelines.
- IPC surveillance is in place to identify and respond to suspected and confirmed multidrugresistant organisms (MDROs)s reported by the clinical laboratory.
- Cleaning guidelines are available for disinfection for when multidrug-resistant organisms (MDROs) s are reported.
- An essential medicines list (EML) specifies prescribing restrictions for different antimicrobials.
- Safeguards are in place for unregistered prescribers presenting prescriptions to pharmacy dispensaries.





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- Infrastructure is in place to isolate cases of multidrug resistant organisms (MDRO).
- Monthly IPC audits are carried out for compliance to standard and hand hygiene practices in the MDRO context.
- There is regular capacity building on IPC guidelines.

#### Challenges

- Irregular reviews of antibiograms undermines knowledge of local AMR and impacts negatively on infection control and rational antimicrobial use.
- Antimicrobials are dispensed over the counter, especially in the private sector.
- It has proved difficult to change individual mindsets, knowledge and behavioural habits around antimicrobial use and the impacts of non-adherence.
- There is no system in place to harmonize the clinical laboratory's antibiotic susceptibility testing with available antimicrobials.
- It has been difficult to enforce adherence to IPC measures across different sectors (i.e. in a One Health context).
- There is currently no system in place to detect and investigate multidrug-resistant organisms (MDROs)s acquired and spread by international travellers.

#### P4.4. Optimal use of antimicrobial medicines in human health – Score 2

#### Strengths

- The National Antibiotic Guideline (2016) provides guidance for antibiotic use.
- A wide selection of antimicrobials is available in clinical settings.
- Clinical laboratories have strong diagnostic capacity for multidrug-resistant organisms (MDROs)s.
- Doctors communicate regularly with the Ministry of Health on their prescribing habits, which helps ensure they remain consistent with national guidelines.
- Health facilities can do prescription-based antimicrobial dispensing.

#### Challenges

- Complex procurement and financing issues contribute to stockouts of some antimicrobials, which may be lengthy.
- Patient demand for antimicrobials is high and doctors give in to demand, leading to inappropriate antimicrobial prescribing and use.
- There is no established antimicrobial stewardship programme to optimize use of antimicrobials, no antimicrobial quality testing, and no penalties in place for counterfeit antimicrobials.
- While a Drug and Therapeutics Committee is in place for human health and promotes and ensures proper use of drugs, antimicrobials are not within its remit.
- The AWaRe (access, watch and reserve) classification of antibiotics has not been adopted into the National Essential Medicines List.
- The review of the antibiotics guideline (2016) is still pending.
- There is a need to audit use of the antibiotic guideline, and increase awareness of it, to improve adherence.
- Partnerships with local research laboratories are required for regular quality testing of antimicrobials.

# Prevent

# P4.5. Optimal use of antimicrobial medicines in animal health and agriculture – Score 1

#### Strengths

- Prescribing guidelines for antimicrobials are established and published for the Animal Health Division.
- Antimicrobial growth promoters are banned in Samoa.
- A minimum number of antimicrobial drugs is used judiciously and sparingly in animals.
- Continuous paraveterinarian training is implemented.
- Only veterinarians can order antimicrobials and only veterinarians and paraveterinarians can administer them.

#### Challenges

- The Animal Production, Health and Welfare Bill (2021), the purpose of which is to protect and promote the welfare of all animals, is not yet finalized.
- At present there is no government veterinarian. Together with the scarcity of paraveterinarians, this limits the effectiveness of veterinary services.
- There is no government pipeline of veterinary graduates, nor are there any veterinary scholarships. Volunteer vets often assist the Ministry of Agriculture and Fisheries.
- There are more than 10 000 livestock farmers in Samoa, but the livestock sector is not well developed because these are mostly small-scale producers. The danger of outbreaks is therefore very real.
- Assistance is needed to finance farmer training, awareness and knowledge, to improve farm management protocols.

### **Recommendations for priority actions**

- Fully cost and implement a two-year operational plan to apply the multisectoral National Action Plan on AMR. Ensure that it includes an antimicrobial stewardship programme and takes a One Health approach.
- Review and update the 2016 Antimicrobial Guideline for Human Health using available evidence, best practice and the guidance in WHO's People-centred approach to addressing antimicrobial resistance in human health (2023).
- Address identified gaps in the animal health sector, including but not limited to quality of prescribing, surveillance coverage and routine consumption audits, and identify and implement long-term solutions to provide veterinary expertise in Samoa.
- Integrate awareness of AMR into health promotion activities and ensure a One Health approach to the annual World AMR Awareness Week (WAAW), World Hand Hygiene Day and all other relevant advocacy activities.
- Finalize the Animal Production, Health and Welfare Bill (2021) by 2024.





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# P5. Zoonotic disease

#### Introduction

Zoonotic diseases are communicable diseases that can spread between animals and humans. These diseases are caused by viruses, bacteria, parasites, and fungi carried by animals, insects or inanimate vectors that aid in its transmission. Approximately 75% of recently emerging infectious diseases affecting humans are of animal origin; and approximately 60% of all human pathogens are zoonotic.

#### Target

Functional multi-sectoral, multidisciplinary mechanisms, policies, systems, and practices are in place to minimize the transmission of zoonotic diseases from animals to human populations.

#### Level of capabilities

In Samoa, the Ministry of Health and the Ministry of Agriculture and Fisheries are the respective government bodies responsible for surveillance of, and response to, zoonotic diseases in humans and animals. The country's livestock population is around 366 948 animals (cattle, poultry, pigs, small ruminants and horses) distributed across 14 000 households.

As a small island state, Samoa relies on food imports. Import and export policies include documentation of imported products and risk analysis protocols for live animals and animal products.

In terms of sanitary practices related to animal production, animal welfare and breeding policies are in place, as are animal slaughter practices and meat supply chains. No in-country traceability system exists other than the one stated in the Samoa Food Act 2015.

There is no formal multisectoral policy or national multisectoral coordination mechanism for zoonotic diseases, either during emergencies or in normal times. The Integrated Vector Control Committee (IVCC), led by the Ministry of Health, is a multisectoral mechanism built on the One Health approach that comprises stakeholders acting at the human-animal-environment interface. It focuses on arboviruses, bringing together actors from different sectors to work on collaborative vector control interventions and strategies. The Integrated Vector Control Committee (IVCC) also has some responsibility for addressing vector-borne zoonotic diseases such as leptospirosis, plague and salmonellosis.

There is no joint list of priority zoonotic diseases, though the Ministry of Agriculture and Fisheries did develop a list of priority zoonotic diseases for animal health: tuberculosis, brucellosis, leptospirosis, trichinellosis, rabies and highly pathogenic influenza (HPAI) virulent strains (e.g. H5N1, H9N2). The national notifiable disease list for human health (developed in 2019 as part of the national communicable disease surveillance and control guideline) does include some zoonotic diseases: anthrax, brucellosis, Chikungunya, dengue, Zika, Ebola virus disease, leprosy, leptospirosis, lymphatic filariasis, malaria, plague and yellow fever. There was no cross-sectoral consultation when these diseases were selected. Leptospirosis was highlighted as a disease common to both sectors.

There is currently no joint protocol for zoonotic diseases to cover surveillance, response, investigation and/or bilateral exchanges for laboratories at the human-animal-environment interface. The animal health sector lacks any surveillance system or laboratory capacity, and the human health sector only conducts syndromic surveillance. There are no epidemiologists in Samoa. Lack of human resources is an identified gap, especially in the animal health sector, which has no domestic veterinary, epidemiological or laboratory capacity at all. The Ministry of Agriculture and Fisheries does work collaboratively with overseas partners

Prevent

including the Pacific Community, the Food and Agriculture Organization of the United Nations (FAO), and the World Organisation for Animal Health (WOAH, formerly OIE).

Samoa has control policies for vector borne diseases (e.g. dengue fever, lymphatic filariasis), and a National Pandemic and Epidemic Preparedness and Response Plan 2020-2025 that covers zoonotic diseases and emerging pandemic threats. The Ministry of Health has developed a national plan to prioritize actions for avian influenza. Animal disease-specific programmes (for example, covering African Swine Fever and foot-and-mouth disease) aim to provide farmers with training to monitor their livestock and identify and report symptoms in animals.

No joint risk assessment actions and/or joint simulation exercises on responding to zoonotic diseases have been conducted in recent years. The Ministry of Health participates in WHO's annual Exercise Crystal, and the Ministry of Agriculture and Fisheries held an exercise in 2015 to test the Samoa Invasive Species Emergency Response Plan.

This JEE, which took place in October 2023, is Samoa's first. The first national PVS evaluation to assess veterinary services will take place in November 2023. Samoa is applying to become a WOAH member country.

#### Indicators and scores

#### P5.1. Surveillance of zoonotic diseases – Score 1

#### Strengths

- The National Communicable Disease Surveillance & Control Guideline (2020) covers zoonotic disease surveillance for human health.
- Initial development of an animal health surveillance system has begun, with support from international partners including the Pacific Community, FAO and WOAH.
- Existing laboratories in Samoa (i.e. clinical laboratories and the SROS) assist with animal health analysis on ad hoc basis.
- Samoa collaborates with regional and international partners to enable laboratory specimen referrals, testing and verification.
- The Ministry of Health shares weekly syndromic surveillance reports.

#### Challenges

- There is no multisectoral coordination for zoonotic diseases, so there are no joint or coordinated surveillance efforts, nor is there effective communication at the human-animal-environment interface either in emergencies or in normal times.
- The environment sector does not engage in coordination for zoonotic diseases.
- There are no joint protocols for zoonotic diseases that cover surveillance, response, investigation and/or bilateral exchanges for teams and laboratories at the human-animal-environment interface.
- Samoa has limited laboratory capacity to detect zoonotic diseases and no laboratory dedicated to animal health.
- Samoa suffers from a shortage of qualified personnel for zoonotic disease in both human and animal health.
- Samoa has insufficient resources to conduct research on existing zoonotic diseases, to determine prevalence and/or to inform evidence-based policies and measures to deal with emerging threats.
- There is no network for information exchange or communication between laboratories in Samoa.







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#### P5.2. Response to zoonotic diseases – Score 1

#### Strengths

- The National Disaster Management Plan and the National Pandemic and Epidemic Preparedness and Response Plan 2020-2025 are available and cover zoonotic disease events.
- National plans are in place to guide responses to zoonotic diseases, and cover pandemic influenza preparedness, emerging pandemic threats, and vector-borne diseases.
- Samoa has a multisectoral emergency plan to address invasive animal and plant species.

#### Challenges

- Capacity to detect, respond to and report zoonotic diseases is limited. The country lacks veterinary capacity and has no epidemiologists.
- Shortages of human resources and funding restrict the ability to respond to zoonotic diseases in both the animal and human health sectors.
- In-country availability of testing capacity for zoonotic diseases is low.
- Farming practices make disease containment challenging particularly the high number of freerange animal smallholdings across the country.
- Medicines, insecticides and larvicides for animal treatments are in short supply.

#### P5.3. Sanitary animal production practices – Score 2

#### **Strengths**

- Samoa has animal welfare and animal breeding policies.
- Samoa has animal slaughter practices in place for meat supply chains.
- Fisheries guidelines are in place.
- Zoosanitary certificates are required for all imported live animals and animal products. Importation certificates for animals coming into the country ensure that they are free of notifiable high-risk diseases reportable to WOAH.

#### Challenges

- Samoa has limited capacity including human resources, tools and equipment for testing animals and animal products.
- There is no national traceability system for animal products.
- There are no resources to deliver, build, promote or support public awareness programmes or training to encourage, train and/or enforce good farming practices.
- Samoa's infrastructure for slaughter facilities and meat inspection is insufficient.
- Animal surveillance for zoonotic diseases through ante-mortem and post-mortem inspections is a challenge.

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- Review the existing committees pertinent to One Health and determine which is most suitable to restructure and expand its scope and responsibility to lead One Health in Samoa. Give that committee responsibility to create and run an overarching mechanism that coordinates actions and ensures communication between all relevant sectors and technical areas (e.g. zoonoses, food safety, environment, AMR, neglected tropical diseases, etc.).
- Enhance the government's human resources and technical capacity to support investigation of zoonotic diseases using the One Health approach. This should include (but not be limited to) strengthening capabilities of government staff working on epidemiology, field investigation, sample collection and management, and laboratory testing.
- In the next year, and engaging all relevant sectors, (1) compose a joint list of priority zoonotic diseases; and (2) develop joint protocols and risk reduction strategies for managing those diseases using the One Health approach.
- Follow up on the outcomes of the JEE and PVS evaluations, including by conducting an IHR-PVS National Bridging Workshop in 2024.









# P6. Food safety

## Introduction

Food- and water-borne diarrhoeal diseases are leading causes of illness and death, particularly in less developed countries. The rapid globalization of food production and trade has increased the potential likelihood of international incidents involving contaminated food. The identification of the source of an outbreak and its containment is critical for control. Risk management capacity with regard to control throughout the food chain continuum must be developed. If epidemiological analysis identifies food as the source of an event, based on a risk assessment, suitable risk management options that ensure the prevention of human cases (or further cases) need to be put in place.

## Target

A functional system is in place for surveillance and response capacity of States Parties for foodborne disease and food contamination risks or events with effective communication and collaboration among the sectors responsible for food safety.

## Level of capabilities

Taken together as "gastroenteritis" in national records, foodborne diseases comprise the fourth highest cause of morbidity in Samoa.

Samoa monitors foodborne events through syndromic surveillance, which monitors for diarrhoeal illness, and both indicator- and event-based surveillance systems. Surveillance includes monitoring for foodborne diseases with defined case definitions based on the Ministry of Health National Communicable Disease Surveillance and Control (NCDSC) Guideline, which includes but is not limited to cholera; diarrhoea; fish poisoning; food poisoning; Hepatitis A and E (epidemic hepatitis); salmonellosis (non-typhoid); shigellosis; and typhoid. All have case definitions.

The Food Safety Act 2015 is the key piece of national legislation governing food safety control. In national efforts to strengthen food safety management in Samoa, various ministries and agencies across different sectors have been assigned specific responsibilities:

- The Ministry of Commerce, Industry, and Labor oversees adherence to Codex Alimentarius standards for food exports and imports, acting as the Codex focal point.
- The Ministry of Health enforces food safety regulations in premises and on labelled products, and serves as the Emergency Contact Point for the FAO/WHO International Food Safety Authorities Network (INFOSAN).
- The SROS conducts food product testing.
- The Ministry of Agriculture and Fisheries enforces safe slaughter standards for meat, monitors fish exports, ensures the safety of edible fish and oversees animal and plant health.
- The Ministry of Customs and Revenue handles the importation of goods at the border.

There are currently five different topic-specific technical groups related to food safety, respectively covering food safety and nutrition; codex standards; a meat advisory function; quarantine and biosecurity issues; and pesticides. However, these groups only meet on an ad hoc basis and tend to work in siloed ways that do not maximize the value of having all these committees in place. Simplifying this structure in a way that encourages collaborative work between these committees and their respective focal points is a small change that could have highly beneficial effects.

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There is an open channel of communication between the INFOSAN emergency focal point and the national IHR focal point.

In the event of an outbreak of foodborne disease, the Ministry of Health, the Ministry of Commerce, Industry, and Labor and the SROS are informally activated. For severe emergencies, protocols are in place to disseminate nationwide food recall notifications and public health notices (although to date, Samoa has had recorded no food safety emergencies). The Ministry of Health's Food Safety Unit and clinical teams work with the Ministry of Commerce, Industry, and Labor to handle reporting and information sharing around food safety incidents. The Ministry of Health collects samples, the SROS tests them, and the Ministry of Commerce, Industry, and Labor assists with preliminary investigations. Previous recorded trainings provided to Ministry of Health staff (including food safety inspectors, nurses and doctors) covered outbreak investigation, and refreshers are provided annually or biannually. No specific food safety training for government staff has been recorded.

In terms of laboratory capacity and testing, the SROS can conduct microbiological and physiochemical analysis of food, water, and environment samples for outbreak investigations and in response to other independent requests from public or private stakeholders. The National Public Health laboratory oversees diagnoses of ill humans during outbreaks of foodborne disease.

## Indicators and scores

## P6.1. Surveillance of foodborne diseases and contamination – Score 1

## Strengths

- Topic-specific national committees are established to share information and act on food safety issues.
- A Food Safety community exists in the relationships between a range of relevant bodies and mechanisms.
- Syndromic surveillance for foodborne disease is in place with case definitions, and this is reflected in the notifiable disease list.

- There is no formal communication and information sharing among food safety stakeholders. Despite having five different topic-specific technical groups related to food safety with consistent focal points, the activities of these groups tend to be siloed. They do not meet regularly, and they do not have structures for collaborative work that properly exploit the considerable added value of having all this expertise in place.
- Samoa lacks sufficient human resources, both in terms of manpower and technical capacity, to implement all the required food safety work.
- Clear procedures are needed for food sampling and for ensuring the traceability of food products (e.g. labelling, testing/sampling protocols, etc.).
- Surveillance of foodborne diseases is restricted to syndromic surveillance.
- Laboratory capacity for food sampling is limited.
- Infrastructure and equipment to support food safety incidents (e.g. field investigation, sampling, contact tracing, laboratory work, etc.) is insufficient.









#### P6.2. Response and management of food safety emergencies – Score 1

#### **Strengths**

- The existing National Disaster Management Plan governs responses to food safety emergencies.
- Existing legislation provides an enabling environment for managing food safety emergencies and food recalls.
- Communication between the INFOSAN emergency contact point and the national IHR focal point is well-established.

#### Challenges

- There is no plan, protocol or mechanism in place for emergency response dedicated specifically to food safety.
- Coordination between existing organizations is insufficient to enable good management of food safety emergencies.
- The INFOSAN emergency contact point is defined, but there are no INFOSAN contact points in the various sectors involved in food safety.
- There is a lack of clear protocols and guidelines to address food safety incidents.
- There is a need for more resources (human and financial resources and infrastructure) to ensure border control for imported food products.

- Review all existing committees doing work pertinent to food safety with a view to consolidation into a single, cohesive platform that facilitates coordination and communication on all food safety matters.
- Assess the current structure of INFOSAN in Samoa. Designate INFOSAN focal points in each relevant sector responsible for efficient coordination of responses to food safety incidents.
- Develop a comprehensive National Food Safety Emergency Plan to serve as a framework for managing and mitigating food safety incidents. Ensure the plan outlines protocols and delineates clear roles and responsibilities for all stakeholders involved.
- Conduct an assessment of the national food system with the ultimate goal of enabling timely national responses to food safety incidents. Ensure the assessment identifies needs and gaps related to surveillance, response mechanisms, laboratory capabilities, human and financial resources, capacity building, and infrastructure enhancements.

# P7. Biosafety and biosecurity

## Introduction

It is vital to work with pathogens in the laboratory to ensure that the global community possesses a robust set of tools – such as drugs, diagnostics, and vaccines – to counter the ever-evolving threat of infectious diseases.

Research with infectious agents is critical for the development and availability of public health and medical tools that are needed to detect, diagnose, recognize and respond to outbreaks of infectious diseases of both natural and deliberate origin. At the same time, the expansion of infrastructure and resources dedicated to work with infectious agents have raised concerns regarding the need to ensure proper biosafety and biosecurity to protect researchers and the community. Biosecurity is important in order to secure infectious agents against those who would deliberately misuse them to harm people, animals, plants or the environment.

## Target

A whole-of-government multisectoral national biosafety and biosecurity system with highconsequence biological agents identified, held, secured and monitored in a minimal number of facilities according to best practices, biological risk management training and educational outreach conducted to promote a shared culture of responsibility, reduce dual-use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and countryspecific biosafety and biosecurity legislation, laboratory licensing and pathogen control measures in place as appropriate.

## Level of capabilities

Samoa has no all-of-government approach to biosafety and biosecurity, and most implementation of biosafety and biosecurity protocols and measures is sector-based (i.e. human health laboratories and the SROS implement biosafety and biosecurity in their respective laboratory contexts). The Ministry of Agriculture and Fisheries Biosecurity Division coordinates bio-exclusion and bio-containment activities for food and agricultural imports and exports.

Although the Ministry of Agriculture and Fisheries has implemented the Quarantine (Biosecurity) Act (2005), and there is also a National Biosafety Policy, there is still no overarching comprehensive national legal framework that provides a legal basis for the implementation of biosafety and biosecurity in Samoa.

## Indicators and scores

## P7.1. Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities – Score 1

## Strengths

- There is an established mechanism for regular and uninterrupted servicing of biosafety equipment (e.g. biosafety cabinets) throughout the country, implemented with international support.
- Medical laboratories and the SROS have sector-specific biosafety guidelines and standard operating procedures (SOPs).









#### Challenges

- Although there is minimal handling and storage of pathogens, there is no national record of the pathogens that are handled or temporarily stored in Samoa. This poses a significant biorisk.
- Samoa's biorepositories and/or storage facilities do not offer adequate security for stored pathogens, and pose a potential biorisk in case of intentional or unintentional release of pathogens.

## P7.2. Biosafety and biosecurity training and practices in all relevant sectors (including human, animal and agriculture) – Score 2

#### Strengths

- Laboratory technical personnel across the One Health sectors receive regular training on biosafety and biosecurity, nationally and internationally, through existing regional and international networks.
- An established unit oversees occupational health and safety in Samoa.
- The Ministry of Agriculture and Fisheries Biosecurity Division has established mechanisms that require electronic phytosanitary certificates (otherwise known as "ePhyto") for the import and export of plant and plant products, and zoosanitary certificates for import and export of animal and animal products.
- A permit is required to import goods of biosecurity concern.

#### Challenges

- Although several short-term biosafety and/or biosecurity trainings have been conducted, these
  were not based on comprehensive needs assessments. As such, certain key stakeholders in the
  laboratory space and/or handling infectious substances have been omitted from the trainings to
  date.
- Although there are sector-specific biosafety guidelines, their implementation is only weakly enforced across all sectors.

- Develop an all-of government, multisectoral, multidisciplinary national biosafety and biosecurity legal framework to govern implementation of national and international biosafety and biosecurity requirements commensurate to the level of risk.
- Establish a biosecurity council, committee or sub-committee, with clear terms of reference, to guide and monitor implementation of biosafety and biosecurity requirements.
- Develop and regularly update a national record and inventory of pathogens handled or stored in-country, including for short-term storage.
- Conduct regular bio-risk assessments to guide implementation of appropriate mitigation measures.
- Conduct a biosafety and biosecurity training needs assessment and develop and implement a comprehensive multisectoral training plan for all biosafety and biosecurity stakeholders.

## P8. Immunization

## Introduction

Immunizations are estimated to prevent more than two million deaths a year globally. Immunization is one of the most successful global health interventions and cost-effective ways to save lives and prevent disease. Measles immunization is emphasized because it is widely recognized as a proxy indicator for overall immunization against vaccine preventable diseases. Countries will also identify and target immunization to populations at risk of other epidemic-prone vaccine preventable diseases of national importance (e.g. cholera, Japanese encephalitis, meningococcal disease, typhoid and yellow fever). Diseases that are transferable from cattle to humans, such as anthrax and rabies, are also included.

## Target

A national vaccine delivery system – with nationwide reach, effective distribution, easy access for marginalized populations, adequate cold chain and ongoing quality control – that is able to respond to new disease threats.

## Level of capabilities

Samoa's Expanded Programme on Immunization (EPI) began in the 1970s and currently covers 14 vaccinepreventable diseases. Vaccinations are conducted by nurses in all of Samoa's health facilities. Nurses also conduct vaccinations in communities through outreach programmes.

In 2020, the EPI programme was strengthened with a review of the Immunization Policy and Schedule, a nurse retraining programme, introduction of a catch-up schedule and new vaccines (typhoid, rotavirus and human papillomavirus/HPV), replacement of cold chain equipment and a campaign to increase public awareness of the importance of immunization.

Samoa's EPI programme is supported by a range of external and internal partners including WHO, the United Nations Children's Fund (UNICEF), the Ministry of Education and the Ministry of Women, Community and Social Development.

Samoa maintains an effective cold chain system that reaches all parts of the country. Ultra-cold freezers for the storage of COVID-19 mRNA vaccines are available. No stock-outs have occurred at national level for the past four years. Community outreach programmes cater for vulnerable unreached populations, and nurses work with community leaders to strengthen outreach.

In 2022, the measles, mumps and rubella (MMR) vaccine first dose coverage was 82%.

Samoa has conducted mass vaccinations over the past four years, including compulsory measles vaccination for the whole population to stem a measles epidemic in 2019. Mass COVID-19 vaccinations for adults and children and mass typhoid vaccination campaigns were also conducted from 2021.

The Director-General of Health has the authority to grant approval for emergency use of vaccines based on certification by WHO and drug regulatory authorities in New Zealand, Australia and the United States of America.





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## Indicators and scores

## P8.1. Vaccine coverage (measles) as part of national programme – Score 3

#### Strengths

- Completion of scheduled vaccinations is compulsory for school entry.
- The EPI programme has been strengthened since 2019 through the addition of the Measles Recovery plan and New Vaccine Project.
- The Ministry of Education and the Ministry of Women, Community and Social Development are actively involved in the vaccination programme.

#### Challenges

- The planned transition to use of the Tamanu E-Health system requires considerable effort to transcribe existing records and change mindsets to use the system.
- Poor availability of transportation often limits community outreach activities.
- Immunization is hampered by manpower issues, particularly high turnover and the fact that health workers must manage multiple simultaneous tasks.

## P8.2. National vaccine access and delivery – Score 5

#### Strengths

- Every health facility has a new vaccine storage refrigerator and associated cold chain equipment.
- Samoa has a dedicated national EPI cold chain officer.
- Samoa is transitioning to the electronic mSUPPLY vaccine ordering system.
- An effective vaccine management assessment (EVMA) was conducted in May 2023.
- The Ministry of Health works closely with the United Nations Children's Fund (UNICEF) under a Vaccine Independence Initiative agreement on a 5-year cycle to maintain procurement of routine immunizations. There have been no national stockouts within the past four years.
- The national cold chain officer monitors stock levels and expiry dates of vaccines closely to avoid stockouts.
- The EPI National Unit conducts quarterly supervisory visits to every health facility to strengthen immunization practices.

- There is a need to optimize cold chain monitoring during the transport of vaccines to health facilities.
- There is an insufficient number of Ministry of Health qualified technicians to ensure preventive maintenance of the cold chain.
- More reliable transport is needed at health facility level for the purposes of community outreach.
- Planned community outreach initiatives can often be cancelled due to lack of nursing staff.

## P8.3. Mass vaccination for epidemics of vaccine-preventable diseases (VPDs) – Score 4

## Strengths

- Legislation is in place to facilitate nationwide mass vaccination campaigns.
- The NEOC coordinates national mass vaccination campaigns.
- The HEOC functions as temporary technical advisory committee to the NEOC and coordinates health responses.
- WHO and the United Nations Children's Fund (UNICEF) provide technical advice for vaccination campaigns.
- Further support for immunization comes from village representatives and nongovernmental organizations (NGOs).

## Challenges

• Vaccine hesitancy and misinformation can hamper vaccine uptake and the implementation of campaigns.

- Increase Measles, mumps and rubella (MMR) D1 coverage for the 12-month-old population to 95%, with a corresponding rise in MMR D2 coverage, to minimize the risk of future measles epidemics.
- Establish an immunization registry to enhance tracking of vaccinations.
- Ensure transport is available for vaccination outreach activities.
- Designate additional nurses for dedicated vaccination duties, to minimize disruptions and build better rapport with communities.
- In collaboration with the RCCE team, monitor closely for early signs of vaccine hesitancy and address them quickly.





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# Detect



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# D1. National laboratory systems

## Introduction

Public health laboratories provide essential services including disease and outbreak detection, emergency response, environmental monitoring and disease surveillance. State and local public health laboratories can serve as a focal point for a national system, through their core functions for human, veterinary and food safety including disease prevention, control and surveillance; integrated data management; reference and specialized testing; laboratory oversight; emergency response; public health research; training and education; and partnerships and communication.

## Target

Surveillance with a national laboratory system, including all relevant sectors, particularly human and animal health, and effective modern point-of-care and laboratory-based diagnostics.

## Level of capabilities

The National Laboratory System of Samoa is made up of laboratory facilities in the human, animal and environmental health sectors, and the Scientific Research Organization of Samoa (SROS). Funding for laboratory activities is primarily provided by the Government of Samoa.

The human health sector has three laboratories: two national hospital/clinical laboratories, and one typhoid laboratory focused on confirmation of *Salmonella typhi* from carriers and their close contacts. There is no designated Public Health Laboratory in Samoa. The national clinical laboratory at Tupua Tamasese Meaole can provide SARS-CoV-2 testing using GeneXpert. Human health laboratories are implementing ISO15189 standards for medical laboratories.

The animal health and environment laboratories have no testing capacities and work mainly to process specimens for international referral and testing. The animal health laboratory has a designated basic laboratory space, but lacks equipment and other supplies to operationalize it properly. For in-country laboratory testing, the animal and environmental sectors rely on the SROS, but this is currently limited mainly to research purposes and work for private clients.

The SROS has plant and post-harvest research, food science, chemistry, microbiology, and molecular laboratories, and provides testing for environmental and animal-related samples – mostly but not exclusively for research and work for private clients. Their tasks include but are not limited to independent verification of compliance with national standards for local regulatory authorities (e.g. the Ministry of Health and the Ministry of Natural Resources and Environment) and certification of compliance for export purposes. During the COVID-19 pandemic, the SROS provided diagnostic support using reverse-transcriptase polymerase chain reaction (RT-PCR) diagnosis, and has capacity to expand to provide other public health diagnostics as needed if requisite supplies and training are provided.

SROS has previously conducted African swine fever testing and established Monkeypox testing when the country had suspected cases.





and calibration for food and water testing, and follow United States Environmental Protection Agency (USEPA) and American Public Health Association (APHA) water-sampling and transportation protocols.

The national laboratory system of Samoa is collaborating with regional and international laboratory networks through the Pacific Public Health Surveillance Network (PPHSN), Maryland University Microbiological Diagnostic Unit and Public Health Laboratory, University of South Pacific (USP) laboratories, the Institute of Environmental Science and Research, Victoria University of Wellington and the Maurice Wilkins Centre.

The NLS has a well-established international referral mechanism that leverages regional capacities of partners and scientific networks in the Pacific subregion, which facilitates access to laboratory testing and capacity building opportunities when needed across the human, animal, environmental, chemical and radiology sectors. The national laboratory policy is currently being updated.

The reliance on international referrals for laboratory testing has led to prolonged turnaround times and ultimately delays in outbreak confirmation and appropriate patient management. Subnational health facilities (i.e. district hospitals and health centres) have some point of care tests, such as P-tests, urine dipsticks and glucose estimation, but these remain limited in scope and these facilities often do not cover other basic tests like haemoglobin estimation, leading to longer turnaround times for basic health consultations.

The lack of a laboratory tier system further complicates the establishment of minimum diagnostic requirements and the enhancement of lab capacities, especially at subnational level. There is also no mechanism for coordination and collaboration across sectors to facilitate optimal use of in-country capacities in a way that could reduce or minimize the need for international referral of specimens for screening and/or confirmatory testing.

## Indicators and scores

## D1.1. Specimen referral and transport system – Score 3

#### Strengths

- Policies and guidelines are in place for handling and transportation of specimens sent to national and international reference laboratories. Additionally, Samoa has personnel certified in infectious substance shipment (ISS) by the International Air Transportation Association (IATA).
- There are efficient and reliable national and international couriers that can transport specimens both within Samoa and to international laboratories.

#### Challenges

- Delays in specimen transportation often affect the quality of specimens and the results they generate, and delay patient management and outbreak response.
- Limited resources, including human resources, hamper efforts to facilitate an efficient specimen referral system for the environmental and animal sectors.

## D1.2. Laboratory quality system – Score 2

#### Strengths

- The Laboratory Quality Management System (LQMS) is relatively well implemented across the human sector and SROS, with regular internal and external quality assessments using the Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA) checklist for compliance with ISO15189 (for human health laboratories) and ISO17025 (for SROS).
- SROS has international accreditation from International Accreditation New Zealand (IANZ) under ISO17025 standards for testing and calibration laboratories for food and water testing.

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## Challenges

- Samoa has insufficient human resources for adequate implementation of all aspects of the Laboratory Quality Management System (LQMS).
- Samoa's laboratories do not have designated quality officers, so this function and the required oversight are being provided by centralized personnel. This imposes limitations to levels of oversight required for the Laboratory Quality Management System (LQMS)implementation.

## D1.3. Laboratory testing capacity modalities – Score 3

## Strengths

• Samoa has designated international reference laboratories for the referral of specimens for testing across the human, animal, environment, food safety, chemical and radiation sectors, with efficient specimen tracking mechanisms and broad testing capacities to meet the country's needs.

## Challenges

- High staff attrition affects continuity of provision of essential laboratory services across all sectors.
- Highly bureaucratic procurement processes often result in stockout of essential laboratory commodities, leading to interruptions in service provision and unnecessary referrals of specimens to international laboratories.
- Limited cross-sectoral communication and collaboration has hampered optimal and efficient utilization of in-country laboratory testing capacities.

## D1.4. Effective national diagnostic network – Score 1

## Strengths

- Samoa has a well-established national referral network to access advanced clinical diagnostic services for populations across the country.
- At subnational level (district hospital laboratories), there is capacity for point-of-care testing for basic clinical consultations, particularly glucose estimation.

## Challenges

- There is no established laboratory tier system and no defined or required testing capacities and modalities across the laboratory system in any sector.
- Although point of care tests are in use at subnational level, they are limited in scope and some district hospitals only have capacity for glucose estimation.

- Define the laboratory tier system for Samoa, clearly stipulating expected diagnostic capacities at each tier commensurate to needs. Align the tier system with health facility structures.
- Finalize the laboratory policy and develop and implement a laboratory strategic plan and costed annual operational plans.
- Establish a multisectoral laboratory stakeholder coordination mechanism by setting up a laboratory technical working group with clear terms of reference and ensuring it meets regularly.
- Leverage existing capacities at SROS to meet in-country needs for public health testing, following ISO15189 Medical Laboratories standards. Establish and implement clear collaboration and communication mechanisms between SROS, Ministry of Health and other stakeholders to provide efficient public health diagnostic support.





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# D2. Surveillance

## Introduction

The purpose of real-time surveillance is to advance the safety, security and resilience of the nation by leading an integrated surveillance effort that facilitates early warning and situational awareness of all IHR hazard-related events.

## Target

Strengthened early warning surveillance systems that are able to detect events of significance for public health and health security; (2) improved communication and collaboration across sectors and between national, intermediate and primary public health response levels of authority regarding surveillance of events of public health significance; and (3) improved national and intermediate level capacity to analyse data. This could include epidemiological, clinical, laboratory, environmental testing, product safety and quality, and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance in accordance with the IHR.

## Level of capabilities

The surveillance system in Samoa covers legally notifiable infectious diseases, syndromic surveillance and event-based surveillance. Notifiable diseases are notified by both medical practitioners and clinical laboratories.

All public health facilities contribute to the syndromic surveillance system.

The National Communicable Disease Control Guidelines have been implemented since 2020 and provide clear guidance on notification, verification and investigation. Samoa has a list of mandatory notifiable diseases (some of which must be notified immediately), and syndromic surveillance and event-based surveillance systems are in place. Verification and investigation of events is carried out by an Ministry of Health surveillance team according to the guidelines.

Risk assessments are not, however, done regularly.

To facilitate testing for public health purposes, Samoa plans to open a National Public Health Laboratory within the two to three years following this JEE. This laboratory will have the ability to test for pathogens using clinical samples (such as measles) that currently need to be sent overseas (usually to New Zealand) for laboratory testing.

Surveillance data is analysed weekly and shared regularly with relevant government stakeholders through the NEOC. However, mainly because of the disruption caused by the measles epidemic and the COVID-19 pandemic, the last Epidemiological Bulletin was published in 2019. Efforts are underway to revive the Bulletin.

## Indicators and scores

## D2.1. Early warning surveillance function – Score 3

## Strengths

- The syndromic surveillance system has been expanded nationally and covers all public healthcare facilities.
- Data is collected regularly and verified weekly.

## Challenges

- The surveillance system is manual and paper based.
- There is a lack of surveillance collaboration with other sectors, such as the animal health sector.

## D2.2. Event verification and investigation – Score 3

## Strengths

- Each disease in the National Guidelines has specific processes outlined for verification and investigation.
- Collaborative approaches to confirming causative pathogens are established between laboratory, clinical and public health teams.

## Challenges

- Surveillance is hampered by a lack of human resources.
- Laboratory testing for some pathogens measles, for example is only available overseas.

## D2.3. Analysis and information sharing – Score 3

## Strengths

• There are well-defined channels of communication between the Ministry of Health and relevant stakeholders in the government.

## Challenges

- Human resources are lacking for example, there is no epidemiological capacity.
- Samoa lacks the ability to conduct in-depth risk assessments of events and trends.
- Samoa lacks capacity for epidemiological modelling.

- Within a year, implement interim solutions to test human clinical samples for priority pathogens (e.g. measles) domestically while waiting for the Public Health Laboratory to be operational.
- Fast track the implementation of an e-Health Management Information System to enhance data collection and analysis for surveillance.
- Recruit or train epidemiologists to develop epidemiological capability and capacity.
- Establish a One Health framework and approach to surveillance, risk assessment and response.







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# D3. Human resources

## Introduction

Human resources are important in order to develop a sustainable public health system over time by developing and maintaining a highly qualified public health workforce with appropriate technical training, scientific skills and subject-matter expertise. Human resources include nurses and midwives, physicians, public health and environmental specialists, social scientists, communication, occupational health, laboratory scientists/technicians, biostatisticians, IT specialists and biomedical technicians and a corresponding workforce in the animal sector: veterinarians, animal health professionals, paraveterinarians, epidemiologists, IT specialists etc.

The recommended density of doctors, nurses and midwives per 1,000 populations for operational routine services is 4.45 plus 30% surge capacity. The optimal target for surveillance is one trained (field) epidemiologist (or equivalent) per 200,000 populations who can systematically cooperate to meet relevant IHR and PVS core competencies. One trained epidemiologist is needed per rapid response team.

## Target

States Parties with skilled and competent health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005).

## Level of capabilities

The Ministry of Health conducted a comprehensive human resources (HR) situation analysis in 2020, which provided the basis for the development of the Human Resources for Health (HRH) Strategy 2020-2026 and the Samoa workforce development plan 2021-2026. The strategy was developed taking into account the health demographics, dynamics and trends in Samoa, but does not include all relevant sectors of the public health professions.

There is also limited collaboration between the human and animal health workforces.

Forty-five percent of the total health workforce in Samoa are in nursing and only 6% are doctors. A total of 4% are in dental services, 2% in pharmaceutical services, and 10% in allied health services (a category made up of health technicians, scientists and other technical health professionals in laboratories, medical imaging and radiology, health promotion, enforcement and surveillance and other allied health services (OAHS); "other allied health services" includes physiotherapy, prosthetics and orthotics, mobility services, social services, and biomedical services). The workforce is young, with 43% of staff below the age of 31. The male to female ratio is 40:60. Continuous professional education (CPE) is available to staff.

The human resources to implement the IHR are spread across Ministry of Health and the Ministry of Agriculture and Fisheries, but a lot of the necessary capacities and expertise are unavailable in Samoa.

There is a designated division within the Ministry of Health charged with coordinating IHR functions, with clear communication mechanisms with the rest of the sector.

The majority of the workforce is funded through the Government of Samoa's annual budget.

The Ministry of Commerce, Industry, and Labor administers the legislation and regulations for occupational health and safety (OHS). The legislation provides for the health and safety of people at work in Samoa and for the administration of OHS in workplaces. There is an active Capital Works Committee comprised of Ministry of Health managers who conduct spot checks.

## Indicators and scores

## D3.1. Multisectoral workforce strategy – Score 2

## Strengths

- The development of the Human Resources for Health (HRH) strategy was a multisectoral project that involved the Public Service Commission (PSC), the Ministry of the Prime Minister and Cabinet, the Ministry of Foreign Affairs and Trade, the Ministry of Finance, the Attorney General's office, the National University of Samoa, Oceania University of Medicine, providers of Technical and Vocational Education Training, the Samoa Qualification Authority, the Ministry of Women, Community and Social Development, the private health sector, the Samoa Medical Council and Samoa Medical Association, the Samoa Nurses Association, the Samoa Cancer Society, the Samoa Family Health Association, the Salvation Army, the Coshen Trust, the Samoa Chamber of Commerce, the Samoa Umbrella of Non-governmental organizations (NGOs), Village Fono, faithbased or church organizations, village-based organizations and development Bank, the European Union and the United Nations (UN).
- The strategy sets out to balance the workforce in both gender and professional terms, and workforce development emphasizes multitasking and cross-training. The workforce includes community health workers and multidisciplinary teams from the MWSCD working collaboratively with community representatives, with services decentralized to local level.
- The Human Resources for Health (HRH) strategy has a monitoring and evaluation (M&E) framework that produces quarterly M&E reports.
- Career incentives are in place to increase opportunities for career development.

- Community health workers are not a formal part of the health workforce.
- All career pathways for health professionals were under review at the time of the JEE (except for the medical pathway, which had already been approved).
- Attrition of the health workforce is an issue: around 72% of the workforce is made up of people with less than five years of working experience (partly a reflection of the youth of the workforce), and the health system lacks sufficient qualified, experienced people to deal with the ongoing complexities of health and its developmental issues and challenges. Causes of this problem include professional migration between ministerial departments; temporary migration through the recognized seasonal employer scheme; and the lure of the New Zealand citizenship quota scheme, the Australia skilled category scheme and training and study opportunities overseas.
- Medical professionals and expertise are unevenly distributed at district levels.
- Financing for career advancement is limited.
- It is not easy to convene a task force or steering committee that requires multisectoral coordination or action. This would usually need to be passed through to Cabinet level for endorsement then approved via a Cabinet decision paper which is then used to convene the meetings.







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## D3.2. Human resources for implementation of IHR – Score 2

#### **Strengths**

- Training opportunities for IHR implementation are available (though they may not be widely known or used).
- Programmes or schemes are in place to address workforce gaps in rural areas. A Masters in Public Health is offered through the National University of Samoa, and discussions are ongoing with the New Zealand Ministry of Foreign Affairs and Trade to develop a Bachelor of Health Science with subspecialities to support the Samoan Ministry of Health.

#### Challenges

- There is a severe lack of epidemiological capacity in Samoa, so managing a prolonged outbreak or simultaneous multiple outbreaks would be very challenging.
- The number of veterinarians in the country is unclear.

## D3.3. Workforce training – Score 1

#### Strengths

- Routine training needs assessments are conducted.
- Public health teams and public health physicians, surveillance officers, port health officers, medical doctors and nurses in the clinical space have received special training in outbreak management.
- The Samoa Emergency Medical Assistance Team (SEMAT) conducts regular training and joint simulation exercises with the NDMO to test plans and SOPs.

#### Challenges

- While some professionals have access to continuous professional education (CPE) programmes, and these are linked to the issuance of annual practicing certificates, there is currently no continuous professional education (CPE) scheme for public health and surveillance officers.
- Customized capacity development, professional development, and succession planning are lacking for all health professionals.
- The Ministry of Health has placed little emphasis on developing the capacity of the legal workforce.
- There is a need to ensure that IHR, One Health and other trainings are implemented not just centrally but at all levels.
- Opportunities to access public health training are unequally distributed.
- There is a need to emphasize the concept of One Health across the workforce.
- Succession planning is not factored into plans. There is a need to think more about workforce attrition when developing training plans.

## D3.4. Workforce surge during a public health event – Score 1

#### Strengths

- Samoa takes a multisectoral approach to implementing surge plans.
- Samoa has access to international support.
- The HEOC is in place and functional, with multisectoral participation and engagement. Multisectoral responses can occur, based upon need.
- Communities, including faith-based organizations and Non-governmental organizations (NGOs), can be mobilized.
- Samoa has potential access to international surge support, if needed.

## Challenges

- Surge plans are not coordinated across sectors.
- Plans need to be tested.
- There is a need to provide emergency response orientation for surge personnel.
- There is a lack of incentive plans for surge personnel (i.e. overtime, time off in lieu, special allowances, etc.).
- The Ministry of Health integrated surge plan is still to be developed, documented and disseminated.

- Assess the human resources needs of the multidisciplinary public health workforce.
- After the assessment is complete, define mechanisms to fill the gaps it identifies across sectors, including by accessing necessary capacity inside and outside Samoa.
- Conduct a training needs assessment then develop training plans and conduct regular multidisciplinary public health training, including on the One Health approach, epidemiology and surveillance.
- Develop and incentivize the public health workforce by (1) providing continuous professional education (CPE) for public health and surveillance officers; and (2) enhancing the roles of non-mandated professionals, including community health workers and other supporting workforces.
- Conduct a gap analysis of surge capacity. Based on the results, develop a multisectoral surge plan for public health emergency response that defines clear roles and responsibilities.





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# Respond



# R1. Health emergency management

## Introduction

This capacity focuses on management of health emergency and systems for enabling countries to be prepared and operationally ready for response to any public health event, including emergencies, as per the all-hazard requirement of IHR. Ensuring risk-based plans for emergency preparedness, readiness and response, robust emergency management structures and mobilization of resources during an emergency is critical for a timely response to public health emergencies.

## Target

(1) Existence of national strategic multi hazard emergency assessments (risk profiles) and resource mapping. (2) Existence of emergency readiness assessment (3) Development of national health EOC81 plans and procedures. (4) Establishment of an emergency response coordination mechanism or incident management system. (5) Evidence of at least one response to a public health emergency within the previous year that demonstrates that the country sent or received medical countermeasures and personnel according to written national or international protocols. (6) Existence of an emergency logistic and supply chain management system/mechanism. (7) Existence of policies and procedures for research, development and innovation for emergency preparedness and response.

## Level of capabilities

The Government of Samoa has a National Emergency Operations Centre (NEOC) in which the Ministry of Health is a participant in the event of any emergency with health implications.

The HEOC Committee coordinates the national response within the health sector and engages in partnership with all relevant sectors and the Government of Samoa in the national response.

An existing National Disaster Management Plan 2017-2020 (NDMP) is in place and mainstreams disaster risk management across all sectors. The NDMP functions as a comprehensive guide to disaster risk management policy and operational procedures.

Samoa is now in the process of training its own emergency medical team, the Samoa Emergency Medical Assistance Team (SEMAT).

The Ministry of Health is an active member of the Community Disaster and Climate Risk Management programme, providing a health perspective that inputs into preparedness and response activities related to natural disasters.

Samoa maintains a stockpile of drugs and equipment, typically a three to six-month buffer of supplies procured through normal processes.

Each sector has its own Disaster Response Plan, with a focus on natural and man-made disasters, and the







Ministry of Health has developed preparedness plans, which include at least the following:

- National Epidemic and Pandemic Preparedness and Response Plan 2020-25
- Samoa National Avian and Pandemic Influenza Preparedness Plan 2008
- Measles Recovery Plan 2020
- Faleolo Aerodrome Emergency Plan 2013
- COVID-19 Preparedness and Response plan 2020
- Samoa's National Action Plan on Antimicrobial Resistance 2023-2028.

## Indicators and scores

#### R1.1. Emergency risk and readiness assessment - Score 4

#### Strengths

- The HEOC Committee coordinates the national response within the health sector and partners with all relevant sectors and the Government of Samoa in the national response.
- Each sector has its own Disaster Response Plan for natural and man-made disasters. The Ministry of Health has developed preparedness plans.
- A risk assessment has been done and has identified public health crises as extreme hazards. Several relevant specific assessments have been completed, including the Hospital Risk Resilience Assessment 2018-2022 and the National Risk Assessments Standard 2017-2022.

#### Challenges

 Although preparedness plans have been developed, some are disease- or situation-specific. There is a need to develop or update more holistic plans, with specificity for certain situations. These should be connected to a risk assessment process to avoid repetition or duplication across different plans or policies. This could be done in conjunction with an update of the National Disaster Management Plan, which expired in 2020.

## R1.2. Public health emergency operations centre (PHEOC) – Score 3

#### Strengths

- During national health emergencies or disasters, and specifically if there is an outbreak or spread of disease involving threat to human life or health, the HEOC Committee coordinates the national response within the health sector and engages in partnership with all relevant sectors and the Government of Samoa in the national response.
- The HEOC Committee provides technical advice for public health responses to outbreaks or the spread of disease and/or during a national state of emergency through Ministry of Health membership of the NEOC, the National Advisory Committee (NAC) and the DAC.
- The experiences of measles and COVID-19 led to weekly updates of procedures based on evidence and changes in settings.

- A (public) health emergency operations centre ((P)HEOC) may need to be set up as an official space and function within the Ministry of Health. Currently, other areas are repurposed for the HEOC in the event of an emergency, an approach that limits continuity. One example of this is the call centre, which uses the IPC section of the Ministry of Health to receive calls from the public when stood up.
- The Ministry of Health reimburses telephone providers for calls to the call centre so they can be toll-free for the public. The government should investigate a public-private partnership with phone providers to provide a dedicated, consistent line that can be used for all health emergencies.

- No permanent staff are assigned to the HEOC. Their functions are included as part of the National Disease Surveillance Unit of the Ministry of Health NHS/IHR Division. Ministry of Health leaders and key staff have been trained in public health emergency management, but there is a need to train other cadres of personnel so they are aware of the Incident Management System (IMS) and HEOC in advance of an event.
- There may be a need to train staff to set up an the Incident Management System (IMS) that can be adapted to different situations, and to be able to alter the HEOC to meet the needs of any given context.

## R1.3. Management of health emergency response – Score 3

## Strengths

- The Government of Samoa has established a HEOC, which is equivalent to an the Incident Management System (IMS). This includes an operational structure, terms of reference, membership composition, functions, and responsibilities.
- An example situation report, or sitrep, was provided that appears to have been developed during the measles outbreak. This comprised a "bottom-line up front" (BLUF) i.e. the report began with its key information along with supporting information and data to provide details of the situation. There may be a need to develop a template and adaptation guidelines that allow this to be used more widely in other types of public health emergency.

## Challenges

• There may be a need to clarify decision-making authority within the HEOC and describe the ways that this organization provides information to and from the NEOC, the NAC and the DAC. This could resemble the SOPs and information sharing policy/communication protocols developed for the NEOC.

## R1.4. Activation and coordination of health personnel in a public health emergency – Score 4

## Strengths

- Samoa is now in the process of training its own emergency medical team (EMT). The Samoa Emergency Medical Assistance Team (SEMAT) was launched in 2022 and staff are being trained on emergency medical team (EMT) principles and standards, including activation protocols, self-sufficient clinical medicine, and water, sanitation, and hygiene (WASH). This work could also lead to a roster of response staff by specialty that can be called upon in the event of different emergencies.
- Samoa participated in an annual exercise using the WHO IHR Crystal exercise tool in December 2023. This annual event provides a good opportunity to identify what is needed in the event of an emergency and develop templates that can be used and adapted in different situations.
- The Ministry of Health has a good understanding of issues around international aid, based on experiences with a tsunami disaster in 2009 and the measles epidemic in 2019.
- The Ministry of Health has experience of organizing intergovernmental aid, Non-governmental organizations (NGOs) and volunteers, registering health professionals, and dealing with the logistical complexities associated with international assistance.

- Emergency response training occurs on an ad hoc basis (through overseas training, conferences, or learning from visiting teams).
- There may be a need to provide staff with rapid response training that would allow them to adapt to different situations and develop their own emergency SOPs and other documents in response to their circumstances.
- Development of a deployment plan in advance of public health emergencies could be beneficial, helping define the types of positions needed and where they could come from within the Ministry of Health and other relevant ministries.







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## R1.5. Emergency logistic and supply chain management – Score 3

#### **Strengths**

- There is no specific plan in place, but the Ministry of Health adopts New Zealand (MedSafe) and Australia (Therapeutic Goods Administration) regulatory advice, and uses the WHO prequalification process to determine what pharmaceutical interventions can be used in Samoa.
- The national medicines policy is currently in draft and will address donations. The current policy contains language that limits donations of medicines from outside Samoa.
- Samoa maintains a stockpile of drugs and equipment, typically a three-month buffer of supplies procured through normal processes.

#### Challenges

• Some global supply chain issues occurred recently, with the procurement of items taking months to reach the country. This resulted in some reports of low stock in facilities. There may be a need to expand the buffer stock from three to six months to prevent stockouts of essential medicines and other supplies.

## R1.6. Research, development, and innovation – Score 1

#### Strengths

- Samoa has a Health Research Committee that could be used in the event of an emergency as an institutional review board.
- Samoa has identified organizations that can be partners in the event of an emergency, including WHO-accredited Laboratories in New Zealand and Australia, the SROS, and the Pacific Community.

#### Challenges

- Samoa relies on advice from WHO and the Pacific Community for operational research agendas applicable to small island developing states.
- Emergency research, as defined for IHR, does not exist in Samoa. Instead, the SROS performs basic research that is not necessarily specific to health. The SROS can conduct testing for chemical, water, and food specimens. Human samples were tested for COVID-19 during the pandemic, but broader clinical testing may not be possible without additional accreditation.

- Complete the ongoing update of the National Disaster Management Plan (NDMP). Once complete, ensure the alignment of all other relevant sector specific plans.
- Finalize the ongoing update of the National Risk Assessments Standard, taking into consideration lessons from the COVID-19 pandemic and other emergency responses, and in line with the who strategic tool for assessing risks (STAR).
- Once the National Disaster Management Plan (NDMP) is updated, conduct a multisectoral simulation exercise to test national and subnational health emergency management core capabilities.
- Complete the training and SOPs for the Samoa Emergency Medical Assistance Team (SEMAT) and add a public health component by the end of 2025.
- Finalize the National Medicines Policy and ensure it includes the language on donations from the 2008 Medicines Policy and other updates related to the Essential Medicines List (EML), including the AWaRe (access, watch and reserve) classification of antibiotics.

# R2. Linking public health and security authorities

## Introduction

Public health emergencies pose special challenges for law enforcement, whether the threat is manmade or naturally occurring. In a public health emergency, law enforcement will need to quickly coordinate its response with public health and medical officials.

## Target

Country conducts a rapid, multisectoral response for any event of suspected or confirmed deliberate origin, including the capacity to link public health and law enforcement, and to provide timely international assistance.

## Level of capabilities

Samoa has a National Security Policy and Strategy, launched in 2018. This strategy is based on an expanded concept of security that includes human security relating to health.

Following the launch of the strategy, a National Security Committee was formed, of which the Ministry of Health is one member. This committee discusses matters of national security, and during national security threats it works cooperatively and collaboratively with the NDMO and the NEOC (as was the case during the COVID-19 pandemic).

The NEOC is activated in case of a disaster and leads national coordination and response in close collaboration with relevant agencies. The Ministry of Health was the lead agency for the response to the measles epidemic in 2018 and COVID-19 in 2019-2021.

Samoa has identified and shared points of contact between public health and security bodies and specified triggers for notification and information sharing to address all hazards – although there is still no memorandum of understanding or equivalent clear agreement to clarify procedures, roles and responsibilities.

## Indicators and scores

# R2.1. Public health and security authorities, (e.g., law enforcement, border control, customs) are involved during a suspect or confirmed biological, chemical or radiological event – Score 2

## Strengths

- Samoa has clear security and emergency structures.
- NEOC operations and SOPs allow for interagency collaboration and information sharing.
- National and sector-specific security committees and a policy are in place and functional.
- Systems for risk communication and disseminating public information are in place and functional.
- The NDMO and a disaster management plan are in place.
- Simulation exercises are performed on a regular basis at the Faleolo international airport.





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- Samoa has a National Risk Assessment Standard (2017).
- Samoa has the capacity to track trade and movement of people, animals and plants.
- Samoa cooperates at regional and global levels on transnational crime detection and protection.
- Faleolo airport's departure area has a machine for detecting traces of explosives.
- X-ray machines and canine units are in place for border security and control.
- Thermal cameras are in place at the airport.
- Sanitation gates are installed at the airport.

#### Challenges

- Communication in emergency situations is slow, both between national agencies and with the public.
- Samoa is insufficiently prepared to manage misinformation and control rumours.
- Not enough attention is given to managing public expectations.
- Inadequate communication and preparation lead to poor public adherence to safety and preventative measures.
- Resources and financial allocations are not earmarked in the national budget.
- Samoa has no armed forces, and the police force is understaffed to respond adequately to a major public health emergency.
- Simulation exercises are not held frequently enough.

- Develop an overarching Memorandum of Understanding (MOU) or other agreement, based on the National Security Policy and Strategy (2018), which outlines SOPs for a rapid, multisectoral response to any event of suspected or confirmed deliberate origin, covering all hazards. Ensure that it addresses roles, responsibilities, SOPs, focal point functions and information to be shared between public health, the Samoan Transnational Crime Unit (STCU) and other relevant national authorities and international stakeholders.
- Organize an annual simulation exercise related to all hazards of suspected or confirmed deliberate origin, which covers Chemical, Biological, Radiological, and Nuclear (CBRN) events, and which includes sharing information with security authorities.
- Engage public health and security officers in joint training programmes to orient, exercise and institutionalize knowledge of the overarching Memorandum of Understanding (MOU) for a rapid, multisectoral response for any event of suspected or confirmed deliberate origin.

## R3. Health services provision

## Introduction

Resilient national health systems are essential for countries to prevent, detect, respond to and recover from public health events, while ensuring the maintenance of health systems functions, including the continued delivery of essential health services at all levels. Particularly in emergencies, health services provision for both event-related case management and routine health services are equally as important. Moreover, ensuring minimal disruption in health service utilization before, during and beyond an emergency and across the varied contexts within a country is also a critical aspect of a resilient health system.

## Target

(1) Evidence of demonstrated application of case management procedures for events caused by IHR relevant hazards.

- (2) Optimal utilization of health services, including during emergencies.
- (3) Ensuring continuity of essential health services in emergencies.

## Level of capabilities

The focus of health services provision in Samoa has been on priority areas such as surveillance and management of non-communicable disease, maternal and child health strategies, and development and implementation of laboratory guidelines. This is underpinned by a strong parallel focus on quality improvement systems and improved referral mechanisms across health service delivery.

Samoa has a Health Sector Plan (2019-2030) that functions as a map for healthcare, including service delivery.

There is little current evidence of case management procedures for events caused by IHR-related hazards other than COVID-19 and measles, which exist as direct results of recent incidents.

## Indicators and scores

## R3.1. Case management – Score 1

## Strengths

- Samoa has guidelines for noncommunicable diseases, maternal and child health, and laboratories.
- Options are available to request overseas opinions and/or treatment when managing cases.
- Overseas specialists frequently visit at the request of the Ministry of Health (funded by donor partners).
- Health services specific to case management are available at national level.
- Policy planning is evident within both the Health Sector Plan (2019-2030) and the Samoa Workforce Development Plan (2020-2026).

- Case management guidelines at all levels of health service provision do not address the main IHR hazards, and/or they require updating.
- The functionality of the existing case management guidelines is untested.





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- Resource mapping for case management for emergency priority conditions is outdated at all levels of health service provision.
- Referral pathways within and between all levels of health service provision are not documented.
- Clinical criteria for referral pathways are not standardized or documented, causing confusion and delays in patient care.
- Logistical barriers such as availability of transport, escorts and beds and a lack of complete clinical documentation result in poor referral and patient outcomes.
- There is limited supervision available for junior doctors.
- Healthcare workers do not always follow treatment plans.
- Management of cases can be delayed due to behavioural trends in communities (for example, late engagement with health care, which leads to poorer outcomes).

## R3.2. Utilization of health services – Score 4

#### **Strengths**

- The Ministry of Health has a quality assurance unit.
- Samoa has a regulatory body for health professionals.
- Internal clinical quality assurance is in place, including regular IPC monitoring.
- Social media is monitored by the Risk Communication Working Group to keep track of levels of trust in the health service.
- Data from social media monitoring has informed changes in health service provision and responses to recent measles and COVID-19 events.
- Digital health records are being adopted across the health sector.
- Health service utilization is reported quarterly to Ministry of Health as a key performance indicator and is used for planning and policy purposes.
- Health services are decentralized and available in rural health facilities.
- Samoa has access to international emergency medical teams (EMT) to assist with surge and emergency clinical care.
- Subsidized clinical care is available to consumers/patients.
- E-health is currently rolling out across the health services.

- Health service utilization data is collected and analysed manually, with little disaggregation to determine true health service utilization and inform decision making.
- The data collection methods currently used to establish the level of utilization of essential health services (EHS) are problematic.
- Samoa has no established external accreditation for health service delivery.
- There is confusion around job descriptions and the delineation of roles within multidisciplinary teams, from tertiary to rural levels.
- The infrastructure and equipment of the healthcare services requires upgrading, renovation, and/ or refurbishment.
- Slow recruitment processes reduce the efficiency and effectiveness of services.
- The current patient load is overwhelming for healthcare workers.
- Treatment capacity in district hospitals is limited.
- The use of data to inform planning and decision-making is not effective.

## Respond

## R3.3. Continuity of essential health services (EHS) - Score 1

## Strengths

- Surge capacity and maintenance of essential health services are considered in National Epidemic and Pandemic Preparedness and Response Plan.
- There is ongoing consultation with Non-governmental organizations (NGOs), community leaders, and committees to ensure access to care for marginalized and vulnerable populations.
- Potential mental health impacts on marginalized and vulnerable populations are considered in the National Epidemic and Pandemic Preparedness and Response Plan.
- Samoa has a funded emergency operations centre (EOC) plan, adapted from the emergency preparedness and response plan, which is activated in emergencies.
- The emergency operations centre (EOC) response structure includes a clinical response team that reports on EHS continuity.
- Prior to COVID-19, the clinical team conducted frequent simulation exercises.
- Ministry post-event debriefs and reviews are performed at all levels of health service delivery and include improvement plans.
- Multisectoral simulation exercises are conducted at primary health care level.

## Challenges

- Samoa does not have a clear package of essential health services.
- Consideration of the continuity of essential health services is not integrated into the health sector plan.
- There are no systems in place to monitor the continuity of EHS either routinely or during emergencies.
- Since COVID-19, simulation exercises are only rarely being conducted across all health service levels.
- Exhaustion of human resources results in poor quality services and leads to the migration of skilled workers.

- Work with partners to develop an essential health services package and mechanisms to ensure their continuity, to be included in the National Epidemic and Pandemic <u>Preparedness and Response Plan and the Health Emergency Operations Centre protocols.</u>
- Identify and disseminate the roles and responsibilities of members of Multidisciplinary Teams (MDT) to ensure continuity in the delivery of essential health services.
- Convene the clinical governance committee to review, update, and implement clinical case management guidelines for IHR hazards.
- Map the current capacity of the health sector and other key stakeholders for emergency response and conduct a training needs assessment.
- Based on the results, and within the next 12 months, develop and implement a multidisciplinary training plan that includes documented multisectoral simulation exercises.
- Work with the Health Information Systems and Monitoring and Evaluation Division to design and implement a plan to collect and analyse key performance indicators and other interactions with health system (including outpatient presentations) to inform decision making and health service planning.





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# R4. Infection prevention and control

## Introduction

To have strong, effective infection prevention and control (IPC) programmes that enables safe health care and essential services delivery and prevention and control of health care acquired infections (HCAIs). It is critical to initially ensure that at least the minimum requirements for IPC are in place, both at the national and facility level, and to gradually progress to the full achievement of all requirements within the WHO IPC core components recommendations.

## Target

(1) National IPC programme strategy has been developed and disseminated. (2) Implementation of the national IPC programme plans, with monitoring and reporting of HCAIs. (3) Established national standards and resources for safe health facilities.

## Level of capabilities

The current IPC framework is the responsibility of the National Quality Assurance and Infection Control Division. The IPC governance and reporting guidelines and compliance standards are monitored monthly, with strong collaboration and joint clinical implementation of IPC from clinical, public health and other support staff in the health service.

Audits are used to monitor IPC practices and provide data on compliance with policies, protocols, and guidelines within Ministry of Health facilities and services. Other core functions of IPC are driving, leading, monitoring, and reporting on achievement of IPC standards to ensure that these standards are met on all occasions; that the incidence of healthcare acquired infections (HCAI) is reduced; and that clinical outcomes for patients are improved. Information from IPC audits is also used in planning to meet educational needs and evaluate the overall effectiveness of the IPC programme.

The IPC programme and workplan are reviewed annually. The Samoa Infection Control Manual 2005 and the National Infection Control Policy (2011-2016) are being reviewed. Samoa is currently using the Pacific Public Health Surveillance Network (PPHSN) IPC Guidelines 2021 for guidance.

The IPC surveillance programme is supported by clinical laboratory services and data collection is laboratorybased. The workflow is as follows: the Principal Microbiology Officer informs the Principal IPC Officer of a positive blood culture, then the IPC team finds the relevant patient record and checks the patient's admission date and diagnosis to exclude community-acquired bloodstream infection (CABSI). Further data is then collected as required through a review of the patient's medical record, which is frequently incomplete, and/or discussion with relevant clinical staff. HCAI surveillance is not routinely undertaken, although data is collected on multidrug-resistant organisms (MDROs) and bloodstream infections (BSI).

All healthcare facilities are connected to safe and treated water. The Ministry of Health monitors all water service providers that supply health care facilities to make sure that water is safe for use. WASH assessments are included in assessments of the safety and functionality of health facilities.

Health facilities keep bed occupancy to one patient per bed, and a system is in place to assess bed capacity and respond as needed – although on some occasions patients may be placed in beds in corridors.

## Respond

## Indicators and scores

## R4.1. IPC programmes – Score 3

## Strengths

- There is an established IPC programme designed to monitor, reflect on and refine the systems used to manage infection risks within the Ministry of Health.
- There is a range of basic IPC guidelines, such as standard and transmission-based precautions and hand hygiene guidelines, available across all the healthcare facilities. IPC guidelines are available in hard copies only in clinical areas.
- The IPC programme includes all information on IPC compliance with policies, protocols, and guidelines within Ministry of Health facilities and services.
- The IPC programme is supported by a multidisciplinary IPC Committee.
- The IPC Committee reports to the Communicable Disease Control Committee and to the Director General of Health.
- A monitoring plan is in place, with data reported to and reviewed by the IPC Committee, which sets targets and conducts further education and training as required.
- Feedback of audit and surveillance results is provided to relevant frontline, cleaning, and operational staff.
- IPC education and training opportunities are provided to a broad range of Ministry of Health staff. There is no link nurse programme at each healthcare facility, so all IPC education and training is conducted and supported by the IPC Principal Officer.
- Regional networking and support are established through membership of the Pacific Infection Control Network (PICNet) and engagement with partners such as the Pacific Regional Infectious Disease Association (PRIDA).

## Challenges

- Up-to-date national IPC Guidelines, a manual and a policy are currently unavailable.
- Current allocated funding for the IPC programme is for staffing and office consumables only. There is no standing line funding available for other IPC activities or initiatives, including training of IPC staff.
- Staff engagement and adoption of IPC is limited, with general reluctance to engage in IPC champion/link roles.
- IPC guidelines are not fully integrated into health service delivery across all levels.
- HCAI surveillance is currently not routinely undertaken (although data is collected for AMR, blood stream infection (BSI), and hand hygiene).

## R4.2. HCAI surveillance – Score 3

## Strengths

- The HCAI programme is linked to the disease surveillance programme.
- The national HCAI surveillance programme is supported by trained staff and has standardized definitions and methodologies.
- Bloodstream infections that meet the definitions outlined in the HCAI surveillance programme are reported to the IPC and Communicable Disease Control committees, other relevant staff and the Director General of Health.
- 100% of facilities can conduct surveillance of HCAI, including for AMR infections in humans.
- Quality control and evaluation of the HCAI surveillance programme is the responsibility of the IPC Committee.





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#### Challenges

- Clinical referrals to overseas facilities increase the risk of AMR issues.
- Based on the evidence provided to the JEE team, the surveillance programme appears limited to AMR and blood stream infection (BSI).
- There is no financial support for HCAI surveillance activities.
- multidrug-resistant organisms (MDROs) clinical results are not always timely, and responses are delayed.
- Case identification and investigation is hindered by poor documentation of medical records.
- Environmental surveillance results are not always timely enough.

## R4.3. Safe environment in health facilities – Score 1

#### Strengths

- Basic WASH and waste infrastructure is mostly present for staff, patients, and other health facility users.
- Water services are safe, sufficient, and reliable.
- Personal protective equipment (PPE) is reportedly available at all times and in sufficient quantities for all uses.
- All healthcare facilities have sterilization services available.
- The Ministry of Health Infection Control Manual contains a comprehensive section on health care worker safety, interventions for occupational exposure to infectious diseases, bloodborne pathogens and management of pregnant healthcare workers (NB the manual is not up-to-date and was under review at the time of the JEE).
- Continuing professional training includes WASH, patient isolation and sterilization services in healthcare facilities.

- Only Samoa's two main hospitals have isolation areas. Faleolo Health Centre is the only District Facility that has an adequate negative pressure isolation room.
- The majority of district and healthcare centres do not have an adequate isolation area, but district hospitals have designated rooms as isolation rooms.
- While basic sanitation infrastructure is in place, it does not meet all WHO basic service level measures. Levels not met include those for addressing menstrual hygiene and meeting the needs of people with limited mobility.
- Staffing levels have not been assessed according to national or international standards to improve compliance with IPC practices.
- Availability of hand hygiene equipment is continually problematic.
- Equipment and supplies for cleaning are not always reliable.
- Cleaning services are currently outsourced, causing quality control issues.

- Complete the update of the National IPC Policy and Manual in line with the National IPC Action Plan, endorse it for use, and create and implement a plan for dissemination, implementation, and evaluation.
- Introduce IPC key performance indicators, including for hand hygiene, surgical site infections, healthcare associated bloodstream infections, and multidrug resistant organisms, for heads of department. These should cover nurse managers and heads of all clinical departments and should be used to demonstrate evidence of adoption of IPC practices in clinical areas.
- Ensure that all IPC personnel receive specialist post-registration IPC training, and ensure IPC specialization is a clear professional pathway for health sector professionals.
- Implement a comprehensive hand hygiene programme, including recruitment of hand hygiene auditors across all health services and training of IPC staff to be gold standard auditors, and build in regular reporting and feedback of hand hygiene compliance.
- Share IPC Committee minutes (including clinical health service IPC surveillance and audit reports) with the Clinical Governance Committee to ensure that the Committee is accountable for improvements in IPC.









# R5. Risk communication and community engagement

## Introduction

Risk communications should be a multilevel and multifaceted process which aims at helping stakeholders define risks, identify hazards, assess vulnerabilities and promote community resilience, thereby promoting the capacity to cope with an unfolding public health emergency. An essential part of risk communication is the dissemination of information to the public about health risks and events, such as disease outbreaks. For any communication about risk caused by a specific event to be effective, the social, religious, cultural, political and economic aspects associated with the event should be taken into account, including the voice of the affected population.

## Target

States Parties use multilevel, multisectoral and multifaceted risk communication and community engagement (RCCE) capacity for public health emergencies. Real-time exchange of information, advice and opinions during unusual and unexpected events and emergencies so that informed decisions to mitigate the effects of threats, and protective and preventive action can be made. This includes a mix of communication and engagement strategies, such as media and social media communications, mass awareness campaigns, health promotion, social mobilization, stakeholder engagement community engagement and infodemic management.

## Level of capabilities

Under the National Disaster Risk Management Plan, the Ministry of Health is the lead agency for risk communication for health emergencies. In the event of a public health emergency, the health emergency operations centre (HEOC) is stood up within the Ministry of Health. The HEOC has arrangements for risk communication and community engagement (RCCE).

Capacity for RCCE is established via a multiagency RCCE Working Group – established during the COVID-19 pandemic and in operation since then – that includes the Ministry of Health Health Promotion team, the Press Secretariat of the Ministry of the Prime Minister and the Cabinet, the DMO and the Ministry of Women, Community and Social Development.

At national level the NEOC is responsible for maintaining effective public information when a state of emergency is declared, with the Public Information Management, Safety and Legal Section (PIMSLS) responsible for coordinating and sharing public information, making liaison arrangements with the Ministry of the Prime Minister and the Cabinet, and managing communication between agencies (including communication related to safety, legal and security issues). These arrangements were implemented during COVID-19. Although RCCE is represented as a function in the HEOC, there is limited visibility of RCCE as a function at national level, where it is absorbed into the Public Information Management, Safety and Legal Section (PIMSLS).

Samoa's capacity for risk communication includes development of the information, education and communication (IEC) materials, social listening (via hotlines, traditional media and social media monitoring, and collecting sociobehavioural and cultural insights from surveys). Social mobilization and community engagement are key strengths for Samoa – for example, via the Integrated Community Health Awareness

Program (ICHAP), the Community Disaster and Climate Risk Management (CDCRM) Programme, and strong partnerships with Village Councils, Women's Committees and the Sui o Nu'u and Sui Tamaitai o Nu'u (liaison officers between villages, NGOS and the government). These activities systematically inform risk communication and other health programming. It is noteworthy that community engagement relies on coordination with Ministry of Women, Community and Social Development, as part of the RCCE Working Group.

To sustain and build capacity under the three indicators in this technical area, it is highly recommended that RCCE is fully articulated and embedded as a core technical unit at all levels of government, to increase visibility of the RCCE function and ensure that it can be tested in future simulation exercises. National RCCE mechanisms (e.g. plans, SOPs and guidelines) could be strengthened by development of multihazard plans that are reviewed at least every 24 months. These mechanisms should also include measurement, evaluation and learning (MEL) for RCCE interventions.

## Indicators and scores

## R5.1. RCCE systems for emergencies – Score 3

## Strengths

- Mechanisms are established and implemented for RCCE functions (e.g. strategies, plans and policies are in place).
- Samoa has risk communication specialists and trained spokespeople and some level of national multisectoral RCCE coordination through the RCCE Working Group and the HEOC. This was demonstrated during the COVID-19 pandemic.
- Samoa has demonstrated the ability to develop risk communication resources for example:the information, education and communication (IEC) materials for health emergencies.
- RCCE functions include training, online and offline media monitoring to shape messages and strategies, and online and offline community listening (including the use of behavioural and cultural insights) to inform the design of communications, interventions and programmatic improvements.
- Samoa has infodemic management capacity (via hotline feedback and online and offline social listening).

- RCCE functions are planned and implemented through the Health Promotion Team. Therefore, additional human and financial resources would be needed to sustain and scale-up RCCE, including dedicated resources for infodemic management.
- While there is some multisectoral coordination (e.g. with the Ministry of the Prime Minister and the Cabinet Press Secretariat and the Ministry of Women, Community and Social Development) and internal coordination across teams (e.g. with surveillance teams), this coordination is limited. Exercising to test these arrangements could identify improvements in coordination mechanisms that would bolster RCCE systems and strengthen RCCE as a function at all levels of government.
- Samoa has quality assurance processes for communication products, but the clearance and approval process especially for pre-testing messages and products for translation could be improved and made more efficient.
- There is limited measurement, evaluation and learning (MEL) activity to monitor and evaluate RCCE interventions.









#### R5.2. Risk communication – Score 3

#### **Strengths**

- Samoa has established mechanisms and capability within the Health Promotion Team, in the form of specialist professionals who develop and disseminate public communication and risk communication products. These products include press releases and press conferences; the information, education and communication (IEC) materials for COVID-19, measles and influenza; and communication products developed in collaboration with other sectors.
- There is evidence that communication products are developed to address identified information gaps, questions and concerns.
- Samoa has demonstrated capacity to develop and share public communication and risk communication products both online (through media and social media) and offline (via community engagement) – including in response to rumours and misinformation.
- There is evidence to show that Samoa's social listening system (including for infodemic management) is functioning in a routine manner via hotlines, monitoring social media, and community engagement both online and offline.
- Samoa has developed RCCE plans for COVID-19 and appointed spokespersons (e.g. the National Controller and the Director General of Health).
- There is some analysis of target audiences based on language, trusted information sources and preferred communication channels. This is done via various knowledge, attitudes and practices (KAP) studies (both online and offline) to inform risk communication interventions. For example, the COVID-19 Vaccination Perceptions Rapid Assessment Tool was used in collaboration with the Pacific Community, the United Nations Children's Fund (UNICEF) and the International Federation of Red Cross and Red Crescent Societies (IFRC) to improve understanding of peoples' perceptions of COVID-19 vaccines.
- Coordination mechanisms between the Ministry of Health Health Promotion Team and the Ministry of the Prime Minister and the Cabinet Press Secretariat provide visibility for RCCE at national government level, but this could be strengthened.
- Identified and segmented target audiences, including marginalized and vulnerable groups, are supported with targeted risk communication, as informed by the National Communication Strategy 2019, the Community Sector Plan 2021-2026, the National Disaster Management Plan 2016-2021, the National Policy for Disability 2021-2031 and the village disaster response plans (which are an output of the Community Disaster and Climate Risk Management Programme).
- Samoa has demonstrated cross-coordination for early warning surveillance for example, through work with the surveillance team to produce public advisories on syndromic trends.

- RCCE lacks sufficient visibility as a core technical area. This could be strengthened by formalizing the RCCE Working Group and providing more recognition for RCCE across government.
- There is a need to build capacity and resourcing for RCCE, including infodemic management.
- There is a need to improve coordination between different technical teams for co-design of rapid assessment tools and surveys. For example, while the COVID-19 Vaccination Perceptions Rapid Assessment Tool was given to the Health Promotion Team to inform RCCE activities, it is understood that the team were not involved in the design of the assessment.
## Respond

## R5.3. Community engagement – Score 4

## Strengths

- National plans and policies are in place to guide community engagement initiatives (e.g. the Community Sector Plan 2021-2026; the National Disaster Management Plan 2016-2021; the National Policy for Disability 2021-2031; and the village disaster response plans.
- Samoa has established two-way community engagement coordination mechanisms to collect and analyse sociobehavioural insights via village governance structures. This is done through the Sui o Nu'u and Sui Tama'ita'i o Nu'u, hotlines, social listening, collecting sociobehavioural insights from affected and at-risk populations, using rapid assessment tools, and regular training of community engagement teams and volunteers. The evidence thereby collected is used to inform risk communication.
- Communities are actively involved in emergency response and co-design of emergency response initiatives.
- Stakeholders are mapped and systematically engaged by District Councils in line with annual district development plans, which incorporate multisectoral engagement activities.
- Strong coordination mechanisms exist in villages, faith-based organizations, and schools, and are supported by the Ministry of Women, Community and Social Development and partners.
- At the community level, social development issues are led via women's committees already embedded into communities (such as committees for domestic violence), as well as via integrated programmes such as the Integrated Community Health Awareness Program (ICHAP).
- Emergency responders are trained, and surge capacity is available for community engagement.

## Challenges

• Competing sectoral priorities for gathering community feedback across sectors can cause community fatigue. This could be addressed by improving coordination of community engagement initiatives.

## **Recommendations for priority actions**

- Formalize a national RCCE committee comprising all relevant agencies/stakeholders responsible for operationalizing the NDMP and an official RCCE function within the ministry of health. Review RCCE mechanisms every 24 months.
- Work with the NDMO and Ministry of the Prime Minister and the Cabinet focal points to ensure that RCCE is articulated as a core technical area of the NDMP.
- Use national and subnational simulation exercises, along with intra- and after-action reviews, to identify health related RCCE gaps. Based on the results, develop and implement actions to address those gaps.
- Develop a multihazard framework for capacity building in RCCE, including infodemic management.
- Working with Ministry of Women, Community and Social Development, build the capacity of District Councils to ensure that annual multisectoral District Development Plans include community engagement around preparing and responding to public health emergencies.





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# IHR Related hazards and Points of entry and border health



# POE. Points of entry and border health

## Introduction

All core capacities and potential hazards apply to "points of entry" and thus enable the effective application of health measures to prevent international spread of diseases. States Parties are required to maintain core capacities at designated international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings), which will implement specific public health measures required to manage a variety of public health risks.

## Target

States Parties designate and maintain core capacities at international airports and ports (and were justified for public health reasons, a State Party may designate ground crossings) that implement specific public health measures required to manage a variety of public health risks.

## Level of capabilities

Samoa has unique characteristics, as a Pacific Island country, that influence its risk profile for managing public health risks at points of entry (POE). Samoa is relatively remote, is small in size and has a small population. Aviation and maritime POE are relatively modest in size, and volumes of traffic are relatively low. There are no ground crossings. However, Samoa has limited human resources and infrastructure.

Samoa has designated two POE, Faleolo International Airport and Manautu sea port, under the IHR. Faleolo International Airport receives the largest share of international passengers entering Samoa (at least 80%), with flights from Australia, New Zealand, Fiji and Hawaii. Some passengers transit through Samoa en route to Hawaii, Fiji and New Zealand. Border health staff meet aircraft on arrival and check all documentation, including the declaration of health, before issuing pratique and allowing travellers to disembark. If there are ill travellers, the aircraft captain will inform the tower, which alerts health authorities. Sometimes this may happen at very short notice. Border health officers then undertake a public health risk assessment and inform the public health doctor. The medical team responds as required. Contact information is collected in case contact tracing is required.

Dedicated facilities have been made available for brief diagnosis of infected passengers before onward transfer to health facilities for further investigation and management. However, reorganization of the flow of sick passengers will be needed, to avoid cross infection with other passengers.

Manautu is the main port through which Samoa receives goods, food and supplies for national consumption and commercial purposes. This port also serves as a passenger terminal for ships from neighbouring areas, such as PagoPago, and receives cruise vessels. Border health officers are trained in ship sanitation.

Designated POE implement all the routine core capacities and are integrated into the national surveillance system for biological hazards/all hazards (e.g. event-based and early warning systems). Samoa implements the routine core capacities for designated points of entry. There are procedures for arriving conveyances to notify the presence of ill travellers, and travellers complete a health declaration on arrival. Additional exercises for responding to ill travellers are needed to develop capacities to deal with infectious pathogens.







Samoa has a national multisectoral process for making policy decisions on international travel-related measures in response to public health events. This process operates under the National Disaster Management Act 2006 and the National Disaster Management Plan. The National Disaster Management Plan is currently under review and will cover all hazards.

Samoa has contingency plans developed for designated POE that include multisectoral agencies and has exercised these plans within the past two years, including with an aircraft crash scenario and during the COVID-19 response. To inform decision-making on measures related to international travel, border health officers are capable of conducting risk assessments for communicable diseases by looking at the level of risk, number of air passengers, travel history, ports of departure, etc.

## Indicators and scores

## POE1. Core capacity requirements at all times for POE (airports, ports and ground crossings) – Score 3

#### **Strengths**

- Samoa has new infrastructure (an isolation room) that can handle public health emergencies at the airport.
- POE have health facilities close by to cater for medical emergencies.
- Samoa has strong multistakeholder collaboration.
- Samoa has the capacity to apply recommended health measures, including disinfecting and decontaminating baggage and cargo at appropriate locations.

## Challenges

- Communication and coordination among stakeholders can be difficult.
- There is a lack of capacity building opportunities for staff (e.g. training for inspectors and instructors at airports and ports, recertification of staff, etc.).
- The level of awareness around IHR core capacities remains limited among POE personnel.
- Cross-border collaboration and information-sharing to support risk assessment and planning remain suboptimal.
- Mobilizing resources for building POE capacities and/or upgrading seaport facilities remains a challenge.

## POE2. Public health response at POE – Score 3

#### Strengths

- Multisectoral and multihazard contingency plans are available at POE.
- POE have health facilities close by to cater for medical emergencies.
- All POE have permanent public health staff.
- Public health emergency response plans were tested during the COVID-19 pandemic.
- Transport is available to respond to medical emergencies at all POE.
- Data are collected at POE and reported to the Ministry of Health for surveillance.

#### Challenges

- Coordination and exchange of public health information between public health units at POE and other agencies remains weak, and information sharing is slow.
- Human resources for public health are limited.

## POE3. Risk-based approach to international travel-related measures - Score 4

## Strengths

- Samoa has a national multisectoral mechanism (the NEOC) that makes policy decisions in response to public health events.
- Risk assessments are conducted regularly.
- There is some level of coordination between responsible agencies when implementing response measures.
- Existing legislation, guidelines, SOPs and plans are implemented at POE.
- During the COVID-19 pandemic, intra-action reviews were conducted after any public health events at POE.
- Samoa has the capacity to isolate international travellers at the airport.

## Challenges

- Collaboration between relevant stakeholders when implementing response measures remains limited.
- Public awareness programmes on travelling requirements have not been implemented consistently in all POE.
- There are no compensation arrangements for staff who must perform mandatory high-risk services (e.g. clearing incoming vessels outside the wharf).
- The exchange of information between conveyance operators and port authorities regarding entry of smaller vessels into seaports is sometimes delayed.
- Samoa mounts only limited patrols of its sea borders.
- There is a limited number of staff available to conduct risk assessments on measures related to international travel.

## **Recommendations for priority actions**

- Update multisectoral contingency plans at designated POE, ensuring they address all public health risks, and undertake regular exercises to strengthen communication and coordination between stakeholders in responses to public health emergencies.
- Provide regular training for border health staff that includes methods of assessing capacities at POEs, to facilitate identification of areas for strengthening and implementation of corrective actions.
- National competent authorities should engage with the international community to share and receive information to support risk assessment and decision making in relation to travel health measures.
- Ensure that POE have dedicated health facilities providing initial assessment, quarantine and/or isolation for sick travellers. Facilities should have dedicated transport access to minimize the possibility of sick travellers infecting others and facilitate safe transportation to other appropriate health facilities.
- Maintain and develop current designated POE to ensure they maintain core capacities during emergencies and at all other times.





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# CE. Chemical events

## Introduction

Timely detection and effective response of potential chemical risks and/or events requires collaboration with other sectors responsible for chemical safety, industries, transportation and safe disposal. This would entail that State Parties need to have surveillance and response capacity to manage chemical risk or events and effective communication and collaboration among the sectors responsible for chemical safety.

## Target

States Parties with surveillance and capacity for chemical risks or events. This requires effective communication and collaboration among the sectors responsible for chemical safety, including health, occupational health, emergencies, environment, transportation and safe disposal, agriculture/veterinary, as well as industries.

## Level of capabilities

Samoa's chemical sector is small and all chemicals are imported. The most significant imports are petroleum products (over 80% of total chemical imports); consumer, pharmaceutical and industrial chemicals; and pesticides.

Much of the population is likely to encounter some form of agricultural chemicals. Many Samoans also use various consumer chemicals in the home (consumer goods such as mosquito coils, for instance, are common household pesticides) and industrial chemicals in their workplaces, and significant improvements are required in how these chemicals are used, stored and disposed of.

Despite recognizing the important role that chemicals play in national development, there are anecdotal reports of growing concern about the hazardous nature of chemicals and their adverse effects on human health and the environment.

Samoa has ratified, and is implementing, five international conventions relating to chemicals and hazardous wastes: the Basel Convention, the Rotterdam Convention, the Stockholm Convention, the Minamata Convention, and the Waigani Convention. Ratification of these international agreements supports Samoa's efforts to improve chemical waste management in terms of monitoring, safe handling and disposal; expanding capacity and skills; strengthening public awareness; and engaging communities and the business sector.

The Ministry of Natural Resources and Environment regulates the monitoring, collection, transportation and storage of chemicals and hazardous waste. The Ministry developed a national chemicals profile in 2010 to manage chemicals sustainably and safely throughout their lifecycle, but this has not been updated since. The Ministry also established a chemical and hazardous waste tracking system in 2011, but this system is no longer in use.

Resistance to pesticides (including insecticides) is a growing concern. The Ministry of Agriculture and Fisheries Pesticides Technical Committee convenes quarterly to oversee pesticide importation. The Ministry of Agriculture and Fisheries Quarantine Division conducts monthly spot checks for pesticides and prohibited agricultural products sold in retailers and for out-of-date chemicals and pesticides in healthcare and education facilities. The SROS can analyse pesticide residues (including persistent organic pollutants such as DDT) in food, water and other environmental samples.

The Ministry of Commerce, Industry, and Labor enforces the Occupational Health and Safety Act 2002, which includes managing chemical risks in the workplace. The Ministry of Finance Petroleum Taskforce is in charge of making sure gas stations follow regulation.

Samoa has not experienced any major chemical incidents in the past five years. The Samoa Fire Services Emergency Authority responds to chemical incidents on land, and the Marine Pollution Advisory Committee (part of the Ministry of Works, Transport and Infrastructure) meets quarterly to oversee and respond to oil and chemical incidents. The Ministry of Health Healthcare Waste Section supports the Ministry of Natural Resources and Environment with chemical incidents and chemical disposal. The Secretariat of the Pacific Regional Environment Programme provides expert guidance on managing chemical incidents.

The disposal of hazardous waste is problematic, as there are no appropriate disposal facilities in Samoa and arranging export for offshore disposal is challenging. The health sector has a National Healthcare Waste Management Strategy 2020–2025 that includes hazardous waste management. The SROS and the Ministry of Education, Sports and Culture assist the Ministry of Natural Resources and Environment in monitoring, collecting, transporting and storing chemical waste.

Samoa has the capacity and capability to analyse chemicals, and established systems to monitor the importation of pesticides. Drinking water and food are monitored for chemical hazards. The SROS can analyse chemicals, including heavy metals and asbestos, but cannot currently analyse human specimens.

Laboratories are required to report cases of suspected poisonings (e.g. acute pesticide toxicity) and there is rigorous health surveillance of paraquat poisoning. However, there is no surveillance of sentinel health events, other than those associated to pesticides, that might signal a hazardous chemical exposure.

The scope of the Disaster and Emergency Management Act 2017 covers chemical and hazardous waste emergencies. There is guidance for managing specific chemicals, but no inventory for chemical poisoning. Samoa has a National Chemical Profile, but this was prepared in 2010 and needs to be updated.

The Samoa Fire and Emergency Services Authority has primary responsibility for managing chemicals and for surveillance and monitoring of chemical events. Current human resources are sufficient to meet needs for managing chemical events, as there is a multisectoral response capability. The Marine Pollution Advisory Committee oversees and responds to maritime oil and chemical incidents, and the SROS is able to analyse chemicals (including asbestos) during chemical incidents, but has not been asked to provide this service to date. Samoa has not experienced any major chemical incidents in the past five years.

Procedures for health risk assessment in chemicals are reflected in the Occupational Health and Safety (OHS) Regulations 2017. All employees handling chemical wastes and engaged in other activities related to chemical waste management are subject to OHS regulations, which strengthen personal protective equipment (PPE) requirements and serve as a safety guide. All government employees and contractors engaged in waste management work are required to adhere to OHS.

Samoa does not have a National Poisons Centre and does not have protocols or guidelines for case management of chemical injuries. The Ministry of Health laboratory can test for paraquat but cannot test for other toxins. The SROS is developing a toxicology laboratory and anticipates this will be in place by the end of 2024. This will provide post-mortem analysis for the police.









## Indicators and scores

## CE1. Mechanisms established and functioning for detecting and responding to chemical events or emergencies – Score 2

## Strengths

- Samoa has a single agency with primary responsibility for chemical management, supported by other agencies including the Ministry of Health.
- The Ministry of Agriculture and Fisheries Pesticides Technical Committee and Marine Pollution Advisory Committee meet regularly, as well as during emergencies and disasters.
- Samoa has established systems and processes for managing chemical and hazardous wastes and is actively improving them.
- Workplace health and safety legislation covers the use of chemicals in the workplace and ensures workers are protected.
- The Ministry of Natural Resources and Environment provides guidance for the management of specific chemicals.

## Challenges

- The importation, handling, use, storage, and disposal of hazardous materials and chemicals could be better coordinated.
- There is no policy or SOP for chemical event detection and response, or for the creation of a national structure for event management (this could be established under the National Disaster Risk Management Plan).
- Because the national chemicals profile has not been updated since 2010, it is challenging to identify the range, volumes and usage of chemicals in Samoa. The recommendations made in 2010 have not been fully implemented.
- The chemical and hazardous waste tracking system needs to be re-established, as there is no systematic monitoring or reporting of chemical usage, environmental impacts, consumer products and/or sentinel health events to identify potential risks.
- Samoa does not have treatment protocols to manage exposure to chemicals and hazardous substances, and there is only limited laboratory capacity for analysing human specimens.
- Knowledge of, and adherence to, laws and regulations pertaining to chemicals and dangerous materials needs to be strengthened (including OHS compliance in the workplace), particularly in locations where chemicals and other hazardous materials are utilized, stored, and disposed of.

## CE2. Enabling environment in place for management of chemical events – Score 2

## Strengths

- The Disaster and Emergency Management Act 2017 provides a framework for a multisectoral response to all hazards, including chemical emergencies.
- The Samoa Fire and Emergency Services Authority has primary responsibility for surveillance and monitoring of chemical events, and the Marine Pollution Advisory Committee oversees and responds to maritime oil and chemical incidents.
- Guidance is in place for the management of specific chemicals (including an oil spill contingency plan).

## Challenges

- Samoa does not have a National Poisons Centre and does not have protocols or guidelines for case management of chemical injuries.
- There is currently no SOP for containment and coordination in the event of a chemical incident.
- Technical capabilities and resources are insufficient to address significant chemical incidents.
- Samoa does not have strong ties to global chemical and toxicological networks.
- Regulations for the export of hazardous waste for disposal or treatment are complicated.
- Procedures for disposing of chemicals and other dangerous waste need to be strengthened, storage capacity and disposal facilities for hazardous waste are restricted, and it is challenging to arrange export of hazardous waste. In the past the Samoan government has arranged for a specialized vessel to collect and export hazardous waste for incineration.

## **Recommendations for priority actions**

- Re-establish the Chemical Committee, chaired by the Ministry of Natural Resources and the Environment, to coordinate agencies and sectors involved in management of chemical and hazardous waste.
- In a joint effort involving all relevant ministries, agencies and sectors, develop national SOPs for detection and assessment of, and response to, chemical emergencies and ensure alignment with the NAPHS development process recommended elsewhere.
- Within a year of developing these SOPs, the NDMO should run a simulation exercise for a chemical emergency that includes an after-action review.
- Revise the National Chemical Profile and the Chemical and Hazardous Waste Tracking System and ensure they are maintained and reporting to the Chemical Committee on implementation at least annually.
- Adapt WHO guidance for healthcare providers on the identification, treatment and reporting of suspected chemical exposures and injuries. This process should include formalizing agreements with National Poisons Centres in the region to access advice and assistance as required, and identifying arrangements for analysis of specimens.









## RE. Radiation emergencies

## Introduction

To counter radiological and nuclear emergencies, timely detection and an effective response towards potential radiological and nuclear hazards/events/emergencies are required in collaboration with sectors responsible for radiation emergency management.

## Target

States Parties should have surveillance and response capacity for radiological emergencies and nuclear accidents. This requires effective coordination among all sectors involved in radiation emergencies preparedness and response.

## Level of capabilities

There is a low risk of nuclear and radiological emergencies in Samoa.

There is also no national agency responsible for radiation surveillance and monitoring in Samoa. In August 2023, the International Atomic Energy Agency (IAEA) conducted its first fact finding mission to Samoa, to gain an overview of the country's needs and opportunities for IAEA support. IAEA staff met with SROS staff to discuss the solutions that nuclear science and technology can offer to address some of Samoa's development priorities.

Samoa has no established mechanisms or regulatory body to oversee and control radiation use, including the detection of radiological and nuclear emergencies. Any response would be managed under the National Disaster Management Plan 2017-2020.

The Disaster and Emergency Management Act 2007 establishes a framework for responding to any emergencies and disasters, including nuclear and radiation events, but ionizing radiation is not a significant risk in Samoa so it is a low priority. If the Ministry of Health revises the risk assessment, it will be given higher priority.

There are no specific national policies, strategies, or plans for detection and assessment of, response to and/or recovery after radiation emergencies. Samoa has no local capacity to monitor or assess radioactive contamination and no arrangements for responding to a radiation emergency.

There is little use of radiation in Samoa. That which exists is limited mainly to radiology services for diagnostic purposes. There is no policy for ensuring the safe use of radiation in Samoa, but a protocol has been developed and implemented by X-ray staff and is currently under review. Samoa has arrangements with the Institute of Environmental Science and Research Ltd. in New Zealand to monitor employee radiation exposures. Currently there are no dosimetry badges available for staff.

Occupational health and safety focuses on risk assessment, training and protocols for workers. Further training is needed, including on protocols for first responders, Personal protective equipment (PPE), and safe operating procedures.

## Indicators and scores

## RE1. Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies – Score 1

## Strengths

- Samoa's geographical isolation and limited use of radioactive sources mean risks from radiation are minimal.
- Samoa is developing technical cooperation with, and may receive financial support from, the IAEA for knowledge sharing, technical assistance and capacity building for radiation safety.

## Challenges

While the Disaster and Emergency Management Act 2007 establishes a framework for responding to nuclear and radiation events, Samoa lacks policies or SOPs for detecting and responding to radiological or nuclear events.

There is no national structure and emergency response plan for nuclear and radiation event management (this could be established under the National Disaster Risk Management Plan).

Because radiological and nuclear risks are low priority, there is limited resourcing for developing policies, regulations, plans and procedures for the detection and assessment of, response to and recovery after radiation emergencies, or for training and capacity-building programmes.

## RE2. Enabling environment in place for management of radiological and nuclear emergencies – Score 1

## Strengths

- As Samoa is a non-nuclear small island state, the risk of a nuclear emergency is low.
- Medical imaging facilities have safety protocols for employees.
- Samoa recently became a member state of the IAEA and will therefore gain access to technical resources, as well as to IAEA guides and manuals on developing radiation safety policy, regulations, safe practices, etc.

## Challenges

- Samoa lacks a multisectoral mechanism for coordinating preparedness and response to radiological and nuclear emergencies.
- Technical capabilities and resources are insufficient to address significant radiological or nuclear incidents.
- There are no policies, regulations, plans and/or procedures for ensuring safe use of radiation equipment in Samoa.
- While there is a draft protocol for ensuring the safe use of radiation by X-Ray staff, there is no dosimetry for radiological staff and there are no guidelines for case identification and management of persons overexposed to ionizing radiation.

## **Recommendations for priority actions**

- Develop national multisectoral SOPs for detection and assessment of, and response to, radiation emergencies.
- Within one year of developing these SOPs, the NDMO should run a simulation exercise for a radiation emergency that includes an after-action review.
- Complete the review of X-ray protocols by the end of 2024 and provide dosimetry equipment and capacity to monitor radiological staff for exposure, thereby ensuring protection of employees and the public from radiation.
- Establish a mechanism for accessing international technical assistance, information and expertise for radiation emergencies.





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# Annex: JEE background

## Mission location and duration

Apia, Samoa. 30 October – 3 November 2023.

## Mission team members

JEE Technical Team		
Team lead: Jeffery Cutter		
Team co-lead: Babatunde Olowokure		
	Technical area lead	Technical area co-leads
P1. Legal instruments	Hendrik Jan Ormel	Nuha Mahmoud
P2. Financing	Eric Gogstad	Nguyen Phuong Nam
P3. IHR coordination, national IHR Focal Point functions & advocacy	Stella Chungong	Nuha Mahmoud
P4. AMR	Babatunde Olowokure	Peta-Anne Zimmerman
P5. Zoonotic disease	Jessica Kayamori Lopes	Hendrik Jan Ormel
P6. Food safety	Jessica Kayamori Lopes	Victoria Katawera
P7. Biosafety & biosecurity	Victoria Katawera	Peta-Anne Zimmerman
P8. Immunization	Jeffery Cutter	Nuha Mahmoud
D1. National lab system	Victoria Katawera	Peta-Anne Zimmerman
D2. Surveillance	Jeffery Cutter	Jessica Kayamori Lopes
D3. Human resources	Nuha Mahmoud	Eric Gogstad
R1. Health emergency management	Eric Gogstad	Sally Gilbert
R2. Linking public health & security authorities	Hendrik Jan Ormel	Babatunde Olowokure
R3. Health services provision	Peta-Anne Zimmerman	Victoria Katawera
R4. Infection prevention & control	Peta-Anne Zimmerman	Jeffery Cutter
R5. Risk communication & community engagement	Nancy Wong	Stella Chungong
POE. Points of entry & border health	Nguyen Phuong Nam	Sally Gilbert
CE. Chemical events	Sally Gilbert	Stella Chungong
RE. Radiation emergencies	Sally Gilbert	Stella Chungong

## Objective

To assess Samoa's capacities and capabilities in the 19 technical areas of the JEE tool, and to provide updated data that will further support Samoa's ongoing efforts to enhance public health security.

## The JEE process

The JEE process is a peer-to-peer review. The entire external evaluation – including discussions around the priority actions, strengths, areas that need strengthening, best practices, challenges, and scores – is collaborative, with JEE team members and host country experts seeking full agreement on all aspects of the final report findings and recommendations.

Should there be significant and irreconcilable disagreements between the external team members and the host country experts, or among the external experts, or among the host country experts, the JEE team lead will decide the outcome. This will be noted in the final report along with the justification for each party's position.

## Field visits

The JEE team made field visits to the following teams, locations and facilities:

- National Emergency Operation Centre
- Faleolo International airport
- Faleolo Health Center
- Matautu Wharf (Seaport)
- Ministry of Health Clinical/Public Health Laboratory
- Scientific Research Organization of Samoa
- Ministry of Agriculture and Fisheries Animal health division
- Leulumoega District Hospital
- Poutasi District Hospital
- Health Emergency Operations Centre
- Ministry of Health Pharmaceutical Warehouse
- Public Health Divisions
- National EPI unit
- Surveillance Unit

## Limitations and assumptions

- The evaluation was limited to one week, which limited the manageable amount and depth of information.
- It is assumed that the results of this evaluation will be publicly available.
- The evaluation is not an audit. Information provided by Samoa was not independently verified, but was discussed and the evaluation ratings mutually agreed by the host country and the evaluation team. This was a peer-to-peer review.

## Samoa participants and institutions

	Organization	Designation	Full Name
& managers	Ministry of Health	CEO - MOH	Aiono Dr Alec Ekeroma
	Ministry of Ministry of the Prime Minister and the Cabinet	CEO - MPMC	Agafili Shem Leo
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	Ministry of Natural Resources and Environment	CEO - MNRE	Frances Reupena
	Ministry of Agriculture and Fisheries	CEO - MAF	Seuseu Dr Joseph Tauati
	Ministry of Finance	CEO - MOF	Saoleitiiti Maeva Betham Va'ai
	Ministry of Commerce, Industry & Labour	CEO - MCIL	Pulotu Lyndon Chu Ling
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	Organization	Designation	Full Name
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	External Team	Manager	Ms Sally Gilbert
	External Team	Senior lecturer	Dr Peta Zimmerman
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	External Team	RCCE expert	Ms Nancy Wong
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	External Team	Head of Samoa Country Office (WHO)	Dr. Kim DICKSON
	External Team	Director & Representative to the Pacific States (UNESCO)	Mrs. Shamila NAIR- BEDOUELLE

## Supporting documentation provided by Samoa

## 01. Legal instruments

- Constitution of the Independent State of Samoa 1960
- The Ministry of Health Act 2006
- Disaster Emergency Management Act
- The Health Ordinance 1959
- Village Fono Act 1990
- The Infant Ordinance 1961
- The Infant Amendment Bill 2019
- The Quarantine Biosecurity Act 2005
- The Allied Health Professions Act 2014
- Family Safety Act 2013
- National Policy on Gender Equality and rights of Women and Girls 2021-2031
- National Epidemic and Pandemic Preparedness and Response Plan
- Climate Adaptation Strategy for Health
- Disaster Risk Management Strategy for the Health Sector 2017
- National COVID-19 Risk Communication and Community Engagement Strategy
- National Communicable Disease Surveillance and Control Guidelines 2020

## 02. Financing

- Pathway for Development of Samoa FY2021/22-FY2025/26
- National Health Sector Plan 2020-2030
- MoH approved local budget for 2023/24
- MoF published budget 2023/24
- Ministry of Health Corporate Plan
- Ministry of Health Budget and forward estimates FY2023/2024
- Flowchart of Budget review and approval process
- Samoa Monitoring Evaluation Reporting Framework (SMERF)
- Terms of reference for the health programs advisory committee (HPAC)
- Annual Health Reports with KPIs
- Background info on Parliamentary Supplementary committee (from AGO)
- MoF Quarterly, Mid-Year Reviews and Annual Financial Reports
- Samoa National Disaster Management Plan 2017-2020
- Copy of Stimulus packages policy and Shelter funding report
- National Social Protection Framework
- Annual Health Reports
- Annual Budget
- MYR and FYR of the current financial budget
- Approved Budget 2023/2024
- Grant agreement Systems strengthening for effective coverage of new vaccines in the pacific Project additional financing between Samoa and Asia Development Bank
- Financing agreement Samoa COVID-19 Emergency Response Project between Samoa and International Development Association
- Partnership agreements (Ministry of Finance and private sector)
- Agreements and Funding allocation evidence (High consideration of vulnerable groups e.g. Shelter funding through private sector ADRA)
- Public Finance Management Act 2001

## 03. IHR coordination, national focal point functions

- Disaster and Emergency Management Act 2007
- Duty roster for Public Health
- Government of Samoa Ministry of Health Budget
- Health Ordinance 1959
- IHR Focal Point Terms of Reference (draft)
- Measles Summary Outbreak report 2019
- Ministry of Health Annual Report 2020 2021
- National Communicable Disease Surveillance and Control Guidelines 2019
- National Disaster Risk Management Plan 2017 2020
- Risk Communication and Community Engagement Strategy (RCCE) for COVID-19
- National epidemic and pandemic preparedness and response plan FY 2020/21 FY 2023/25
- Samoa-national-disaster-management-plan-2017-2020-final-web.pdf (mnre.gov.ws)
- Samoa Emergency Medical Assistance Team (SEMAT) press release November 2022
- Terms of reference for Communicable Disease Control Committee
- Terms of reference for National AMR Committee
- Terms of reference for National Integrated Vector Control Committee
- Terms of reference for committees National Security Committee
- Terms of reference for Director General of Health
- Terms of reference for Deputy Director Public Health

#### 04. Antimicrobial resistance (AMR)

- National Advisory Committee on Antimicrobial Resistance Terms of Reference
- Samoa's National Action Plan on Antimicrobial Resistance (2023-2027)

## 05. Zoonotic disease

- List of priority zoonotic diseases from Ministry of Agriculture and Fisheries
- National Communicable Disease Surveillance and Control Guidelines 2020
- Proposal to review Surveillance guideline
- Surveillance guideline review workshop training report
- Terms of reference Integrated Vector Control Committee
- Terms of reference Communicable Disease Surveillance and Control Committee
- Simulation exercise Report on testing Samoa Invasive species emergency response plan
- National Strategy for Mosquitoes and Mosquito Borne Diseases 2023-2033
- National Action Plan to Eliminate Lymphatic Filariasis in Samoa 2018/2024
- National Avian and Pandemic Influenza Preparedness Plan
- Samoa Invasive Species Emergency Plan 2019
- Ministry of Agriculture and Fisheries: Animal Health & Regulatory Section of the Animal Production & Health Division
- National Pandemic and Epidemic Preparedness and Response Plan
- Animal Welfare Bill
- Animal Ordinance Act 1960
- Slaughter and Meat Supply Act 2016
- Export of Meat Act 1977
- Quarantine (Biosecurity) Act 2005
- PVS analysis evaluation mission report
- FAO One Health Meeting August 2023
- Samoa Zoonoses situation 2020

- Highly pathogenic response plan for avian influenza
- AMR NAP workshops in 2022
- Zoo-sanitary export certificate
- Samoa Agricultural Census 2019

#### 06. Food safety

- National Communicable Disease Surveillance and Control Guidelines 2020
- Refresher training at health facilities report
- Food safety regulation
- Food Act 2015
- Samoa food recall system
- Slaughter and Meat Supply Act 2016
- SROS accreditation certificate
- National Pandemic Preparedness and Response Plan
- Samoa National Disaster Management Plan 2017-2020
- Guideline for food operators
- Health clearance form Food handlers
- The Health Ordinance 1959
- Health requirements for food premises
- Terms of reference for National Food Safety and Nutrition (FSCN) Committee
- CODEX Committee Terms of reference
- National CODEX Committee Roles and Responsibilities

#### 07. Biosafety and biosecurity

- Samoa Occupational Safety and Health Act 2002
- Samoa Occupational Safety and Health Regulations 2017
- Laboratory quality manual
- Specimen Management Manual
- the International Air Transportation Association (IATA) Dangerous Goods Regulations (DGR)
- Ministry of Natural Resources and Environment Waste Management Act 2010
- Ministry of Agriculture and Fisheries-Ministry of Health Quarantine Biosecurity Act 2005
- E-Phyto sanitary certificate
- Zoo sanitary Certificate
- SAMOA National Infection Control Policy-2011-2016

#### **08. Immunization**

- Measles Recovery Plan 2019
- National EPI Policy 2020 2025
- Infant Amendment Act 2020
- Rapid Formative Assessment Report
- New Vaccine Project + Reports
- Cold Chain Procurement Summary
- Food and Drug Act Year 1967

## 09. National laboratory systems

Human Health

- Ministry of Health Clinical Laboratory Handbook. 1st edn. Ministry of Health.
- Tamasese Hospital Specimen Reception Manual; Ministry of Health.
- Medical Laboratories: Requirements for quality and competence (ISO 15189:2022)

- Tupua Tamasese Hospital Laboratory Health and Safety Manual (2022)
- Tupua Tamasese Hospital Microbiology Manual (2023)
- Ministry of Finance Procurement Operating Manual (2020)
- SAMOA National Infection Control Policy-2011-2016

#### Veterinary Health

- General requirements for the competence of testing and Calibration Laboratories (ISO 17025). (2005)
- SROS laboratory manuals

## 10. Surveillance

- National Communicable Disease Control Guideline 2020
- Health Ordinance 1959
- Ministry of Health Act 2006
- PACNET / PSSS Reports
- National Sitreps, Bulletins and Reports
- Pacific Outbreak Manual 2016
- National Pandemic Preparedness and Response Plan 2022

## 11. Human resources

- the Public Service Commission (PSC) Act 2004
- Human Resource for Health Strategy Policy 2020
- Health Sector Plan Policy 2019
- Human Resources for Health Workforce Situation Analysis Report 2023
- Samoa Health Workforce Development 2023
- Occupational Safety And Health Act 2002
- Disaster Risk Management Strategy for the Health Sector 2017
- National Epidemic and Pandemic Preparedness and Response Plan Policy 2020

## 12. Health emergency management

- National Disaster Risk Management Plan 2017 2020
- National Risk Assessment Standards 2017
- Any documents on review of the NDRM (Need from DMO)
- Disaster and Emergency Management Act 2007
- Hospital and Health Centers Risk Resilience Assessment 2017
- District Development Plan Launch
- Example of a District Development Plans
- National epidemic and pandemic preparedness and response plan FY 2020/21 FY 2023/25
- Samoa national avian and pandemic influenza preparedness plan 2008
- Measles recovery plan 2020
- Faleolo aerodrome emergency plan 2013
- COVID-19 Preparedness and Response plan 2020
- Samoa's national action plan on Antimicrobial resistance 2023 2028
- the Community Disaster and Climate Risk Management (CDCRM) community readiness assessments
- Constitution of the Independent State of Samoa 1960
- Standard Operating Procedures Samo National Emergency Operation Centre
- NEOC Information Sharing Protocol
- Health emergency operation operational structure
- Terms of reference health emergency operations centre committee

- Terms of reference health program advisory committee
- Reporting form for immediately notifiable conditions
- HEOC Sitrep example disseminated to NEOC
- Samoa Emergency Medical Assistance Team (SEMAT) press release November 2022
- TOR for Medical and Equipment Committee
- Food Act 2015
- Food and Drugs Act 1967
- National Medicines Policy 2023 (draft)
- Example of regulatory authorization for emergency use of COVID-19 vaccine

#### 13. Linking public health and security authorities

- Samoa National Security Policy 2018
- National Disaster Management Plan 2017-2020
- Disaster and Emergency Management Act 2007
- NEOC Standard Operating Procedures
- National Epidemic and Pandemic Preparedness and Response Plan.
- Climate Adaptation Strategy for Health
- Disaster Risk Management Strategy for the Health Sector 2017
- TOR of the National Security Committee
- National Security Policy and Implementation Strategy 2018
- Travel Advisories
- SOPS (Disease Surveillance)
- Health Ordinance 1959
- Disaster and Emergency Act 2007
- STCU Strategic Plan 2021
- Samoa National Marine Spill Contingency Plan 2011
- Ministry of Police Prisons and Correction Response Plan 2022
- National Tsunami Wave in 2019 Report
- SAA Aircraft Crash Exercise Reports 2017 and 2020
- Ministry of Health Situational Reports
- TIS Plan 2023 2028 Sea & Air
- Samoa Occupational Safety and Health Act 2002
- Samoa Occupational Safety and Health Regulations 2017

#### 14. Health services provision

- Health sector plan FY2019/20-FY2029/30
- Samoa Health Workforce Development Plan FY2020/21-FY2025/26
- Complaints and Grievance Policy
- HEOC reports for measles
- HEOC reports from COVID-19
- Ministry of Health Annual Report FY2020/21
- National epidemic and pandemic preparedness and response plan FY2020/21-FY2023/25
- HEOC Terms of Reference
- Response structure of HEOC
- Government of Samoa Ministry of Health Budget FY2023/24

## 15. IPC

- Infection Control Manual
- Pacific Public Health Surveillance Network Infection Prevention and Control Guidelines 2021
- Guidelines on Core Components for Infection Prevention and Control programmes at the National and Acute Health Care Facility Level
- National Infection Control Policy 2011-2016
- District Hospital Infection Control Audit March 2023
- IPC Programme and Workplan
- Ministry of Health Structure, Departments, and Divisions
- Hand hygiene compliance audit reports
- IPC Committee minutes
- Samoa's National Action on Antimicrobial Resistance 2023-2028
- Laboratory Infection Control Surveillance
- Multi resistant organism investigation and deep cleaning reports
- Samoa National Drinking Water Standards 2016

## 16. RCCE

- Communication Strategy 2019 Ministry of the Prime Minister and Cabinet
- National Disaster Management Plan 2017-2020
- Community Development Sector Plan 2021-2026
- Integrated Community Awareness Program (ICHAP) reports
- Knowledge, Attitudes and Practice Survey reports
- National Risk Communication and Community Engagement Strategy for COVID-19 Pandemic
- Health sector plan FY2019-2020 FY2029-2030
- Information sharing protocol NEOC communication protocol

## 17. Points of entry and border health

- Port Health Staff roster
- WHO Risk Assessment Tool
- The Health Ordinance 1959
- International Health Regulation 2005
- National Epidemic and Pandemic Preparedness and Response Plan FY 2020/21 FY 2024/25
- National Disaster Management Plan 2017-2020
- National Avian and Pandemic Influenza Plan 2008
- Customs Act 2014
- 2019 Novel Coronavirus (COVID-19) National Preparedness and Response Plan
- Reporting Template for assessment.
- Mosquito trapping report
- Minutes of Integrated Vector Control Committee meeting
- WHO Handbook on Vector surveillance at POEs.
- WHO Handbook on recommended methods for aircraft disinfections.
- Procedural Guide for all vessels including fishing vessels
- IHR 2005
- SAA Aircraft Crash Exercise Reports 2017 and 2020
- SOPs for case investigation and contact tracing
- Samoa Airport Authority Emergency Plan 2007
- Reports on IHR consultation in 2016
- Samoa National Security Policy 2018

- Health Declaration Card
- The Pacific Public Health Surveillance Network (PPHSN) report

## **18. Chemical events**

- Biosecurity & Safety Act 2005 and Regulations
- Disaster and Emergency Management Act 2017
- Marine Pollution Prevention Act 2008
- Occupational Health and Safety Act 2002
- Occupational Health & Safety Regulation 2017
- Waste Management Act 2010
- Health Ordinance 1959
- National Chemical Profile 2010
- Chemical and Hazardous Waste Tracking System 2011
- National Disaster Management Plan 2017-2020.
- National Healthcare Waste Management Strategy 2020-2025
- TOR for chemical steering committee
- International Conventions
- Basel Convention
- Rotterdam Convention
- Stockholm Convention
- Minamata Convention
- Waigani Convention

#### **19. Radiation emergencies**

- Disaster and Emergency Management Act 2007
- X-ray Safety Measures Protocol

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