

THE PLOT HAVE WE LOST IT? BUILT ENVIRONMENT IN HEALTHCARE



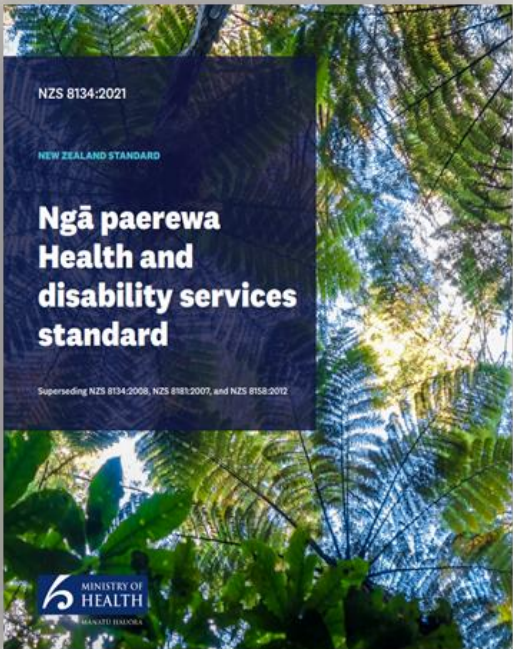
Siewling Ong
Clinical Nurse Specialist
Waikato Hospital



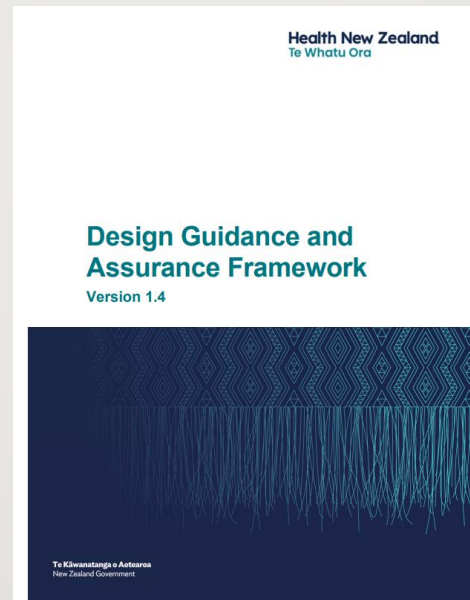
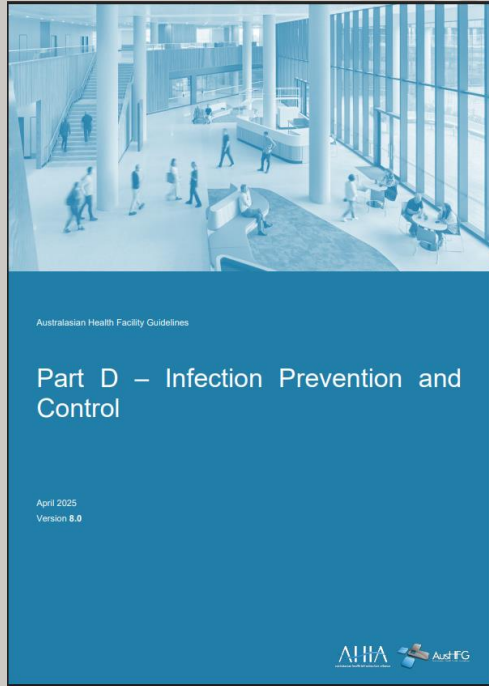
Julie White
Clinical Nurse Specialist
Waitaha Canterbury

THE GUIDING VISION

- 5.2.3 Service providers shall develop written policy related to (k) The Built Environment
- 5.2.8 Service providers will demonstrate a clear process for early consultation and involvement from the IP personnel or committee during **design of any new building or when significant changes are proposed to an existing facility**
- 5.5.5 Service providers shall ensure that the IP role has – or IP personnel have – oversight of the facility testing and monitoring programme for the built environment



SET DESIGN AND SCAFFOLDING



Any variation from these documents requires approval.

Renovations pose additional challenge as may not be able to meet these – a pragmatic variance should be considered

These documents form the primary framework for healthcare facility design in New Zealand

Capital projects under Health New Zealand follow a mandatory blueprint for planning and room design

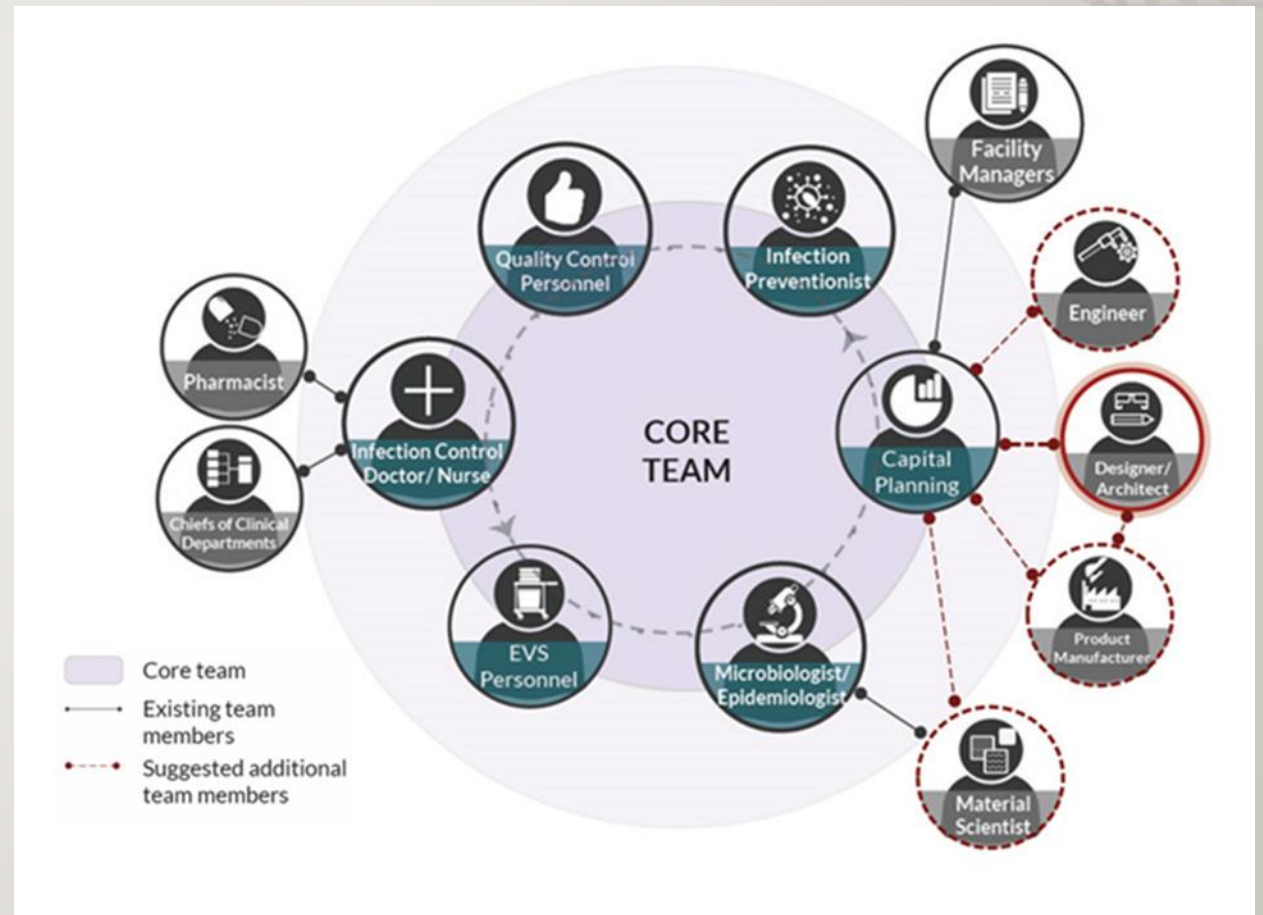
THE PRODUCER



The Health New Zealand Infrastructure and Investment Group (IIG) are accountable for managing and overseeing the entire physical property and capital works portfolio for public healthcare.

STAGE ENGINEERS

The technical team for healthcare building projects unites specialized architects and trade subcontractors to manage strict clinical, functional, and infection-control requirements.



THE CAST



Early involvement of IPC working in collaboration with project managers, designer, health planners and user groups strengthen this process ensuring the environment is safe for patients, visitors, and staff

REVISING THE SCRIPT



Infection Control
The First Step to Safer Healthcare

Australasian Health Facility Guidelines
Part D – Infection Prevention and Control

April 2025
Version 8.0

SCRIPT CONSULTANTS THE BUILT ENVIRONMENT WORKING GROUP (BEWG)



The National IPC BEWG includes members from the regions and private facilities (co-opted to the group based on their expertise)

The purpose of the group is to promote key principles in healthcare design that support best practice and reduce risk

STAGING FOR A SUCCESSFUL BUILT ENVIRONMENT IN HEALTHCARE



- Governance – arranging regular meeting with project/IIG at local/regional level
- Collaboration – connecting with National IPC Colleagues.
- Risk assessment –with sharing specialist knowledge.
- Framework - documented process to risk assess and demonstrate rational for decisions during renovations

HAZARD ELIMINATION - ASSESSING THE SCENE

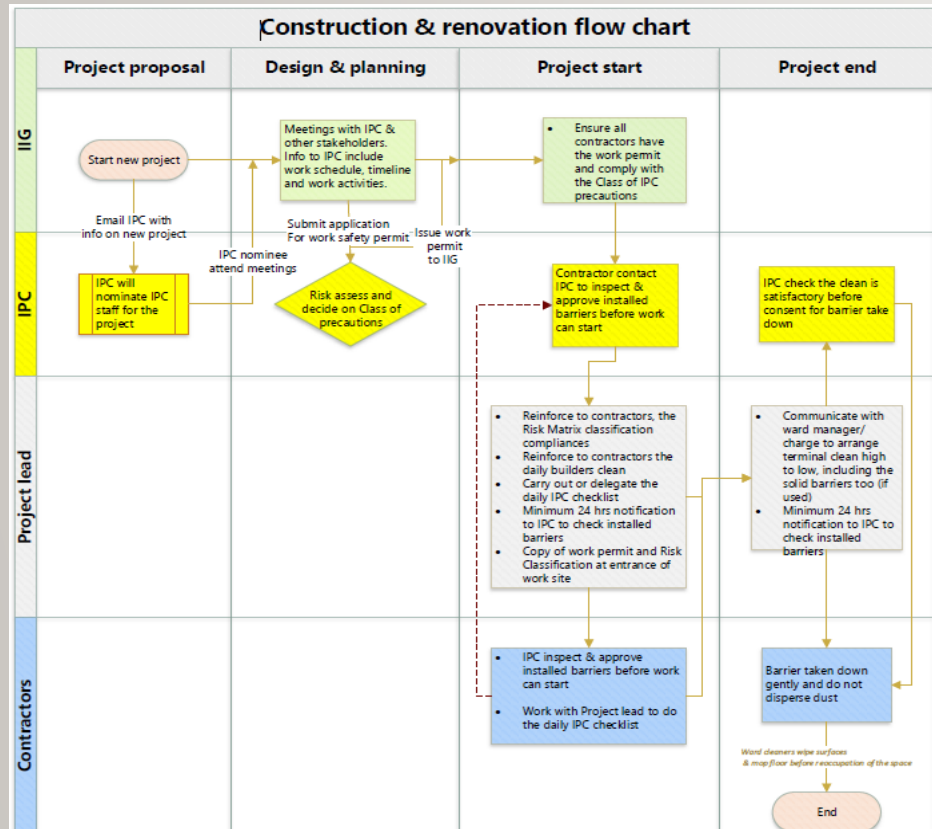
- Collaboration with Project Managers and Maintenance
- Understand the workplan – what, how and where
- Utilise a formal risk management approach for construction and renovation activities, using IPC risk assessments and provide written instruction
- Support and promote IPC activities - alongside enabling them to complete works in a timely and safe manner – offering alternate / bespoke solutions

Table 5 Definitions of the Construction Activity Types				
Type A	Type B	Type C	Type D	
Inspections and general upkeep activities	Small scale, short duration activities, which create minimal dust	Any work that generates a moderate to high level of dust	Major demolition and construction projects	
Includes but not limited to, removal of ceiling tiles for visual inspection (limited to 1 tile per 5 m ²); painting (but not sanding); installation of wall covering; electrical trim work; minor plumbing; any activities that do not generate dust or require cutting into walls or access to ceiling other than for visual inspection.	Includes, but is not limited to, installation of telephone and computer cabling, access to chase spaces, cutting into walls or ceiling where dust migration can be controlled.	Includes, but is not limited to, demolition or removal of built-in building components or assemblies, sanding of wall for painting or wall covering, removal of floor covering/wallpaper, ceiling tiles and casework, new wall construction, minor ductwork or electrical work above ceiling, major cabling activities.	Includes, but is not limited to heavy demolition, removal of a complete ceiling system, preparation of foundations which causes earth disturbances, and new construction.	
Step 2 – Select the Infection Prevention and Control Risk Groups				
The IPC groups as defined in the table below are indicative only. Where possible, work should be conducted after patient care hours where services are not provided on a 24-hour, seven-day basis, such as outpatient clinics and day therapy services.				
Table 6 Infection Prevention and Control Risk Groups				
Group 1 – Low	Group 2 – Medium	Group 3 – Medium/High	Group 4 – Highest	
- Office areas - Non-patient area areas not listed elsewhere	- Patient care and other areas not listed under Groups 3 or 4 - Laundry - Cafeteria - Dietary - Materials - Allied health - Admissions - MRI - Nuclear medicine - Echocardiography	- Emergency department - Medical Imaging –	- Oncology units - Radiation therapy	
Table 7 The Construction Classification Matrix				
Construction Activity Risk Level	Type A	Type B	Type C	Type D
Group 1	Class I	Class II	Class II	Class III/IV
Group 2	Class I	Class II	Class III	Class IV
Group 3	Class I	Class III	Class III/IV	Class IV
Group 4	Class III	Class III/IV	Class III/IV	Class IV
Step 4 – Implement the Infection Prevention and Control Construction Guidelines and Actions				
IPC construction guidelines (Table 8) outline procedures to control the release of airborne contaminants resulting from construction, demolition, or renovation activities.				
Implement the appropriate IPC construction guideline based on the construction activity type as identified using the construction classification matrix (Table 7).				
An IPC checklist can be found in Section 10.1 Infection Prevention and Control Checklist.				
Table 8 The Infection Prevention and Control Construction Guidelines				
Class	Guideline			
Class I	Execute work by methods to minimise raising dust from construction operations. Replace any ceiling tiles displaced for visual inspection as soon as possible.			
Class II	Provide active means to prevent air-borne dust from dispersing into atmosphere. Seal unused doors with duct tape. Contain construction waste before transport in tightly covered containers. Wet mop and/or vacuum with HEPA filtered vacuum. Place dust-mat at entrance and exit of work area and replace or clean when no longer effective. Isolate HVAC system in areas where work is being performed. Wipe casework and horizontal surfaces at completion of project.			
Class III	Isolate HVAC system in area where work is being done to prevent contamination of the duct system. Complete all construction barriers before construction begins. Maintain negative air pressure within work site utilising HEPA filtered ventilation units or other methods of maintaining negative pressure. In each jurisdiction, the relevant public safety officers will monitor air pressure. Do not remove barriers from work area until the entire project is thoroughly cleaned. Wet mop or vacuum twice per eight-hour period of construction activity or as required in order to minimise tracking. Remove barrier materials carefully to minimise spreading of dirt and debris associated with construction. Barrier material should be wet wiped, HEPA vacuumed, or water misted prior to removal. Contain construction waste before transport in tightly covered containers.			

A NEW SCRIPT – THE QUIET PROMPT

Renovations and Construction projects can be harder to pin down and rely on built relationships to receive updates

- Meet & Greet with new IIG Project staff / leads
- Establish modes for informing IPC of new projects and renovations
- Consider regular meetings with project teams for timely updates on current/new building works



EPILOGUE



We haven't lost the plot - we're in control !