

# Tasmanian Healthcare Associated Infection Prevention Strategy 2020-2022



#### Tasmanian Healthcare Associated Infection Prevention Strategy

Tasmanian Infection Prevention and Control Unit (TIPCU), Public Health Services (Public Health Services)

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#### **Foreword**

The Tasmanian Healthcare Associated Infection Prevention Strategy 2020-2022 presents a whole of system approach to addressing Infection Prevention and Control priorities in Tasmania. Our vision is to protect the health of our community through prevention and control of healthcare associated infections in Tasmania by providing safe, quality care.

Healthcare associated infections contribute to increased morbidity and mortality and impose a significant financial burden on the healthcare system. It is well documented they continue to be common complications affecting patients in hospitals and recipients of care in community healthcare settings.

The Strategy aims to provide a framework to guide healthcare services to undertake activities to decrease the incidence of healthcare associated infections. It outlines seven strategic priorities of importance for Infection Prevention and Control identified in collaboration with healthcare professionals in Tasmania.

I would like to acknowledge those who contributed to the Strategy, notably the Tasmanian Infection Prevention and Control Advisory Committee, and the services they represent who provided expert information, time and support. I look forward to observing the outcomes that occur as a result of this Strategy.

Dr Scott McKeown

Chair, TIPCAC

Deputy Director of Public Health

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## **Abbreviations**

AMR Antimicrobial Resistance

AMS Antimicrobial Stewardship

AU Antimicrobial Usage

AURA Antimicrobial Use and Resistance in Australia

**CDPU** Communicable Diseases Prevention Unit

HAI Healthcare Associated Infection

NAPS National Antimicrobial Prescribing Survey

**PHS** Public Health Services

**SoNGs** Series of National Guidelines

TIPCAC Tasmanian Infection Prevention and Control Advisory

Committee

TIPCU Tasmanian Infection Prevention and Control Unit

## **Glossary of Terms**

Antimicrobial A chemical substance that inhibits or destroys bacteria, fungi or

parasites

Antimicrobial Resistance Antimicrobial resistance occurs when microorganisms such as

bacteria become resistant to antimicrobial medicines such as

antibiotics

Antimicrobial Stewardship The appropriate and judicious use of antimicrobials, and

strategies, policies and procedures to promote such practices

**Consumers** A person who has used, or may potentially use, health services,

or is a carer for a patient using health services

**Governance** The structures and processes by which the health system is

regulated, directed and controlled. It includes the obligations of stewardship - ensuring the system is well sustained for the future

as well as service the needs of the present

**Hand Hygiene** A general term applying to processes aiming to reduce the

number of microorganisms on hands

**Healthcare Associated** 

Infections

Infections acquired in healthcare facilities and infections that occur as a result of healthcare interventions, and which may

manifest after people leave the healthcare facility

The Australian Atlas of Healthcare Variation

Series

This series explores how healthcare use in Australia varies depending on where people live. It investigates reasons for variation that may be unwarranted, and provides specific achievable actions to reduce unwarranted variation

## Introduction

The Tasmanian Healthcare Associated Infection (HAI) Prevention Strategy is a collaborative approach to improving health outcomes of individuals who receive healthcare in our state.

The Strategy was commissioned by the Tasmanian Infection Prevention and Control Advisory Committee (TIPCAC), coordinated by the Tasmanian Infection Prevention and Control Unit (TIPCU) and reflects the input and expertise of the healthcare professionals who participated in the Strategy's development.

The Strategy has seven core strategic priorities and three central themes: governance, surveillance, and education and training. The central themes were originally developed in 2018 and are outlined in the TIPCAC Strategy and Action Plan<sup>1</sup>.

The Strategy provides a set of key priorities including objectives, and outlines focus areas for improvement as identified by experts in a range of healthcare settings. The document is freely available to all health services and can be used as a central resource to promote communication, collaboration and discussion of Infection Prevention and Control priorities in Tasmania.

## **Background**

Healthcare associated infections are a common complication affecting patients in and out of hospital and contributes to morbidity, mortality and excess healthcare expenditure<sup>2</sup>.

The TIPCAC is a state-wide committee whose purpose is to reduce the risk of HAl's, and to reduce the risk of infection in relation to relevant broader public health threats. In 2018 TIPCAC committed to develop a state-wide HAI prevention strategy for Tasmania focusing on Infection Prevention and Control governance, surveillance and education and training. This work was a focal point for the TIPCAC throughout 2019.

## **Development**

The Strategy has been informed by the previous strategy for HAI prevention and control<sup>3</sup>, the TIPCAC Strategy and Action Plan<sup>1</sup>, a range of National standards<sup>4 5 6 7 8</sup>, and a state-wide survey<sup>9</sup>. Through analysis of these documents, trends were identified and used to create the Strategy's seven core strategic priorities.

Other healthcare strategies were researched to explore design options<sup>10 11 12 13</sup>.

#### **Consultation**

Health services contributed by completing an online survey and participating in consultative forums. A broad cross section of Tasmanian health services contributed including public and private hospitals, other private health services, aged care, Ambulance Tasmania, Oral Health, Primary Health, Community Health, Palliative Care, Correctional Services and Mental Health.

Members of the TIPCAC were extensively consulted throughout development of the Strategy and provided the key link to the services they represent.

#### **Time Frame**

The time frame for the Strategy is three years, with a full review planned for 2022.

## **Vision**

Prevention and control of healthcare associated infections in Tasmanian healthcare settings by providing safe, quality healthcare.

## **Aim**

The Strategy will guide healthcare services to undertake activities to decrease the incidence of healthcare associated infections in Tasmania.

## **Strategic Priorities**

The Tasmanian HAI Prevention Strategy outlines seven strategic priorities.

- I. Clinical Governance
- 2. Consumer Partnerships
- 3. Antimicrobial Stewardship
- 4. Research
- 5. Infection Prevention and Control Practices and Interventions
- 6. Infection Prevention and Control Surveillance
- 7. Education for Healthcare Workers

## **Strategic Priority I: Clinical Governance**

#### **Objective:**

Effective Infection Prevention and Control clinical governance frameworks incorporating appropriate organisational structures, strategic plans, adequate resources and partnerships in all healthcare settings.

#### Focus areas:

- Continue to evolve TIPCAC through implementation and monitoring of the Tasmanian HAI Prevention Strategy
- Use the Quality Governance Framework for Tasmania's Publicly Funded Health Services to
  ensure consistent structures, systems, and processes are in place to define minimum
  acceptable standards of Infection Prevention and Control in service delivery in Tasmania
- Establish a Tasmanian Aged Care Infection Prevention and Control network to facilitate a state-wide approach to achieving key objectives for Aged Care providers
- Establish a state-wide network for Infection Prevention and Control in the Tasmanian Health Service to promote consistency of practice
- Identify and document Infection Prevention and Control programs and activities to increase visibility across health services in Tasmania

#### Case Study I:

The role, purpose and function of the Tasmanian Healthcare Associated Infection Advisory Committee was evaluated in 2017. This process recognised the committee's work was predominately focused on acute care and unintentionally excluded other health settings where Infection Prevention and Control governance is equally important.

As a result, the Tasmanian Healthcare Associated Infection Advisory Committees was disbanded and in early 2018 the Tasmanian Infection Prevention and Control Advisory Committee (TIPCAC) was convened.

The TIPCAC membership represents a wide range of health services providing a whole of system approach to Infection Prevention and Control governance in Tasmania.

## **Strategic Priority 2: Consumer Partnerships**

#### **Objective:**

Engage and collaborate with consumers in strategic planning, practices, monitoring and evaluation of Infection Prevention and Control activities in healthcare.

#### Focus areas:

- Learn how to effectively engage and use consumers in Infection Prevention and Control practices to provide person centred care
- Recruit a consumer representative onto the Tasmanian Infection Prevention and Control Advisory Committee
- Develop networks with consumer groups in Tasmania to strengthen relationships

#### Case Study 2:

In 2016, a consumer representative joined the Oral Health Services Tasmania Clinical Governance Committee. This change has enabled a patient perspective to be considered in all strategic decision-making processes within the service.

## **Strategic Priority 3: Antimicrobial Stewardship**

#### **Objective:**

Effective clinical governance frameworks in healthcare settings to support the judicious and appropriate use of antimicrobials.

#### Focus areas:

- Establish a Tasmanian Aged Care Infection Prevention and Control network to facilitate a state-wide approach to support antimicrobial stewardship for Aged Care providers
- Strategically evaluate Tasmanian antimicrobial use data to guide improvement activities
- Promote antimicrobial stewardship resources for consumers and healthcare workers

#### Case Study 3:

Since 2015, TIPCU have conducted surveillance of antimicrobial use across all 13 Tasmanian rural hospitals. Data on inpatient antimicrobial use is collected by rural hospital nursing staff over one calendar month each year and assessed for appropriateness by an Infectious Diseases Physician in accordance with the National Antimicrobial Prescribing Survey (NAPS) definitions. Data is entered into the NAPS portal and feedback and a report provided to the individual hospitals.

Results showed the most common indications for antimicrobial use over this time to be respiratory tract infections, skin and soft tissue infections and urinary tract infections. Appropriateness of prescribing increased from 51% in 2015 to 74% in 2017, and the turnaround time for reporting to the hospitals decreased from 6 months to 3 months.

TIPCU have co-ordinated additional activities including meetings with the GP liaison group, an online survey of rural hospital prescribers in relation to antimicrobial stewardship, distribution of antimicrobial prescribing resources, provision of an AMS webinar and provision of a hard copy of the Therapeutic Guidelines: Antibiotic to all rural hospitals.

Improvements in the appropriateness of antimicrobial prescribing over the life of the program may reflect improvements in engagement with, and provision of feedback and education to, the rural hospitals and prescribers.

## **Strategic Priority 4: Research**

#### **Objective:**

Strengthening research in Infection Prevention and Control in Tasmanian healthcare settings.

#### Focus areas:

- Identify research opportunities for Infection Prevention and Control
- Establish key links between health services and Menzies Institute for Medical Research
- Participate in research opportunities within time and resource availability in accordance with the Research Governance Framework

#### Case Study 4:

The Launceston General Hospital participated in the National REACH trial in 2016<sup>14</sup> <sup>15</sup>. The trial sought to evaluate the effectiveness of a bundled approach to cleaning as a means of reducing the transmission of healthcare associated infections in hospitals.

Education, development of support material and communication strategies, daily frequent touch point (FTP) cleaning (with clarification of role between House Services and Hospital Aides) and an audit and feedback program using ultraviolet gel dots were implemented.

An overall increase (House Services/Hospital Aides) in compliance with FTP cleaning from 22% during the control phase to 61% during the intervention phase was shown. House Services increased from an average of 31% to 79% during the intervention phase. Continued auditing post-trial demonstrated continued improvement, with House Services reporting a compliance rate of 97% for FTP cleaning in October 2019.

# **Strategic Priority 5: Infection Prevention and Control Practices and Interventions**

#### **Objective:**

Infection Prevention and Control practices are informed by an appropriate policy framework consistent with national standards and guidelines.

#### Focus areas:

- Use the Policy Development Framework to standardise Infection Prevention and Control protocols and practices in the Tasmanian Health Service
- Establish a framework to promote consistency in Infection Prevention and Control guidelines and practices in services including Aged Care and Ambulance Tasmania
- Contribute to the Infection Prevention and Control considerations for the introduction of new technology and research

#### Case Study 5:

The TIPCU was established in 2008 to provide leadership, advice and support to all healthcare facilities in Tasmania on healthcare associated infections. In 2014, a review was commenced of the unit's role and function, accountabilities, key relationships and resourcing.

One of issues identified was cumbersome local processes for policy development, lack of uniformity between the Tasmanian Health Organisations, now the Tasmanian Health Services (THS), and intensive use of resources in each of the regions to develop policy documents. The review recommended a Policy Development Framework be established to allow TIPCU to take a lead role in developing state-wide Infection Prevention and Control documents.

In 2017, a partnership was established between the THS and TIPCU and the Policy Development Framework was developed for all THS services including major acute and rural hospitals, mental health and oral health services.

To date, 15 protocols have been endorsed in the THS and 65 policies rescinded.

# **Strategic Priority 6: Infection Prevention and Control Surveillance**

#### **Objective:**

Ongoing, systematic collection of Infection Prevention and Control data is analysed, interpreted, disseminated and used to inform quality improvement activities.

#### Focus areas:

- Establish priority areas for Infection Prevention and Control surveillance in different Tasmanian healthcare settings
- Evaluate the TIPCU Tasmanian Healthcare Associated Infection surveillance program
- Explore information technological solutions to optimise workflow efficiencies for THS HAI surveillance activities with the THS Clinical and Financial Analytics Team
- Establish performance indicators for occupational exposure incidences in Oral Health Services Tasmania
- Strategically evaluate and review the Tasmanian Infection Prevention and Control Hospital Acquired Complications data in acute care hospitals

#### Case Study 6:

Oral Health Services Tasmania audited their hand hygiene practices. 28% of workers observed did not cover all surfaces of their hands with alcohol-based hand rub. An internal promotional campaign using written, pictorial and practical demonstrations was implemented promoting correct technique in accordance with national and international best practice protocols.

Repeat observations of healthcare workers 6 months after, noted an 18% improvement in hand hygiene practices. These standards have been maintained as evidenced in repeated audit results.

## **Strategic Priority 7: Education for Healthcare Workers**

#### **Objective:**

Contemporary, evidence-based Infection Prevention and Control educational resources are accessible to healthcare workers.

#### Focus areas:

- Identify, endorse and promote evidence-based Infection Prevention and Control resources
- Develop an online education platform for Oral Health Services Tasmania
- Align Ambulance Tasmania Infection Prevention and Control education with other jurisdictions

#### Case Study 7:

In 2017, a high number of influenza outbreaks were reported to the Communicable Diseases Prevention Unit (CDPU) in Public Health Services from Aged Care facilities in Tasmania.

In 2018, CDPU facilitated an Influenza in Aged Care Workshop targeted at managers and clinicians working in Aged Care settings. The workshop provided participants with an overview of epidemiology of the 2017 influenza season, influenza vaccination, use of antivirals, infection prevention and control practices, outbreak response management, and case study scenarios. The session was well received resulting in subsequent regional Influenza in Aged Care Workshops delivered in 2019 and a state-wide webinar in 2020.

Evaluation of these workshops demonstrated increase in participant awareness of national<sup>7</sup> <sup>15</sup> and state resources, the steps in influenza outbreak management and an understanding of Infection Prevention and Control strategies.

## **Monitoring the Strategy Outcomes**

The Strategy provides a strategic whole of system approach to Infection Prevention and Control priorities in Tasmania. To achieve the stated outcomes, responsibility is shared between TIPCAC and the health services represented by its members.

The TIPCAC is accountable for development of the Strategy, monitoring outcomes, and future reiterations. Progress is to be monitored quarterly at committee meetings against the Strategy workplan, and a full review completed in 2022. The TIPCAC committee members are responsible for embedding the Strategy within the healthcare services they represent, and for facilitating outcomes listed under the strategic priorities.

A summary of the strategic priorities, supporting focus areas and performance indicators is provided in Table I: Tasmanian HAI Prevention Strategy 2020–2022: Strategic Priorities, Focus Areas & Performance Indicators.

Table I: Tasmanian HAI Prevention Strategy 2020–2022: Strategic Priorities, Focus Areas & Performance Indicators

	Strategic Priorities	Focus Area	Performance Indicator
I	Clinical Governance	Continue to evolve TIPCAC through implementation and monitoring of the Tasmanian HAI Prevention Strategy	Implementation of the Strategy in 2020, documented monitoring of outcomes and full review in 2022.
		Use the Quality Governance Framework for Tasmania's Publicly Funded Health Services to ensure consistent structures, systems, and processes are in place to define minimum acceptable standards of Infection Prevention and Control in service delivery in Tasmania	Evidence of TIPCAC using the Quality Governance Framework for Tasmania's Publicly Funded Health Services and Continuous Improvement cycle in relation to HAI Surveillance results using the Plan Do Check Act Cycle
		Establish a Tasmanian Aged Care Infection Prevention and Control network to facilitate a state-wide approach to achieving key objectives for Aged Care providers	Establishment of an Aged Care Infection Prevention and Control network in Tasmania with documented Terms of Reference
		Establish a state-wide network for Infection Prevention and Control in the Tasmanian Health Service to promote consistency of practice	Establishment of a state-wide Infection Prevention and Control Network in the Tasmanian Health Service
		Identify and document Infection Prevention and Control programs and activities to increase visibility across health services in Tasmania	TIPCAC standing agenda item. Infection Prevention and Control activities and programs documented in a register
2	Consumer Partnerships	Learn how to effectively engage and use consumers in Infection Prevention and Control practices to provide person centred care	Engagement with consumer advocacy leaders
		Recruit a consumer representative onto the Tasmanian Infection Prevention and Control Advisory Committee	Updated Terms of Reference and appointment of a consumer representative
		Develop networks with consumer groups in Tasmania to strengthen relationships	Establishment of networks with consumer groups
3	Antimicrobial Stewardship	Establish a Tasmanian Aged Care Infection Prevention and Control network to facilitate a state-wide approach to support antimicrobial stewardship for Aged Care providers	Promotion of participation in Aged Care NAPS and additional antimicrobial stewardship activities through the Tasmanian Aged Care Infection Prevention and Control network

	Strategic Priorities	Focus Area	Performance Indicator
		Strategically evaluate Tasmanian antimicrobial use data to guide improvement activities	Evaluate data from NAUSP, NAPS, Rural Hospital Antimicrobial Surveillance and The Australian Atlas of Healthcare Variations and highlight areas that require review with appropriate stakeholders and health services
		Promote antimicrobial stewardship resources for consumers and healthcare workers	Promotion of antimicrobial stewardship resources by the TIPCAC including during Antimicrobial Awareness Week
4	Research	Identify research opportunities for Infection Prevention and Control	TIPCAC standing agenda item. Research opportunities documented in a register
		Establish key links between health services and Menzies Institute for Medical Research	Evidence of research affiliations established, and research opportunities shared and facilitated where practicable
		Participate in research opportunities within time and resource availability in accordance with the research governance framework	Research examples cited in future Strategy reiterations and document in the Infection Prevention and Control activities and programs register
5	Infection Prevention and Control Practices and Interventions	Use the Policy Development Framework to standardise Infection Prevention and Control protocols and practices in the Tasmanian Health Service	Standardised all Infection Prevention and Control protocols in the Tasmanian Health Service
		Establish a framework to promote consistency in Infection Prevention and Control guidelines and practices in services including Aged Care and Ambulance Tasmania	Develop a framework for standardised Infection Prevention and Control guidelines in health services including Aged Care and Ambulance Tasmania
		Contribute to the Infection Prevention and Control considerations for the introduction of new technology and research	Evidence of TIPCAC's contribution to technology and research governance
6	Infection Prevention and Control Surveillance	Establish priority areas for Infection Prevention and Control surveillance in different Tasmanian healthcare settings	Development of the Tasmanian Surveillance Plan
		Evaluate the TIPCU Tasmanian Healthcare Associated Infection surveillance program	Evaluation report of the TIPCU coordinated healthcare associated surveillance program, including recommendations
		Explore information technological solutions to optimise workflow efficiencies for THS HAI surveillance activities with the THS Clinical and Financial Analytics Team	Outcome report of the TIPCU and THS Clinical and Financial Analytics partnership to optimise THS HAI surveillance activities

	Strategic Priorities	Focus Area	Performance Indicator
		Establish performance indicators for occupational exposure incidences in Oral Health Services Tasmania	Benchmark occupational exposure incidences in public oral health services in other Australian jurisdictions and set performance indicator rates
		Strategically evaluate and review the Tasmanian Infection Prevention and Control Hospital Acquired Complications data in acute care hospitals	Evidence of evaluation of Tasmanian HAC data in the acute Tasmanian Health Service settings
7	Education for Healthcare Workers	Identify, endorse and promote evidence-based Infection Prevention and Control resources	Updated resources listed on the TIPCU website and distributed through TIPCAC members
		Develop an online education platform for Oral Health Services Tasmania	Establishment of an online platform and implementation of Infection Prevention and Control modules
		Align Ambulance Tasmania Infection Prevention and Control education with other jurisdictions	Inclusion of Infection Prevention and Control education in the Ambulance Tasmania Clinical Practice Development Model

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<sup>5</sup>Australian Commission on Safety & Quality in Healthcare, National Safety and Quality Health Service Standards, 2nd ed. Sydney: ACSQHC, 2017.

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