

# Pacific Heads of Health

## Réunion des directeurs de la santé du Pacifique

### Healthcare Waste Management in the Pacific: Navigating Towards a Sustainable Future

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# Outline of presentation

1. Introduction to SPREP
2. Overview of waste management in the Pacific
3. Healthcare waste management in the Pacific

# Introduction to SPREP

## Who we are:

- Inter-governmental organization of the Pacific, established under the SPREP Treaty in 1993.
- Member of the Council of Regional Organization of the Pacific (CROP)

## Our mandate:

*“To promote co-operation in the Pacific region and provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations”*

## Our priorities:

1. Climate Change
2. Ecosystems and Biodiversity Protection
3. Waste Management and Pollution Control
4. Environmental Monitoring and Governance





# Overview of waste management in the Pacific

## Unique challenges:

- Geographic isolation and dispersed island geography complicate logistics and infrastructure development.
- Economic constraints limit investment in advanced waste management technologies.
- Diverse demographic factors influence waste generation and management strategies.

## Current practices:

**Policy and legislative frameworks:** Very few countries have national waste management policies. Few countries have dedicated waste management legislation while others utilize provisions under general environment or public health legislation.

**Storage, collection and transportation:** Larger states delegate responsibility for waste management services to lower levels of govts like municipalities. Collection and transportation services are provided mainly through contracting to the private sector. Poor coverage with minimal services to rural areas and informal settlements in urban settings.

**Recycling:** Initiatives to increase recycling rates through community programs and international aid. Inhibitive shipping costs.

**Disposal:** Primarily reliant on landfilling; limited availability of land poses significant challenges.





# Healthcare waste management in the Pacific

## Definition

“Waste generated by health care activities, ranging from used needles and syringes to soiled dressings, body parts, diagnostic samples, blood, chemicals, pharmaceuticals, medical devices and radioactive materials” - WHO

## Types of healthcare waste

- Non-hazardous general waste
- Hazardous

## Sources of healthcare waste

- Hospitals
- Clinics
- Laboratories
- Research activities
- Mortuaries
- Paramedic and ambulance services
- Blood banks



# Current situation

## **Data Scarcity and Complexity of Waste Types:**

- Limited data on waste generation highlights gaps in systematic monitoring.
- Healthcare facilities produce various waste types including non-hazardous, infectious, sharps, and chemical wastes, complicating management and disposal.

## **Challenges in Segregation and Disposal:**

- Inadequate segregation at the source mixes hazardous with non-hazardous waste, increasing disposal complexity and risks.
- Many islands lack proper disposal facilities like incinerators, leading to unsafe practices like open burning and landfilling.

## **Gap in Awareness and Training:**

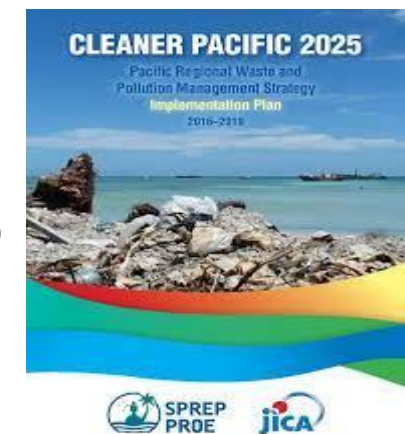
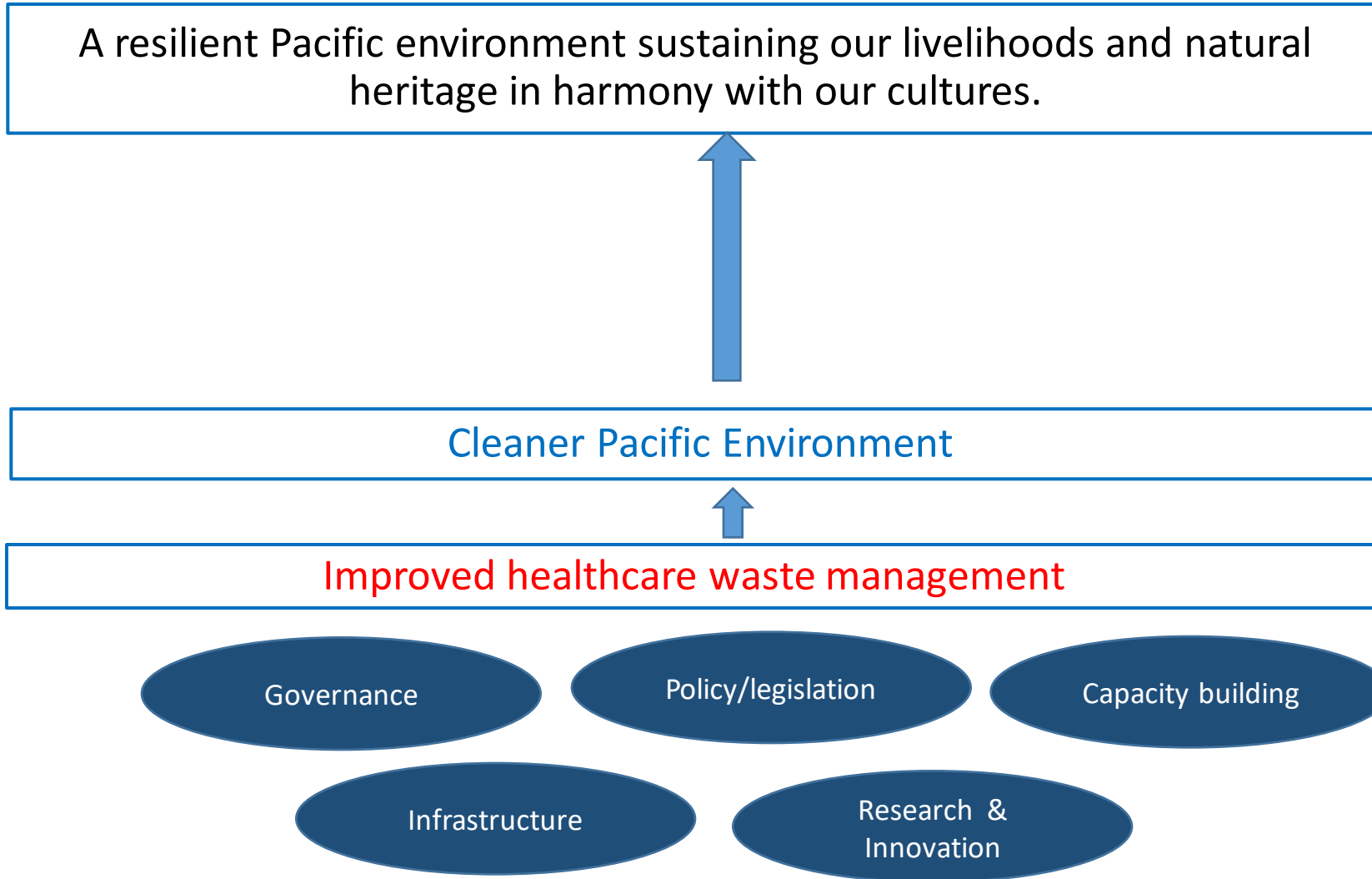
- Significant training and awareness gaps among healthcare workers on best waste management practices.
- This lack of knowledge leads to improper disposal methods, heightening infection risks and environmental harm.

## **Impact on Public Health and Environment:**

- Pollution from uncontrolled waste disposal contaminates soil, water, and air, posing severe health risks.
- Improper disposal practices can spread diseases like hepatitis and HIV and harm marine ecosystems, affecting community livelihoods and food chains



# Future vision



## Recent progress

Significant strides in healthcare waste management have been made through the PacWaste Plus Programme and capacity building initiatives.

- Advanced Incineration Technology
- Capacity Building and Education
- National Strategy Development
- Local Waste Management Plans



# Example: Improve incineration technology

- **Implementation of New Technology:** Introduced state-of-the-art incineration technology designed to handle healthcare waste efficiently.
- **Benefits:** This technology significantly reduces the volume of waste, cutting down on the amount required to be stored or processed further.
- **Health and Environmental Impact:** By ensuring complete combustion of hazardous waste, the technology minimizes risks of infection spread and environmental contamination, protecting both healthcare workers and the general public.



## Example: Capacity building and education

- **Training Programs:** Conducted extensive training programs aimed at healthcare workers and waste management staff across the Pacific islands.
- **Focus Areas:** Training focuses on proper waste segregation, handling, and disposal practices to ensure safe and efficient management of healthcare waste.
- **Outcome:** These initiatives equip staff with necessary skills and knowledge, enhancing overall waste management and reducing potential errors that could lead to health hazards.





## Example: Capacity building and education

# PCCC and University of Melbourne Partnership

- Officially launched the Australia Awards Fellowship Initiative on 6<sup>th</sup> November 2023
- Fifteen (15) fellows from Tonga, Samoa, Kiribati, Tuvalu, Solomon Islands, Marshall Islands, Federated States of Micronesia, Papua New Guinea, Vietnam, Cambodia, Indonesia and Thailand are beneficiaries of the program and are currently in Melbourne to attend the fellowship
- The program has been designed by the University and the Pacific Climate Change Centre to equip Fellows with additional skills, networks, and resources to drive action on climate, health, and equity priorities in their respective countries across the Indo-Pacific





## Example: Capacity building and education

# PCCC and University of Melbourne Partnership

- This collaboration builds on existing efforts by PCCC and the University of Melbourne on climate and health capacity-building.
- It will create a regional community of policy makers and researchers whose knowledge of climate and health will support better outcomes for populations in their respective countries
- At the end of the program, Fellows will present a climate policy/practice output to the Fellowship cohort, mentors, internal and external partners
- PCCC hosted a three-day workshop in Samoa in March 2024 to explore how participants have applied skills developed during the fellowship to their practice, scope CC and H research and project proposals as well as a Community of Practice





## Example: Strategic planning

- **Collaboration:** Worked in close partnership with Papua New Guinea's National Department of Health to craft a comprehensive healthcare waste management policy.
- **Policy Goals:** The policy aims to standardize practices across the nation, addressing unique regional challenges and improving consistency in waste handling.
- **Long-term Vision:** By establishing a national framework, the policy sets the stage for sustainable waste management practices that can be monitored and adjusted as needed.



### National Healthcare Waste Management Policy

2024 – 2030

National Department of Health  
Version: 2 of 27/02/2024

# Why urgent action is needed now

## 1. Urgency of Environmental Protection:

- The Pacific's unique and biodiverse ecosystems are at risk from pollution caused by improper waste management.
- Immediate action is essential to protect these environments from contaminants and climate change impacts.

## 2. Public Health Considerations:

- Effective waste management is critical to preventing the spread of infectious diseases.
- The COVID-19 pandemic highlights the need for robust waste management systems to enhance public health and resilience.

## 3. Opportunity for Leadership:

- The Pacific has the potential to lead globally in sustainable healthcare waste management.
- Adopting innovative solutions can set a global example and inspire broader cooperation and action towards the United Nations Sustainable Development Goals.





# Proposed recommendations for governments

**Pacific Heads of Health are invited:**

## **1. Policy and Regulation**

### **Strengthening Policies and Regulations**

- Advocate for comprehensive regional policies with practical, enforceable standards.
- Prioritize healthcare waste segregation, handling, disposal, and treatment.
- Implement monitoring and evaluation mechanisms to ensure compliance.

## **2. Capacity Building**

### **Targeted training for healthcare workers & staff**

- Implement training programs for healthcare and waste management staff.
- Focus on best practices for waste management to enhance safety and effectiveness.
- Ensure training is ongoing and reflective of the latest waste management advancements.

## **3. Investment in Infrastructure**

### **Development of waste management infrastructure**

- Invest in facilities for safe disposal and treatment of waste, such as autoclaves and incinerators.
- Develop environmentally friendly recycling plants suitable for Pacific island needs.
- Improve transportation and storage facilities to minimize public health risks.



# Proposed recommendations for governments

**Pacific Heads of Health are invited:**

## **4. Community Engagement and Education**

### **Comprehensive community engagement and education initiatives**

- Launch initiatives to educate on waste reduction and recycling.
- Foster community participation in sustainable waste management.
- Highlight the health and environmental impacts of waste, promoting actionable community steps.

## **5. Research and Innovation**

### **Supporting Research and Innovation**

- Fund research into new waste management technologies adaptable to the Pacific context.
- Encourage collaboration between governments, academia, and the private sector.
- Focus on developing culturally appropriate, scalable, and effective waste management solutions.



**Thank you!**