Te Whatu Ora
Health New Zealand
Capital, Coast, Hutt Valley and Wairarapa

Huanui Pathway

Communicable Disease & Housing Student Placement Handbook

Name: _____

welcome

Welcome

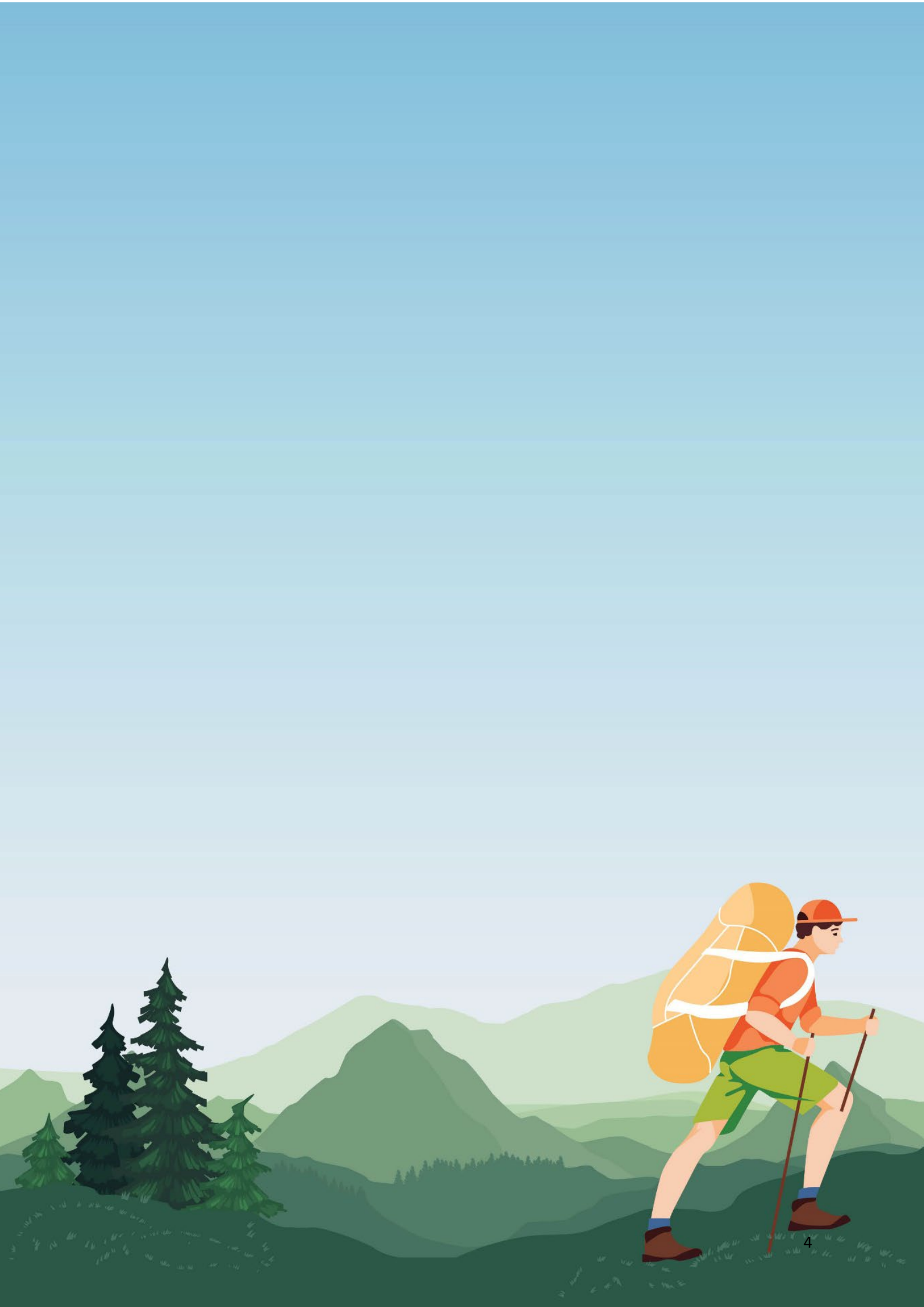
Nau Mai

Haere Mai

Student Nurse

Communicable Disease & Housing Team

Health Protection Cluster



Communicable Disease & Housing

What we do · How we help

Communicable Diseases

The main emphasis for the Communicable Disease Nurse team is on communicable disease surveillance and control through follow up of Tuberculosis, vaccine preventable disease, Hepatitis A, B & C, Leprosy, Rheumatic Fever and Meningococcal Disease.

Well Homes (Healthy Housing)

Well Homes is a housing coordination service for the Wellington region that brings together Te Kotahi Asthma Trust, Sustainability Trust, He Kainga Ora and Te Whatu Ora – National Public Health Service to deliver 1 of 12 Healthy Housing Initiatives under Te Aka Whai Ora. Whānau can be offered a free comprehensive housing, health & social support assessment and onward referrals if required.

Refugee health and support

PHNs offer and deliver initial refugee health transitional visits to newly arrived Refugees who settle in the Wellington region. This service is provided free of charge to quota refugees, refugee family support category (RFSC) and asylum seekers resettling in the Greater Wellington Region.

WellKiwis (SHIVERS)

This includes 3 research studies – WellKiwis Adults, WellKiwis Infants and Household Transmission that look to understand a person's immune response after a first then subsequent flu exposure or flu vaccination. The ultimate goal is longer lasting broad-protective universal influenza vaccination.

About the Communicable Disease & Housing Team

Within the team we have:

- 1x Team Leader
- 1 x Clinical Nurse Specialist (CNS)
- 9 x Communicable Disease Public Health Nurses (PHNs)
- 1 x Healthy Homes Initiative (HHI) Co-ordinator
- 2 x Well Homes Public Health Nurses
- Well Homes Partners (Sustainability Trust & Tu Kotahi Māori Asthma Trust)
- WellKiwis staff (1 Clinical Lead, 3 PHNs, 3 Phlebotomists and 2 Technical Officers)

Our work is guided by the principles of the Ottawa Charter, The Treaty of Waitangi, and relevant Government Legislation. We are funded to deliver our services through our contracts with Te Whatu Ora.

Our role is diverse; working with individuals, families/whanau, communities, and other health practitioners.

The Communicable Disease and Housing Team sit within the wider Health Protection Cluster. PHN's work alongside others in the Cluster, including Health Protection Officers (HPO's). We all work closely alongside our four Medical Officers of Health (MOoH), Medical Registrar, and House Officer's. We respond to any notifiable illnesses and/or disease outbreaks that, by law, are required to be notified to a MOoH.

Health Protections Officers (HPO's) respond to those notifications of illnesses that come from food, water and the environment.

PHN's respond to all other notifiable diseases. Please see page 9 for a list of notifiable diseases.

Communicable disease and outbreak management:

The nurses in the communicable disease specialty are an integral part of a multidisciplinary team whose emphasis is on communicable disease surveillance and control through the follow up of:

- Tuberculosis cases
- Vaccine preventable disease
- Hepatitis A, B and C
- Leprosy
- Rheumatic Fever
- Meningococcal disease
- Refugee health
- Health Promotion activities

Within this work stream CD PHN's prevent and control communicable illnesses and respond effectively to notifiable diseases and outbreaks of public health concern. This is achieved through effective public health disease surveillance, case investigation and contact management, thus reducing the incidence of cases from further spread. COVID-19 had a huge impact on the team from February 2020, with our first case 13 March 2020. The team have been instrumental in supporting our public health service to upskill in case and contact management throughout 2020/2021.

CD PHN's also deliver refugee health services to quota refugees, refugee family support category (RFSC) and asylum seekers resettling in the Greater Wellington region. Our work involves clinical services that facilitate refugees transitioning into the New Zealand health system; training and education that builds health sector capacity (i.e. GP services) and health promotion activities for both refugee communities and volunteer support organisations who work with refugee communities (i.e. Red Cross Refugee Services).

We aim to ensure a continuum of care approach is delivered to refugee and migrant populations from all sectors involved in refugee resettlement across the greater Wellington region through networking and developing partnerships. We empower refugee communities to be independent in managing their health through providing education and tools to understand the New Zealand health system and access appropriate health services.

Well Homes (Healthy Housing)

Well Homes is a housing coordination service for the Wellington region that brings together Tū Kotahi Māori Asthma Trust, Sustainability Trust, Regional Public Health and He Kainga Oranga to deliver one of 12 Healthy Housing Initiatives. We offer whanau a free housing assessment, provide useful tips and advice to stay warm and healthy, save power, and treat and prevent mould. We also look at the physical house, discuss health and social support, and check options for housing transfers.

We may be able to provide items directly such as curtains, heaters and bedding, if funding allows. We engage with landlords around heating, insulation and other upgrades and for homeowners we'll check eligibility for large discounts off heating and insulation. Referrals

come to Well Homes from health professionals such as Māori and Pacific health services, doctors, nurses and social workers, as well as self-referrals.

WellKiwis (Influenza Like Illness (ILI) Research)

WellKiwis Adults: In 2018, RPH was invited by Institute of Environmental Science and Research Limited (ESR) to collaborate on an important research project looking at the impact of repeat influenza vaccination on an individual's immune system response to influenza infection. This research followed on from the successful Southern Hemisphere Influenza Vaccine Effectiveness Research and Surveillance project (SHIVERS I) that occurred in Auckland from 2012-2014. The study has evolved over the last five years and its aims widened to understand how an adult's prior (or a Child's first) flu exposure influences immunity to subsequent flu exposures with the ultimate goal of developing a longer-lasting and broad-protective universal influenza vaccine. The project is run and funded by the National Institute for Allergy and Infectious Disease (NIAID) and St Jude Children's Hospital USA. www.stjude.org/research/initiatives/influenza-research-surveillance.html. RPH successfully participated in SHIVERS II in 2018, 2019 and 2020.

WellKiwis Infant: This study follows children from birth to seven years to see how a child's first encounter to the flu virus or vaccine influences their immune response to subsequent flu exposures as the child grows. The purpose of the WellKiwis study is to provide information to make more effective and longer lasting flu vaccines for our populations in the future. The research is funded by United States National Institutes of Health through the St. Jude Children's Research Hospital (SJCRH) in Memphis USA, and will involve an international and multi-agency collaboration, including midwives, nurses, obstetricians, paediatricians, the Wellington region communities, the Universities of Otago and Auckland and the Hutt Valley and Capital Coast District Health Boards.

Household Transmission: The 2021 season added a new study- WellKiwis household transmission, a study which is looking at influenza immunity and transmission within the household setting. The study follows ~450 families for up to seven years (2021-2028). In addition to understanding how their prior flu exposures shape their immunity to subsequent flu exposures, it also aims to understand how the flu virus spreads from an infected person to others in a household setting. Symptomatic participants will also be tested for COVID-19 and we will ensure staff and participants are protected through the use of PPE and mobile swabbing. Once the COVID-19 vaccine is rolled out in New Zealand, the study will examine its effectiveness within our study cohort.

List of notifiable diseases by urgency

Urgent notification Phone 04 570 9267
After hours until 10pm (including weekends and public holidays) contact the on-call health protection officer or medical officer of health (MOH) on 04 570 9007. Overnight in exceptional circumstances or urgency call the on-call MOH.
Acute gastroenteritis[1]
Amnesic shellfish poisoning
Anthrax
Avian influenza (highly pathogenic)
Botulism
Cholera
Diarrhoeic shellfish poisoning
Diphtheria
Ebola
Haemophilus influenzae type b (invasive disease)
Hepatitis A[2]
Hepatitis B[2] (acute disease only)
Highly pathogenic avian influenza (HPAI)
Lassa fever (viral haemorrhagic fever)
Marburg virus disease
Measles[3]
Meningococcal disease
Meningoencephalitis – primary amoebic
Middle East Respiratory Syndrome (MERS)
Neisseria meningitidis invasive disease or conjunctivitis
Neurotoxic shellfish poisoning
Non-seasonal influenza (capable of person to person transmission)
Paralytic shellfish poisoning
Paratyphoid fever
Plague
Poliomyelitis
Rabies and other lyssaviruses
Scombroid
Severe Acute Respiratory Syndrome (SARS)
Shiga toxin producing or verotoxigenic Escherichia coli (STEC/VTEC) infection
Shigellosis
Toxic shellfish poisoning - unspecified
Tuberculosis: new case, relapse or reactivation
Typhoid fever or paratyphoid fever
Verotoxigenic or Shiga toxin producing *Escherichia coli,* (VTEC/STEC) infection
Viral haemorrhagic fevers
Yellow fever
Zika

Non-urgent notification Fax generic case report form to 04 570 9373
During office hours you can also phone the communicable disease notification line on (04) 570 9267 with the name, DOB, NHI and contact details of the ill person.
Arboviral disease e.g. Dengue fever[4] Chikungunya
Barmah Forest virus infection
Brucellosis
Campylobacteriosis
Congenital rubella
Creutzfeld-Jakob Disease and other spongiform encephalopathies
Cronobacter species (Enterobacter sakazakii invasive disease)
Cryptosporidiosis
Cysticercosis
Decompression sickness
Dengue fever[4]
Giardiasis
Hepatitis C
Hepatitis (viral) not otherwise specified e.g. hepatitis E
Hydatid disease
Invasive pneumococcal disease
Japanese encephalitis
Kunjin
Lead absorption > 0.48 µ mol/l (10µ/dl)
Legionellosis
Leprosy
Leptospirosis
Listeriosis
Malaria
Mumps[3]
Murine typhus
Murray Valley encephalitis
Pertussis[3]
Poisoning from chemical contamination of the environment
Primary amoebic meningoencephalitis
Q fever
Rheumatic fever - initial attack or recurrence
Rickettsial disease
Ross River virus infection[4]
Rubella - not congenital or congenital[3]
Salmonellosis
Taeniasis
Tetanus
Trichinellosis
Typhus
Yersiniosis

1. Acute gastroenteritis is only notifiable if suspected outbreak or linked to common source or person in high risk category e.g. food worker, caregiver, etc. (check list of high risk category) or chemical, bacterial or toxic food poisoning e.g. ciguatera, scombroid
2. Notification must include a faxed copy of serology confirming acute hepatitis and LFTs
3. Notify on suspicion and send confirmatory serology (IgM) for measles/mumps/rubella or nasopharyngeal swab result for measles or pertussis to RPH when available.
4. Acute Dengue fever or Ross River virus notifiable by telephone if there is NO recent overseas travel; if there is recent overseas travel, notify by fax.

Section C diseases
Diseases notifiable without identifying information of person. Notification usually provided by laboratory.
AIDS (Acquired Immunodeficiency Syndrome)
Gonorrhoea
HIV (Human Immunodeficiency Virus)
Syphilis

A short history of Public Health Nursing

- This service commenced in 1911 when Native Health Nurses were appointed to teach health to Māori people. The early work was confined mostly to the prevention of the spread of infectious diseases, particularly smallpox and typhoid fever, and as Māori would not go to hospital, the nurses had to care for them in camps established in the Māori settlements. The work was arduous and many of the early pioneer nurses laid down their lives in this service.
- In 1912 school medical inspections were instituted but school nurses were not appointed until 1917. These nurses were appointed to the Division of School Hygiene, Department of Education, to assist with the health service for school children. This function was transferred to the Department of Health following the Health Act 1920.
- This Act provided for the division of New Zealand into four health districts, each under a Medical Officer of Health and a staff of Nurse Inspectors. Until 1930 there were two types of nurses, a Native Health Nurse who was responsible for the health supervision of the Māori people, and a School Nurse who assisted the School Medical Officers with the medical inspection of schools. The title was changed in 1930 to 'District Health Nurse' and all nurses employed by the Department of Health were known as such.
- The work of the District Health Nurse was broadened to include TAB (Typhoid) inoculation of all Māori school children. Prior to this, TAB inoculation had only been carried out following the notification of a case of typhoid fever. This inoculation was given yearly to all Māori children and has contributed materially to the present low incidence of this disease. Increased antenatal supervision was also given and Māori mothers were encouraged to go into hospital to have their babies. Tuberculosis follow-up work amongst Māori was intensified and travelling specialists held clinics in out-lying districts at which District Health Nurses attended with Māori patients and contacts. The responsibility for the follow-up of European tuberculosis patients was then the duty of the Inspector of Health. In 1940, all tuberculosis follow-up work with Māori and Europeans became the duty of the District Health Nurse.
- In 1941 new venereal disease regulations decentralised notifications. Follow-up work was carried out in the four main centres by a Senior District Health Nurse, and the rural work was carried out by the District Health Nurses.
- In the early thirties devastating waves of diphtheria swept New Zealand with appalling loss of infant and child life. By 1935 preventive injections had been discovered and were being given by health nurses and doctors.
- During World War II, Special Health Nurses were appointed to help control the spread of social disease always associated with a concentration of troops.
- The first Industrial Health Nurse was appointed by a firm in Wellington in 1924 when much emphasis was given to the health promotion and welfare aspects of her work. By the end of World War II, 36 Industrial Health Nurses were employed in New Zealand. In 1945, as a result of a survey of Occupational Health Services carried out by the Department of Health, a Division of Industrial Hygiene was established and in

1946 an Industrial Nurse Inspector, responsible for the Industrial Health Nursing Service, was appointed to the Division of Nursing. Industrial Health Nurses were subsequently employed by the Department to work with Industrial Medical Officers in the main centres. In 1953, as a result of policy changes, the Industrial Health Nursing Service became integrated with the Public Health Nursing Service.

- With increasing emphasis was given to the promotion of health and prevention of disease and social aspects of her work, the designation of nurses employed by the Department of Health was changed from 'District Health' to 'Public Health' Nurse in 1952, but, although the administrative and supervisory content of her work had increased, the designation 'Nurse Inspector' remained unchanged till 1974 when it changed to Principal Public Health Nurse.
- In the early 1960's, Public Health Nurses were engaged in a New Zealand-wide campaign to immunise the whole population against poliomyelitis - one of the first countries in the world to achieve over 90% population coverage against this dreadful disease.
- In 1971, mass rubella immunisation of primary school children was carried out resulting in a marked reduction of children with congenital deafness.
- At the end of 1989, the Minister of Health for the Labour Government, Helen Clark, introduced a reformation of the Health System of Hospital Boards into Area Health Boards and Public Health Nurses who had previously been part of the Department of Health for over 40 years became employees of the new Boards.
- In the Wellington Region, the Public Health Nurses continued to work in district offices and community bases belonging to the now named Well Health and became part of Health Development Units that had the philosophy of just that. A time of further revision of resources ensued and resulted in many other services within the units, being reviewed and reconstructed into other specified areas. One such reconstruction resulted in the regionalisation of the Health Development Units into the present Regional Public Health.
- In July 1993, the National Government restructured the Area Health Boards into Crown Health Enterprises (CHEs) and instigated the funder/provider split that was to be jointly managed by the CHEs and the new Regional Health Authorities (RHAs). Until this time, a Public Health Nurse's role was very similar around the country. With the advent of CHEs and further restructuring, the Public Health Nurse's role changed to meet the needs of their community as deemed by the contracts their employing organisation had with its local RHA.
- In 1998 the Government restructured the RHA into the Health Funding Authority (HFA) and changed the CHEs back into Hospitals and Health Services (H & HSs). Early 2001, the HFA was restructured back into the Ministry of Health and the H & HSs into District Health Boards. The funding of services is now placed with the DHB's. As the contracting for services provided continues, the role of Public Health Nurses varies still from region to region throughout New Zealand. Therefore the work undertaken by Public Health Nurses in Te Whatu Ora, Capital Coast, Hutt Valley & Wairarapa is not necessarily a definitive guide to what all Public Health Nurses do around the country.

Relationships

Relationships

Team Leader | Gail O'Leary

✆ 027 293 2905 ✉ Gail.Oleary@huttvalleydhb.org.nz

Team Leader for Communicable Disease & Housing team. They will support you, advise and advocate for you.

Clinical Nurse Specialist | Helen Ryan

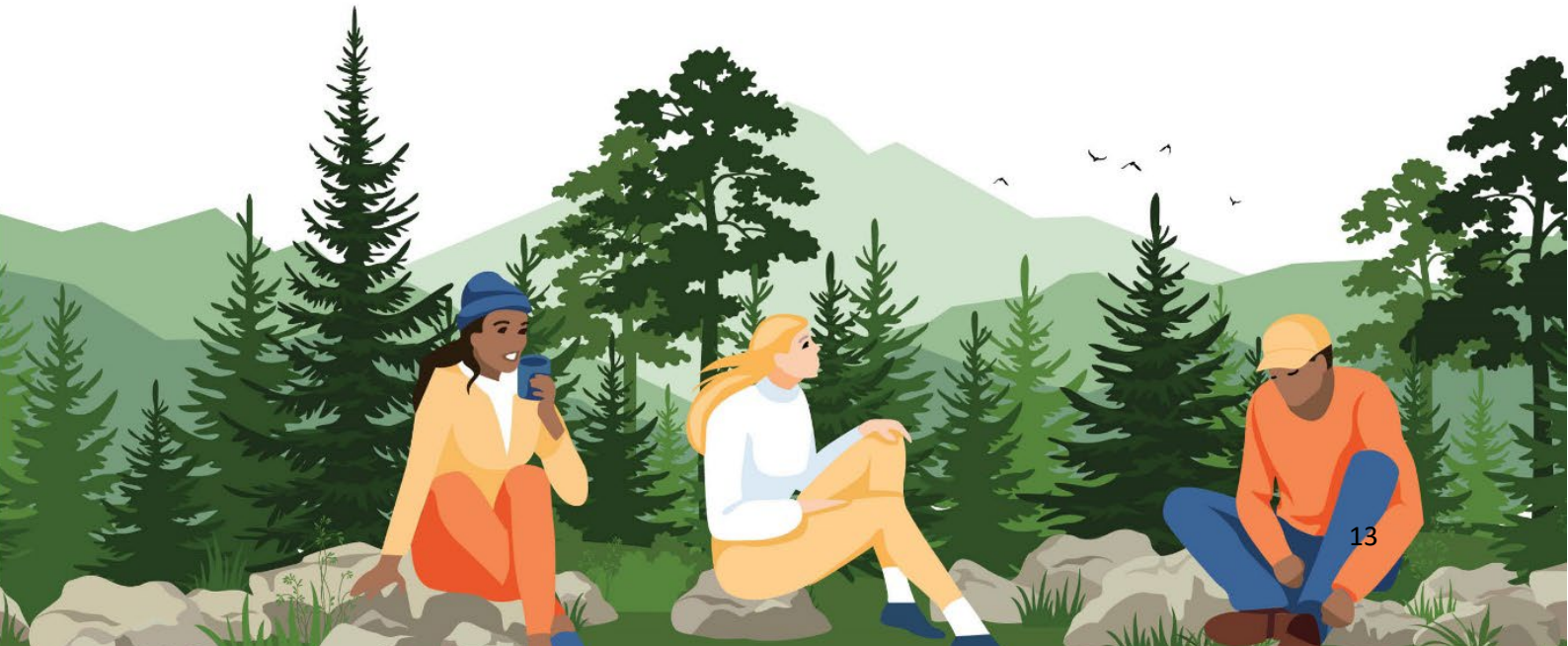
✆ 027 588 9962 ✉ Helen.Ryan@huttvalleydhb.org.nz

Provides support and education to Communicable Disease, Well Homes and Well Kiwis Nurses.

Student Nurse Coordinator | Lee Thoms

✆ 027 252 2839 ✉ Leonora.Thoms@huttvalleydhb.org.nz

Your Student Nurse Coordinator is an experienced Registered Nurse who will be your support person through your student placement.



Public Health Wellington Region Bases

Hutt base

Location: Level 1 Community Health Building, Hutt Hospital, High Street, Lower Hutt
Reception is available from 8am to 4.45pm.
A swipe card is required to gain access to the building between 5.15pm and 7.45am.
Phone (04) 570 9002 as contact for all bases.

Porirua base

Location: Level 3, City Fitness Building, 1 Walton Leigh Avenue, Porirua
Make arrangements to gain access to the building with a staff member.
Parking is available at the car park below New World for 240 minutes.

Wairarapa base

Location: Level 2, 49-51 Lincoln road
The office is open for 8am – 4.30pm daily.
Parking is available on the street.

Pretoria Street base

Location: Level 1, Office 4, 14-18 Pretoria Street, Lower Hutt
Access codes are required to gain entry (Main Entrance: C2019)
Parking is available on the street.

About Te Whatu Ora – Public Health Wellington Region

Te Whatu Ora – Public Health Wellington Region serves the greater Wellington region, through its three districts: Capital & Coast, Hutt Valley and Wairarapa and as a service is part of Te Whatu Ora, Health New Zealand – National Public Health Service. We are the third largest public health service in New Zealand.

Public health is about keeping our population well and preventing ill health before it happens, rather than treating disease in individuals. An important part of our work is working with others to address the wider causes of good or ill health in our population, such as the physical environment, housing and access to services.

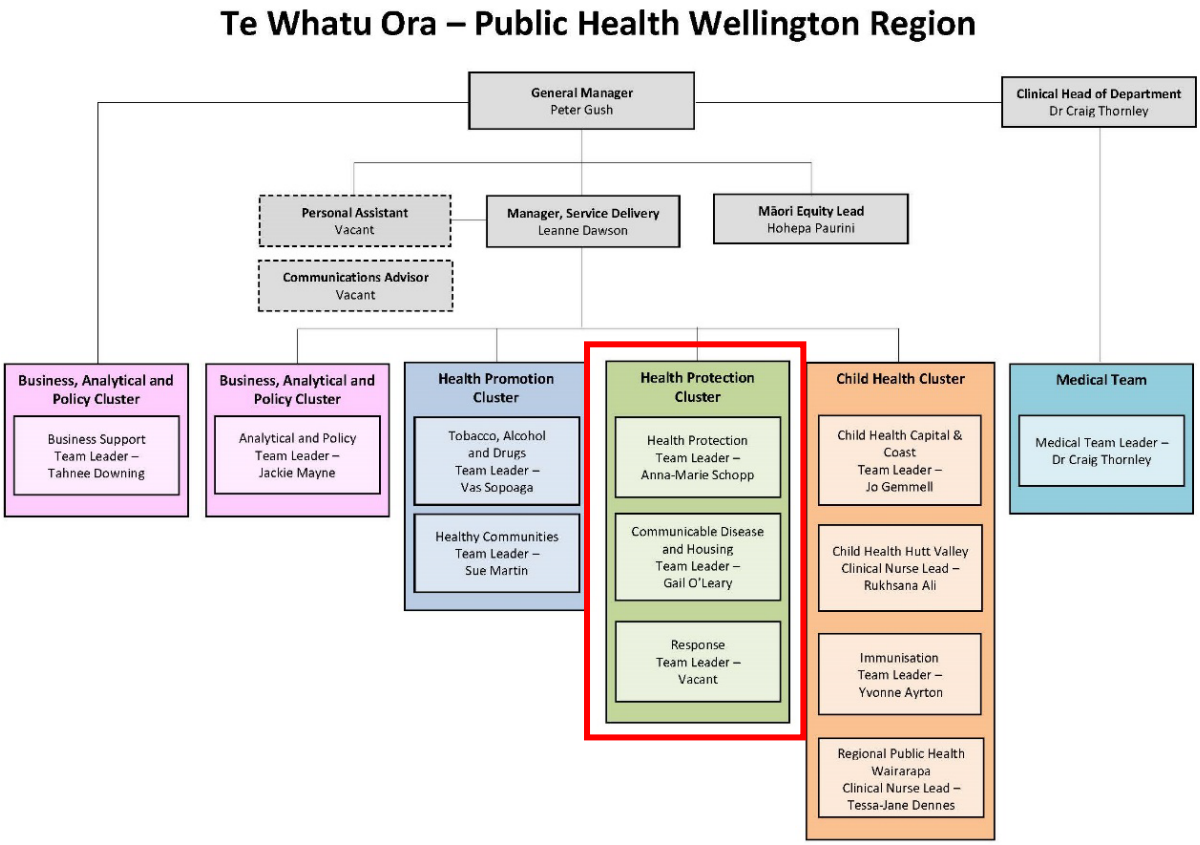
We work with our community to make it a healthier safer place to live. We promote good health, prevent disease, and improve the quality of life for our population, with a particular focus on children, Māori and working with primary care organisations.

We have a special focus on improving opportunities for good health for Māori, Pacific and refugee groups and reducing inequalities in health outcomes that exist between these groups and others.

Some of the approaches we use include sharing health information, making submissions to influence policy, enforcing health legislation, doing health impact assessments and working with other agencies to improve access to services and resources.

Our staff includes a range of occupations such as Medical Officers of Health, Public Health Advisors, Health Protection Officers, Public Health Nurses, and Public Health Analysts.

Organisational structure



There are four groups within Public Health Wellington Region. These are:

- Business, Analytical and Policy Cluster
- Health Promotion Cluster
- Health Protection Cluster
- Child Health Cluster

HUTT HOSPITAL MAP

Finding your way around

Te Whatu Ora
Health New Zealand

NIKAU CENTRE

G	• Infant, Child, Adolescent and Family Services (ICAFS)

COMMUNITY HEALTH BUILDING

3	• Community Health Service – District Nursing • Social Work Service • Community Physiotherapy • Community Occupational Therapy
2	• Regional Public Health
1	• Regional Public Health
G	• Peadiatric Outpatients • District Nursing Dressings Clinic • Plunket and Care Seat Rental • Antenatal Room • Community Midwifery Team • Transport office

CARE BLOCK

1	• Older Persons & Rehabilitation Service (OPRS) *East and West Wards*
G	• OPRS Mental Health • OPRS Outpatient Services
G	• Breast Centre

THERAPIES BUILDING

G	• Physiotherapy • Speech Therapy Occupational Therapy • Child Development Service

F BLOCK

G	• Equipment Store *(collection and return)*

CLOCK TOWER BLOCK

1	EAST	• Diabetes • Dietitians • Respiratory
1	WEST	• Plastic, Maxillofacial and Burns Outpatients *(Plastics and Burns Unit see Heretaunga Block)* • Plastic Surgery Dressing Clinic
G	EAST	• Dental
G	Main Corridor	• Coffee Shop
G	WEST	• Ear, Nose,Throat (ENT) • Audiology • Ophthalmology

TE WHARE AHURU (TWA)

(i)	**ENQUIRIES** • Ground Heretaunga Block at General Outpatients
(P)	**PARKING PAY MACHINES** • Main Entrance, Heretaunga Block • Gate 3 • ED Entrance • Parking building

THEATRE AND ED BLOCK

1	• Operating Theatres • Intensive Care Unit (ICU) • Day Surgery Unit
G	• **EMERGENCY DEPARTMENT** • Medical Assessment and Planning Unit (MAPU) • Orderlies
G	• Fracture Clinic
G	• Endoscopy and Medical Day Stay

HERETAUNGA BLOCK

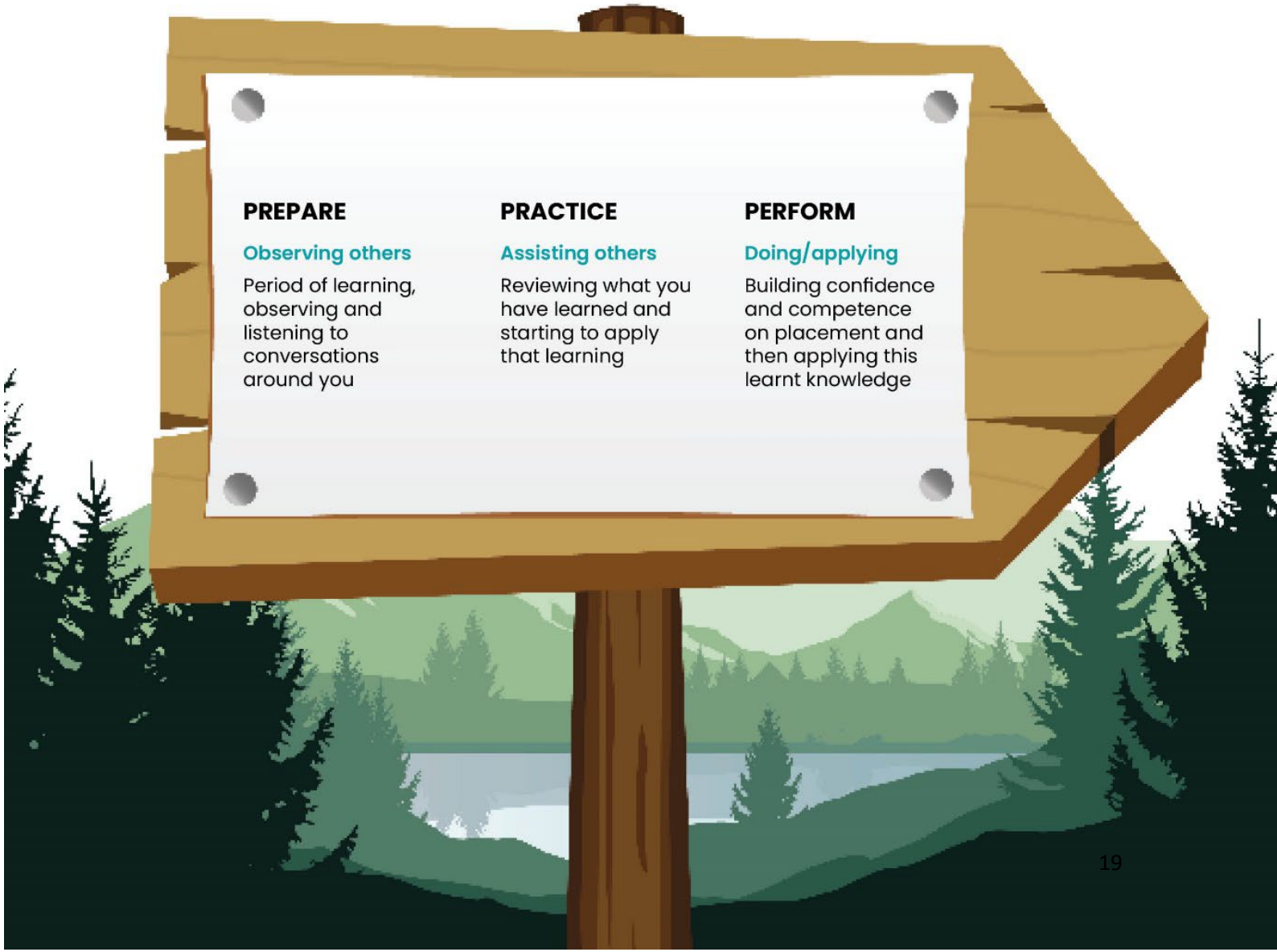
7	• Building and Property Service
6	• Coronary Care Unit (CCU) • Cardiology • Rheumatology Outpatients
5	• Medical Ward
4	• General Surgery and Gynaecology Ward (GSG) • Orthopaedic Ward
3	• Children's Ward • Plastics and Burns Unit *(Plastics Outpatients see Clock Tower Block)*
2	• Maternity and Postnatal Services • Special Care Baby Unit (SCBU)
1	• Laboratory Outpatients • Pharmacy
G	• General Outpatients and **ENQUIRIES** • General Outpatients – Suite 2 • Hutt Hospital Radiology • MRI and CT Imaging Suites • Maternity Assessment Unit

COMMS: 1119-0823 - Last updated MARCH 2023

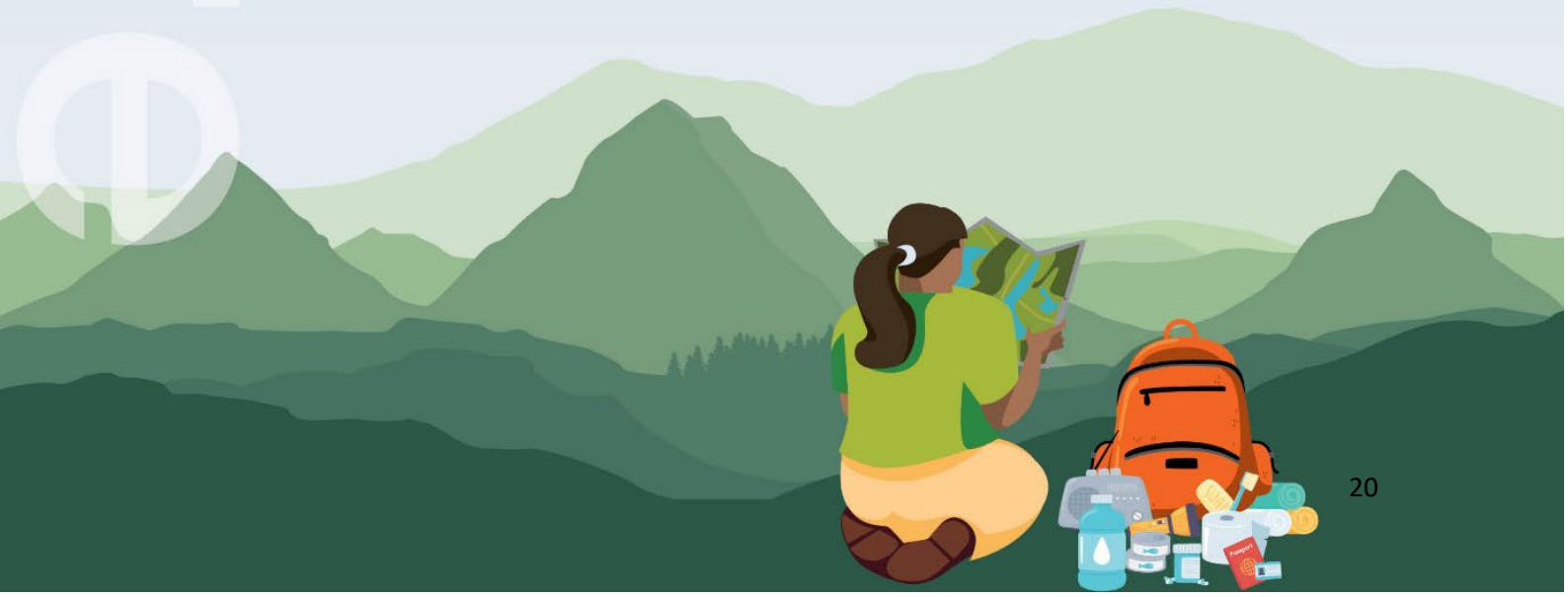
Phases

Prepare, practice, perform

Your time on placement with us will go through three phases of growth:



Prepare



Prepare

Working with your preceptor, please ensure the following preparations are completed:

Observing others
Period of learning, obtaining anything required for your role

Orientation to the base	**Hutt**	**Porirua**
Meeting staff	☐	☐
Toilets	☐	☐
Staff room	☐	☐
Kitchen	☐	☐
Staff indicator board	☐	☐
First aid kit	☐	☐
Clinical equipment storage areas	☐	☐
Security of building	☐	☐
Staff parking	☐	☐

Emergency procedures	**Hutt**	**Porirua**
The location of emergency exits	☐	☐
The location of fire extinguishers and fire hoses	☐	☐
The evacuation procedure	☐	☐

My assembly area is:

Hutt: _____

Porirua: _____

Expectations of student nurses

- Nurses should be prepared for the placement and read the information given/sent. Also bring along your personal learning objectives.
- Good time management. Turn up at the correct place at the time expected. Working hours are 8am – 4.30pm Monday to Friday with the School Health and Disease Control teams.
- Immunisation team hours are 7.30am to 4pm Monday to Friday.
- You are expected to wear your uniform when working with the Immunisation team.
- For other placements wear appropriate clothing and footwear. You will often be visiting people in their homes so you will need to wear culturally acceptable dress – i.e. not low cut tops or mini-skirts. Comfortable footwear will be needed as you may need to climb stairs. Also weather appropriate clothing – warm and waterproof as needed.
- Identification badges must be worn at all times.
- If you are unwell you need to let your student preceptor or the student coordinator know via cell phone.
- Cell phone use whilst on placement should be at break times only. Cell phones should be turned off during work time.
- If you are leaving your placement for any reason you need to let the nurse you are working with know.
- You will be expected to show interest and enthusiasm whilst on placement. Please ask questions as you go along about the topics that you are interested in or unsure of.
- Be polite to staff and clients and maintain a professional manner at all times.
- Confidentiality is paramount.
- If you are not achieving your objectives, please discuss this with your preceptor (before the last week of placement).
- Please ensure all documentation you need to complete for the polytechnic/university is accomplished before the last days in the unit. Your preceptor will not complete any paper that is given to him or her in the last days of your placement.

Privacy and confidentiality

Staff routinely collect and have access to peoples' personal health information in order to do their jobs. This puts us in a privileged position. Patients must have confidence that we use their information appropriately and we will maintain confidentiality at all times.

Wherever health information is collected, used, held or disclosed by health agencies, the Health Information Privacy Code 1994 (HIPC) applies. The rules in the HIPC can be summarised simply:

- Purpose: You can only collect the information you need.
- Source: Get it straight from the people concerned.
- Collection from the individual: Tell them what you are going to do with it.
- Manner of collection: Be polite and considerate when you are getting it.
- Storage/security: Take care of it once you have got it.
- Access: People can see their health information if they want to.
- Correction: The client can request a correction if it is wrong.
- Accuracy: Make sure it is accurate before you use it.
- Retention: Get rid of it when you are done with it.
- Limits on use: Only use it for the purpose you got it for.
- Limits on disclosure: Only disclose it if you have good reason.
- Unique identifiers: Only assign unique identifiers (NHIs) where permitted.
- Be careful with electronic patient management systems (PMSs) – do not give your password to anyone else and ensure patients and visitors cannot read your screens.
- Ensure hard copy notes are stored safely and securely. Don't leave them lying around where public have access to them.
- Patients or other work related business must not be discussed outside of work.
- When discussing a patient with other people or agencies, ensure that the information you are disclosing is relevant and appropriate.
- Beware of conversations in public i.e. schools, cafes.

SOAPE

"A word on documentation...
A useful acronym to use when writing nursing notes is by using the following guide:

S Subjective. Summarize subjective observations and patient/client experience
O Objective. List objective da
A Assessment. Complete a patient/client assessment
P Planning. Outline the treatment plan
I Investigations. Describe Healthcare interventions/tests/examinations
E Evaluation. Evaluate the interaction

Remember: if it isn't written, then it didn't happen!"

Proactio

Practice

Complete the following activities and case studies to familiarise yourself with the work that the Communicable Disease & Housing Nurses do:

Assisting others
Reviewing what you have learned and starting to apply that learning

Your placement

Your main placement with us will be with the Communicable Diseases team.

Refugee Health and Support

Accompany a PHN on a refugee health transition visit.

WellKiwis visit

Visit the WellKiwi's team in Upper Hutt and learn what they do.

Time for a home assessment!

During your placement with us, you will attend a Well Homes visit accompanying a PHN to assess a home.

To ensure your safety on any home visits, you'll want to do a few things. Answer the questions below and then review them with your preceptor.

> How do you assess the home you're visiting to ensure it's safe?

_____

_____

_____

_____

> What are some safety concerns that would mean you abort the visit?

_____

_____

_____

_____

Terminology

Some terminology that you may hear while you are on placement with us:

TB	Tuberculosis
LTBI	Latent TB Infection
QFT	Quanti-Feron blood test
Contact (or disease contact – DC)	A person who has been in contact with a person who has an infectious disease
Index case	The first known case in a group of people of a disease or medical condition that can be passed onto others.
CRF	Case Report Form (on EpiSurv)
Sx	Symptoms
Rx	Treatment
Dx	Diagnosis
PMHx	Past Medical History
CXR	Chest X-ray
LFT's	Liver Function Tests
CBC	Complete Blood Count
MMR	Measles, Mumps, Rubella
AFB	Acid Fast Bacili
RF	Rheumatic Fever
MOoH	Medical Officer of Health
HPO	Health Protection Officer
TO	Technical Officer
ID	Infectious Diseases
NCTS	National Contact Tracing Solution (our patient management system to record our interaction with Measles and Covid cases and contacts)

Concerto	HVDHB Patient Management System (where we record all our interactions with cases and contacts of infectious diseases (not including measles or COVID)
Infectious period	The period during which an infected person has a probability of transmitting the virus or bacteria to a susceptible host. This will be different for every infectious disease.
Incubation period	The time it takes between a person being infected with an infective organism and the appearance of the first sign or symptom it causes.
Isolation	Separates sick people with a contagious disease from people who are not sick
Quarantine	Separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick
PCR	Polymerase Chain Reaction
Extra Pulmonary TB	TB disease outside of the lungs
Pulmonary TB	TB disease that involves the lungs

Tuberculosis – a Public Health Nurse's 'bread and butter'

You will see that the majority of our work for PHN's in the Communicable Disease Team, consists of meeting and following up clients with newly diagnosed TB, and then supporting them for the duration of their treatment. We would also follow up any contacts that they may have, and provide their contacts with monitoring with the purpose of determining whether they are also displaying signs of active TB disease, or whether they have had previous exposure to TB. In this later case, we would offer LTBI treatment.

TB disease (TBD) usually affects the lungs (pulmonary TB), but can also affect many other parts of the body, such as lymph nodes, brain, kidneys, bowel, or bones (extrapulmonary TB). People with TB disease can have pulmonary or extrapulmonary TB, or both.

TB disease is usually curable, and requires 6 to 12 months of multi-drug therapy to achieve cure. Multi-drug resistant TB (MDR-TB) has lower cure rates than drug sensitive TB, and requires treatment for up to two years or more. In TB disease the bacteria is actively making a person sick. The most common gold standard treatment for both Pulmonary and Extra-Pulmonary TB is a 4 drug therapy which would include Rifampicin, Isoniazid, Pyrazinamide, and Ethambutol (commonly referred to as the RIPE therapy).

Treatment of active TB usually includes two phases:

- Intensive phase of treatment (when more drugs are used) – bactericidal phase (RIPE Therapy where all 4 antibiotics are taken). Of a six month treatment, the first two months are considered the intensive phase
- Continuation phase (with fewer drugs) – sterilisation phase (only Rifampicin and Isoniazid would continue for the remainder of the treatment). Of a six-month treatment, the last 4 months are considered the continuation phase.

Multi-drug resistant TB (MDR-TB) is TB that is resistant to the two most powerful first-line TB medicines, isoniazid and rifampicin. Therefore, MDR-TB needs to be treated with second- line TB medicines. In some cases of MDR-TB, the TB germs may be resistant to other first- line and/or second-line TB medicines too. Extensively drug resistant TB (XDR-TB) is a rare type of MDR-TB that is resistant to isoniazid and rifampicin and is resistant to some of the second-line TB medicines – any fluoroquinolone and at least one of the three injectable second-line drugs (amikacin, kanamycin and capreomycin). MDR-TB is more common amongst people who have been treated for TB in the past and have subsequently developed active TB disease again.

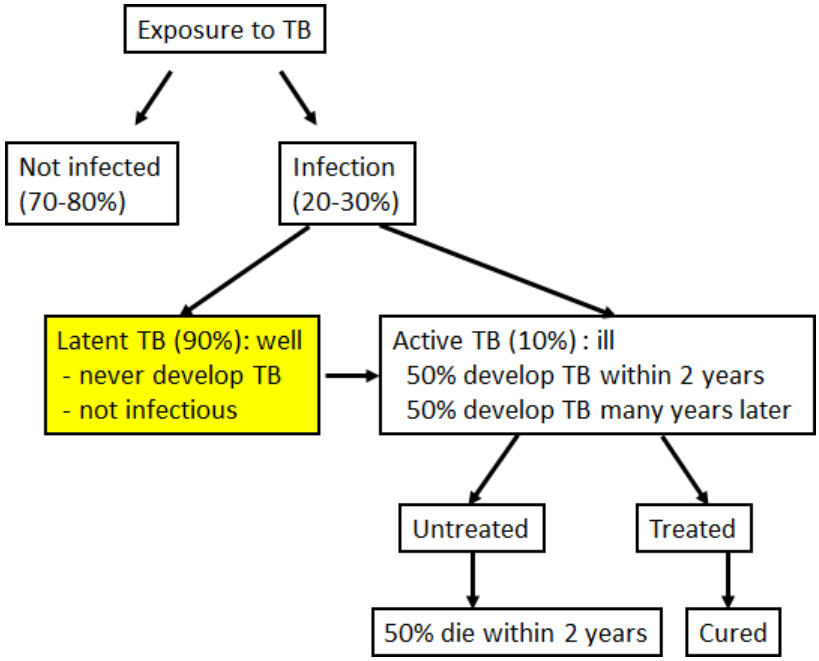
Resistance to TB medicines can develop when TB medicines are not prescribed correctly or are not taken correctly. Examples would include health care providers who treat TB incorrectly. This would include Doctors who prescribe the wrong medicines, the wrong dose or too short a treatment course, Or people who have TB who do not take their TB medicines correctly. This would include people who take their medicines irregularly, or who take some tablets but not others. Other reasons why we can see antibiotic resistance are drug supply issues in a country (e.g. when TB medicine stocks run out); and drug quality issues (e.g. poor quality TB medicines).

People with LTBI are not infectious to others and do not have symptoms of TB disease. However, they do have a small risk of developing TB disease in the future. For this reason, LTBI is often treated,to reduce the person's chance of developing TB disease in the future. This is not notifiable (like Active TB disease in NZ), and it is not compulsory to have treatment for LTBI, though our ID Clinicians would highly recommend that they do receive treatment. The same antibiotics are used for treating LTBI but consist of a much shorter course (usually a minimum of 3 months)

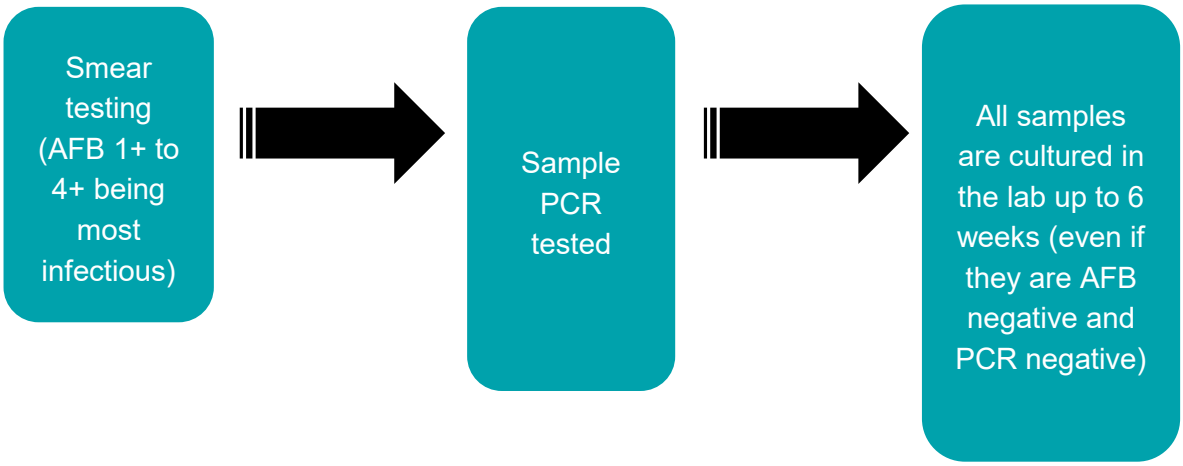
The risk of those with LTBI developing active TB disease is higher within the first two years of becoming infected, and for people who are immunosuppressed (for example, people with HIV/AIDS, cancer, kidney disease, diabetes, or who are taking chemotherapy or long term oral steroid treatment).

People with TB disease (active TB) have active TB bacteria in their bodies. People with TB disease may be asymptomatic. When symptoms of TB disease occur, these may be non- specific and may occur later in the course of the disease. **People with TB disease of the lungs (pulmonary TB) or larynx are capable of spreading the bacteria by production of respiratory droplets or aerosols, mainly during coughing, and may therefore be infectious to others. The importance of TB of the larynx (and probably other parts of the upper respiratory tract) is that it causes coughing, and so may be highly infectious, but does not show up on a chest x-ray.**

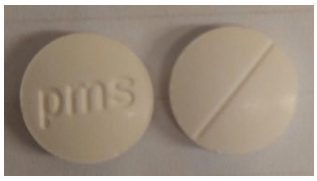
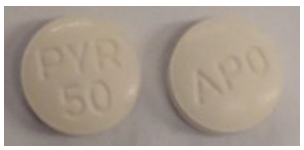
Present thinking about TB disease and latent TB disease is that the disease is a spectrum of conditions, rather than discrete entities. However, at present this has no effect on our management of TB disease and latent TB infection (P Drain et el, Clin Micro Reviews, 10-2018).

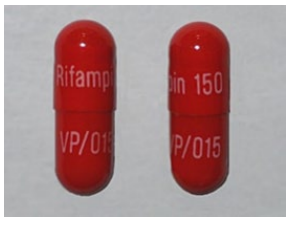


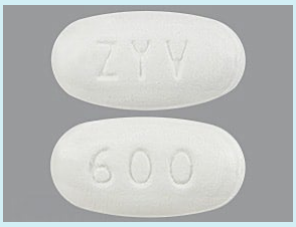
How we test for M. Tuberculosis



Common TB medications used

	Description	Side Effects
Ethambutol 	Strength: 400mg tablets Colour: White Scoring/writing: No	• Drug induced hepatitis • Nausea/vomiting • Optic neuropathy – blurry vision, difficulty reading • Colour blindness – red/green • Urticaria/rash • Pruritus/itchy skin • Thrombocytopenia/low platelet count
Pyrazinamide 	Strength: 500mg tablets Colour: White Scoring/writing: Yes	• Drug induced hepatitis • Nausea/vomiting • Hyperuricema/high uric acid • Arthralgia/painful, swollen joints • Myalgia/painful muscles • Urticaria/rash • Pruritus/itchy skin
Pyridoxine 	Strength: 25mg tablets Colour: White Scoring/writing: No	ALWAYS given with isoniazid and linezolid (for children consult with prescriber) • Nausea • Headaches • Paraesthesia/burning, prickling sensation • Sleepiness
Pyridoxine 	Strength: 50mg tablets Colour: White Scoring/writing: Yes	ALWAYS given with isoniazid and linezolid (for children consult with prescriber) • Nausea • Headaches • Paraesthesia/burning, prickling sensation • Sleepiness
Rifinah 150/100mg 	Strength: Rifampicin 150mg + Isoniazid 100mg tablets Colour: Pink Scoring/writing: No	• Orange tears, sweat and urine – avoid soft contact lenses • Urticaria/rash • Pruritus/itchy skin • Menstrual disturbances • Muscular weakness • Peripheral neuropathy • Optic neuropathy – blurry vision, difficulty reading • Mood disturbances • Stevens-Johnson Syndrome • Drug induced pancreatitis

	Description	Side Effects
Rifinah 300/150mg 	Strength: Rifampicin 300mg + Isoniazid 150mg tablets Colour: Orange Scoring/writing: No	• Drug induced hepatitis • Nausea/vomiting • Headache • Orange tears, sweat and urine – avoid soft contact lenses • Urticaria/rash • Pruritus/itchy skin • Menstrual disturbances • Muscular weakness • Constipation • Peripheral neuropathy • Dry mouth • Optic neuropathy – blurry vision, difficulty reading • Mood disturbances • Stevens-Johnson Syndrome • Drug induced pancreatitis • Vertigo
Isoniazid 	Strength: 100mg tablets Colour: White Scoring/writing: No	• Drug induced hepatitis • Nausea/vomiting • Constipation • Peripheral neuropathy • Dry mouth • Optic neuropathy – blurry vision, difficulty reading • Mood disturbances • Stevens-Johnson Syndrome • Vertigo
Rifampicin 	Strength: 150mg capsules Colour: Red and blue Scoring/writing: Yes	• Drug induced hepatitis • Nausea/vomiting • Diarrhoea • Headache • Dizziness • Orange tears, sweat and urine – avoid soft contact lenses • Urticaria/rash • Pruritus/itchy skin • Menstrual disturbances • Muscular weakness
Rifampicin 	Strength: 300mg capsules Colour: Red Scoring/writing: Yes	• Drug induced hepatitis • Nausea/vomiting • Diarrhoea • Headache • Dizziness • Orange tears, sweat and urine – avoid soft contact lenses • Urticaria/rash • Pruritus/itchy skin • Menstrual disturbances • Muscular weakness

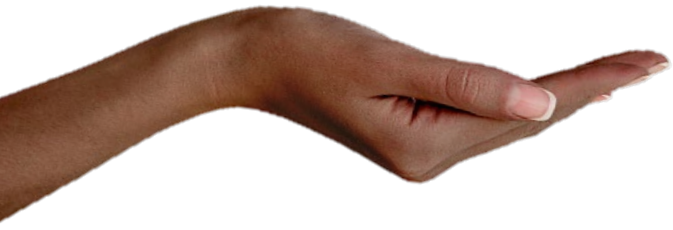
	Description	Side Effects
Bedaqualine 	Strength: 100mg capsules Colour: White Scoring/writing: Yes	• Headache • Nausea/vomiting • Arthralgia's • Drug induced hepatitis • Prolonged QT interval – should receive ECG – consult with prescriber
Moxifloxacin 	Strength: 400mg capsules Colour: Pink/salmon Scoring/writing: Yes	• Nausea/vomiting • Diarrhoea • Headache • Dizziness • Pain, swelling or tearing of a tendon • Agitation • Nightmares
Linezolid 	Strength: 600mg capsules Colour: White Scoring/writing: Yes	• Nausea/vomiting • Diarrhoea or constipation • Headache • Visual disturbances • Malaise • Discoloured tongue • Anaemia • Peripheral neuropathy • Bone marrow suppression • Lactic acidosis
Clofazimine 	Strength: 50mg capsules Colour: Brown Scoring/writing: No	• Nausea/vomiting • Abdominal pain • Headache • Tiredness • Brownish-black discolouration of lesions and skin – avoid sun exposure • Dry skin • Red discolouration's of faeces, urine and body fluids • Urticaria/rash • Pruritus/itchy skin • Dry eyes • Dimmed vision

Disease profile summaries

When on placement with the Communicable Disease & Housing team, please complete the table below. Answers can be found in a variety of sources: e.g. SOPs, Internet, Health Pathways, Communicable Disease Manual, etc.

Refresh your memory of terminology used by referring to page 26 of this handbook.

	Spread by	Symptoms	Incubation period	Period of infectivity	Isolation requirements	Test type
TB						
LTBI						
Measles						
Pertussis						
Mumps						
Meningitis						
Rheumatic Fever						



Handy Tip

Save “Health Pathways” to your laptop favourite’s bar.

Saving the “Health Pathways” link will ensure you have up-to-date, evidence based practice guidelines when you need them.

Communicable Disease profiles

The following disease profiles are some of the more common communicable diseases we see. Answers can be found in SOPs, Internet, G: Drive folder, Health Pathways or the Communicable Disease Manual. If present when one of these diseases are notified to our team, you will have the opportunity to sit alongside and assist your preceptor or another experienced Registered Nurse with any case investigation or public health follow-up that is required.

PERTUSSIS

Case definition	
Mode of transmission	
Incubation period	
Period of infectivity	
High risk contacts/people of concern	
Urgency of response and reason	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	

MEASLES

Case definition	
Mode of transmission	
Incubation period	
Period of communicability	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

EXTRA PULMONARY TB

Case definition	
Mode of transmission	
Incubation period	
Period of communicability	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/ resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

PULMONARY TB

Case definition	
Mode of transmission	
Incubation period	
Period of communicability	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/ resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

LTBI

Case definition	
Mode of transmission	
Incubation period	
Period of communicability (infectious period)	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/ resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

RHEUMATIC FEVER

Case definition	
Mode of transmission	
Incubation period	
Period of communicability	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/ resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

MENINGOCOCCAL DISEASE

Case definition	
Mode of transmission	
Incubation period	
Period of communicability	
High risk contacts/people of concern	
Urgency of response and reason	
Timeline – plan of follow up (include follow up priorities for case and contact/s)	
Education priorities (case and contact/s) - Educational material specific for disease	
Documentation considerations/ requirements (e.g. importance of ladder for contacts of measles contacts, outbreak entries in HealthScape)	
Medications (for case /contacts) e.g. standard treatment in TB, prophylaxis in Meningo, follow up vaccination Meningo, Immunoglobulin Hep B	
Important documents/ resources (for PHN for case and contact/s) – SOPs, Comms Disease Manual, Hep B interpretation of results chart	
Important people to be aware, seek advice from, refer to (e.g. community nurses, NZRC team, refugee health)	

Andrea Vause

LESSONS LEARNT FROM MA

Treating a client with tuberculosis whose social and economic situation is poor and lifestyle risky presents a public health nurse with some major challenges.

By Andrea Vause

Tuberculosis is a disease that continues to cause problems worldwide — numbers of infected people in New Zealand continue to be higher than in Australia. It is often associated with overcrowded living conditions, poor nutrition, poverty, alcohol and substance abuse, factors that can complicate the management of a TB case and present major challenges for a public health nurse (PHN). The case of Mr D, a Māori male in his 20s who was diagnosed with smear positive pulmonary TB, illustrates the nature of the problems that can be encountered from presentation of symptoms to diagnosis, and then to the completion of nine months of treatment. It does not touch on the many hours spent finding and working with his contacts and their treatment.

I met Mr D in late 2004 in the isolation unit. He was a tall, very thin young man; obviously image-conscious, wearing a cap, baggy trousers, a hooded sweatshirt and sunglasses with his cell phone close at hand. He presented with a two- to three-year history of cough with green, brown phlegm. He was seen by his GP in 2003 with a productive cough and muscular pain, diagnosed with bronchitis, given antibiotics, which he did not collect, and advised to return if he did not improve. Despite his continuing cough, his next visit to his GP was 15 months later when he presented with a long history of night sweats, a 20 kilogram weight loss, shortness of breath when walking short distances and overwhelming fatigue.

His chest x-ray was consistent with TB, with a large cavity in the right upper apex. His sputum smear was positive and his sputum culture became positive after three days. This indicated he had an extremely high level of infectivity.

The initial interview showed that Mr D did not understand his situation, why he was in isolation and what this meant for himself and his visitors. His concentration was poor. I had to work hard to keep him focused on what we needed to cover and explained the issues several times. Confidentiality was an issue, because he feared he was in danger of being beaten if his friends — particularly the people he associated with one day a week at the Community Probation Service — learned of his diagnosis.

Because of his illness he had failed to report to the Probation Service for some weeks and a warrant had been issued for his arrest. This was a huge concern and was the first thing I sorted out for him. I found myself involved with the justice system on many occasions throughout his treatment.

As our relationship developed, I realised that Mr D had some characteristics which were protective, enabling him to survive, and others that worked against him, adversely affecting his health and influencing the issues needing to be addressed throughout his treatment.

Resilient characteristics

Mr D was a likeable, social person with a great sense of humour who related well to children. He always intended to do good even though he was easily misled. He was resilient and was able to manipulate most situations to his advantage. He knew how to access and use health and government systems when it was useful to him. He had a lifelong history of poorly controlled asthma with a chronic cough which caused some difficulties with his initial diagnosis.

Mr D often lied, stretching the truth to enhance his image. But honesty and trust were crucial to our working relationship and his lies often complicated our journey. He was a binge drinker and a regular user of cannabis and methamphetamine. When using methamphetamine his personality would change and, on those occasions, I did not feel safe with him. He had been in prison on a drug-related charge several years prior to his diagnosis.

Several of the socio-economic factors regarded as health determinants are reflected in his case. Income and poverty, among the most important determinants of health, are closely associated with employment and basic population-based services, such as water, electricity and transport.[1] Mr D was on the unemployment benefit, which was often stopped because he did not attend appointments with his WINZ case worker. He then did not have the money for transport to meet the case worker or for food and bills, including electricity and his cell phone. There is good evidence that unemployment is detrimental to both physical and mental health, because employment provides income, social status, social contact and regular activity. It also improves self-esteem.[1] Mr D spent his days "hanging out". He had never been employed. He complained of being lonely and bored and did not appear to have the self-confidence to apply for work.

Family background

Education is strongly related to occupation and income. Literacy skills are critical for coping effectively in society.[1] In his early childhood, Mr D's family were transient. Consequently he attended five primary schools and was expelled from two high schools. He never completed his high school education.

Good levels of social support enhance health. People with strong family and community ties have better health than those who are socially isolated.[1] Mr D came from a large family. His parents separated when he was at primary school. His mother moved to another city and struggled to cope with all of her children. Even now she has limited contact with them. They do not know how to contact her and she contacts them when she is able.

Culture refers to accepted patterns and behaviours within identified groups in society.[1] Mr D mixed with young people who were associated with gangs, drugs, alcohol and violence. His father had been a leader within one of the local gangs.

Housing involves the quality of accommodation, its location and overcrowding.[1] After Mr D left home he led a transient lifestyle, staying with friends and extended family. He never had his own home. When I met him he was living in a boarding house.

For Mr D to complete nine months of TB treatment successfully, it was essential our relationship allowed him to feel good about himself, genuinely cared for, and listened to with boundaries that were flexible and constantly being renegotiated. Working with people who are diagnosed with TB is unique because the

extensive contact tracing enables the nurse to establish a relationship with most people involved in the client's life. This allows the nurse to have a good knowledge of the client's networks and support, which in this case was another reason for the successful completion of treatment.

The main issues addressed in Mr D's case were his management of his hospital isolation and then home isolation, inappropriate housing, poor nutrition, finances, liaison with the justice system, his alcohol and drug abuse, the safety of the nurse, compliance with medication and management of the daily observed therapy (DOT). Nurses working with TB cases work under the Tuberculosis Act 1948, which states that people must take their medication. DOT involves the nurse delivering the medication and ensuring the client swallows it correctly. The TB medication is broken down by the liver and therefore it is recommended that patients avoid alcohol while taking it.

Generally after two weeks of TB treatment we can assume that clients are no longer infectious but, in cases with high levels of infectivity, this can take much longer. In Mr D's case this took approximately eight weeks.

Managing client's isolation

Managing the home and hospital isolation was difficult because of Mr D's lifestyle, smoking and drug and alcohol habits. During his hospital stay he spent hours outside smoking, which frustrated the ward nurses. He had many visitors who did not always wear masks and often turned up very late at night. After ten days in hospital isolation he disappeared and went to a party with his friends. I was contacted by the ward, and with the help of his friends, found him and returned him to the isolation unit. This emphasised to Mr D very early in his treatment that protecting the public from infectious patients is paramount and that, as health professionals, we were serious about treating him and that we cared about him.

There was never going to be an ideal place to manage his isolation, because of the difficulties the ward staff faced and the risk to other patients. After three weeks' hospital treatment, he was discharged home to the boarding house. He was advised to wear a mask whenever he left his room; a microwave was provided for heating his meals; and he was allowed to socialise with his friends outside. Later we helped him get his first home, a flat situated near his friends.

Negotiating treatment times

It is important that the TB medication is taken daily for the first two months; for the remaining treatment it can be given in larger doses twice weekly. It was decided to set firm boundaries around medication management from the very beginning. The first morning after Mr D's hospital discharge I visited him at home with the local Medical Officer of Health and a contract which would oblige him to be home every day between 8 and 9 am and to take his medication. He refused to sign the contract, because he felt it would be impossible to always be at home, but he could promise to always have his cell phone switched on so I could phone each day to establish his whereabouts. Mostly, if the cell phone battery had not gone flat or he had not lost his cell phone, this arrangement worked well. When his cell phone was not working, I would contact his friends or his sister who could tell me his whereabouts. I medicated him in many settings — the beach, his friends' flats, the local district court cell, at court, at parties.

He quickly understood the potential combined effect of alcohol and the TB medication on his liver, most often substituting alcohol with drugs. He managed to do this for several months until he succumbed to pressure from his peers. During this time he was on twice-weekly medication, which was administered Monday and Thursday mornings. Wednesday was benefit day and in the evening he would often binge on alcohol. Thursday mornings then became problematic because he would try to avoid taking the medication by not answering the door or cell phone. On two occasions he admitted pretending to take his medication and throwing it away because he was worried about the effect it would have on his liver after heavy drinking sessions the night before. These were the only doses he missed in his treatment. Once we identified this as an issue we administered the Thursday dose late in the afternoon.

Maintaining personal safety

There were many occasions when I felt unsafe, particularly when Mr D had been bingeing on alcohol or drugs. I would then leave the flat and return later. As a team we often discussed this issue and we decided I would always phone Mr D before visiting to assess the situation. If in doubt, I visited with another nurse or met in a neutral place like the beach. I always carried a cell phone and let another team member know where I was.

Mr D completed nine months of treatment. Eight other people were diagnosed with TB as a result of their contact with him, three of them young children. Of the 117 people screened, 29 had positive mantoux tests and 15 were given Isoniazid treatment for latent TB. Many of these required DOT to ensure they completed the treatment. We helped two other family members move into more suitable accommodation.

In contrast to Mr D is the case of another TB client I dealt with who had a similar chest x-ray, sputum smear and culture result. This client was in good employment, owned his own home and car, was married with good support from family and friends. He presented to his GP as soon as he developed a cough and felt unwell. Because there was limited improvement with the introduction of the antibiotics, a chest x-ray was done and TB was diagnosed within a month of symptom development. The treatment was uncomplicated for this client, no further TB cases were identified and, out of the 79 people screened, only two required Isoniazid treatment.

Mr D's case was challenging and taught me many lessons. I learned the importance of putting aside my own values and seeing the good in someone else's; of emphasising the good points in people who have been faced with negative messages throughout their lives. I learned relationships need to have boundaries and take time to develop. I learned never to judge, to be patient and flexible, and to let the patient lead the way. I learned that people learn differently and that persistently reiterating health messages is important — when the time is right, the client will take on board the information you are trying to give. Finally, I learned to appreciate the strength and support of a good nursing team and to maintain a sense of humour. •

** Some details have been changed to protect patient confidentiality.*

Andrea Vause, RN, BN, is a public health nurse working for regional public health in Lower Hutt. This article is based on a presentation she gave at the National Navigating Futures Tuberculosis Conference in March 2006 in Wellington.

Reference

1) National Health Committee. (1998) *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*. Wellington: Ministry of Health.

Case studies

Please feel free to complete during your time with the Communicable Disease & Housing team.

CASE ONE

Jenny is a 25-year-old woman who is 5 months pregnant when she is diagnosed with Miliary TB. Her sputum results show that she is fully sensitive to all our usual TB medications.

>> What is miliary TB?

_____

_____

>> Is miliary TB always pulmonary, or can it be extra-pulmonary?

_____

_____

>> What medications do you expect her to be prescribed? Do you expect these will be different to standard regime because she is pregnant – i.e. type of medication, length of treatment?

_____

_____

>> How long will Jenny be considered infectious for after she has commenced taking treatment?

_____

_____

>> Will there need to be any special precautions when Jenny delivers the baby?

_____

_____

>> What does her diagnosis of TB mean for her unborn child? Is there any chance she can pass TB on to her unborn child? What special considerations do you think may be needed (for baby) once the baby is born?

_____

_____

CASE TWO

Fredrico is a 25 year old male who presents to his GP and tells the medical receptionist at the front desk he is feeling miserable. The receptionist notices he has a red rash over his face, and the whites of his eyes look red and uncomfortable.

The doctor sees Fredrico in their room and their assessment is as follows:

25 year old male, currently traveling through NZ on a visitors visa. Describes 2-3/7 hx of sore throat, cough, and runny nose. He was meant to travel to Rotorua with a friend yesterday but decided to stay in Wellington due to illness. Describes fever starting yesterday and woke up this morning with a red spotty rash over his forehead. This has spread to his trunk and back.

Originally from Uruguay, arrived in NZ Approx. 10/7 Beijing on an Air New Zealand flight. Stopped in Auckland for approx. 8 hours.

Chest clear, HS normal.

Rash – macropapular face, neck, trunk, back.

>> What could Fredrico be unwell with?

_____

_____

>> What are the important considerations when following up an illness like this?

_____

_____

>> What is the recommended test to order to confirm dx?

_____

_____

>> After public health has been informed, what would some questions be that the nurse would ask the patient?

_____

_____

CASE THREE

Referral for a 26-year-old woman with suspected pertussis.

>> What are the clinical features of pertussis?

1._____

2._____

3._____

4._____

5._____

>> What area of the body should be swabbed for pertussis? What type of swab would you use?

_____

_____

>> What is the incubation time for pertussis?

_____

_____

>> What is the infectivity period for pertussis?

_____

_____

>> How long do symptoms last?

_____

_____

>> What is the preferred treatment prescribed to treat pertussis?

_____

_____

>> When would you not use antibiotics?

_____

_____

>> For household contacts, what questions would you ask?

1._____

2._____

3._____

4._____

5._____

>> Who are the high-risk individuals that need to be identified?

_____

_____

>> What information you would give to these individuals re pertussis?

_____

_____

>> On the immunisation schedule at what age are you vaccinated for pertussis and what is also included in the vaccine?

_____

_____

>> What other groups are also eligible for vaccination?

_____

_____

CASE FOUR

>> What are the different types of meningitis?

>> Which ones are followed up by Regional Public Health?

>> Where does Neisseria Meningitis live in the body?

>> What percentage of the population is a carrier of Neisseria Meningitis?

>> Why would it activate in some and not others?

>> Which contacts are eligible for chemo prophylaxis?

>> What information would you give these contacts?

>> Who is eligible for vaccination for meningitis in NZ?

>> Is there a cost?

CASE FIVE

A seven-year-old child presents to her GP with a short history of sore throat and is prescribed antibiotics. 3 weeks later she experiences migrating polyarthralgia and fevers.

>> What is Rheumatic Fever?

_____

_____

>> What are the symptoms?

_____

_____

>> What are the diagnostic criteria for Rheumatic Fever?

_____

_____

>> What is the role of RPH in working with Rheumatic Fever patients?

_____

_____

>> What is the treatment regime, and for how long?

_____

>> Who delivers the treatment?

_____

>> What is the age group and ethnicities most at risk for this disease?

_____

CASE SIX

Jeremy is a 40-year-old male, with a 5 month history of a productive cough. He is an inmate of a local prison, however is seriously assaulted and is transported to ED by ambulance with significant injuries. He is admitted to ICU Hutt Hospital, however after 2 days is then transferred to ICU Wellington Hospital. Three weeks after his admission to Wellington ICU, a sputum test confirms smear positive (2+AFB) pulmonary TB.

>> What precautions are put in place in hospital following the diagnosis?

_____

_____

>> What does a smear test positive mean? What are the different grading's of the smear test and how does the grading impact our contact tracing plan?

_____

_____

>> Jeremy is transferred to a brain injury unit for ongoing care. He has received 2 weeks of TB treatment prior to being transferred. Are the same hospital precautions required at the unit?

_____

_____

>> Jeremy has likely been infectious for the last 5 months. Pulmonary TB is airborne/droplet spread. Considering this, who might be the 'contacts' or groups of people that require a public health screening?

_____

_____

>> When screening we complete a health/symptom questionnaire. What are the four typical symptoms of TB?

_____

_____

>> What are the two tests (one for <7 years, one for >7 years) that are used to screen for exposure to TB? What do each of these tests involve?

_____

_____

>> If an adult or child is asymptomatic but has a positive TB screening result, they likely have LTBI. What is LTBI and how does it differ to TB?

_____

_____

>> Can LTBI be cured? Statistically, what are the risks of developing TB if LTBI is left untreated? And if treated?

_____

_____

Notes

Notes


Perú

Perform

Working with your preceptor, and after you feel confident and competent in these areas, complete the following sign offs:

Doing/applying
Building confidence and competence on placement and then applying this learnt knowledge

3-4 weekly placement

- ☐ Do a home visit with your preceptor, discuss safety precautions ___/___/____
- ☐ Work with your preceptor taking new TB case ___/___/____
- ☐ Complete some TB contact screening questionnaires ___/___/____
- ☐ Watch a PHN do a VA assessment and Ishihara's assessment ___/___/____
- ☐ When feeling confident, do a VA assessment and Ishihara's test with the support of your preceptor ___/___/____
- ☐ Attend a Refugee transition visit, do one with support and if time and opportunity presents itself ___/___/____
- ☐ Complete an outbreak questionnaire if the opportunity presents itself ___/___/____
- ☐ Attend an ID or Respiratory Clinic appointment ___/___/____
- ☐ Attend a pre-TB meeting, TB meeting or post-TB meeting ___/___/____
- ☐ Familiarise yourself with TB medication prescribed and check medication with Preceptor ___/___/____
- ☐ With the support of your Preceptor, generate a lab request form for a patient on TB treatment ___/___/____
- ☐ Shadow your Preceptor when they are on-call for phones, follow up notifications for a vaccine preventable illness. Present a summary of case to a medical staff member. Document in notes. Practice on the nursing team if you'd like ___/___/____
- ☐ Deliver a teaching session on an area or communicable diseases or other relevant topic of interest to you to team members at a team meeting. This may also be an objective or weekly goal that you need to research and deliver to us. ___/___/____
- ☐ Watch a PHN do a throat swab for Rheumatic Fever, then do one if opportunity presents itself ___/___/____

9 weekly placement

☐	Do a home visit with your preceptor, discuss safety precautions	___/___/____
☐	Work with your preceptor taking new TB case	___/___/____
☐	Complete some TB contact screening questionnaires	___/___/____
☐	Watch a PHN do a VA assessment and Ishihara's assessment	___/___/____
☐	When feeling confident, do a VA assessment and Ishihara's test with the support of your preceptor	___/___/____
☐	Attend a Refugee transition visit, do one with support and if time and opportunity presents itself	___/___/____
☐	Complete an outbreak questionnaire if the opportunity presents itself	___/___/____
☐	Attend an ID or Respiratory Clinic appointment	___/___/____
☐	Attend a pre-TB meeting, TB meeting or post-TB meeting	___/___/____
☐	Familiarise yourself with TB medication prescribed and check medication with Preceptor	___/___/____
☐	With the support of your Preceptor, generate a lab request form for a patient on TB treatment	___/___/____
☐	Shadow your Preceptor when they are on-call for phones, follow up notifications for a vaccine preventable illness. Present a summary of case to a medical staff member. Document in notes. Practice on the nursing team if you'd like	___/___/____
☐	Deliver a teaching session on an area or communicable diseases or other relevant topic of interest to you to team members at a team meeting. This may also be an objective or weekly goal that you need to research and deliver to us.	___/___/____
☐	Watch a PHN do a throat swab for Rheumatic Fever, then do one if opportunity presents itself	___/___/____
☐	Be assigned a new TB case, attend and ID/Respiratory appointment, commence treatment, contact trace if required, follow up as required	___/___/____
☐	Manage a new communicable disease case that is notified to us and respond appropriately and provide any follow-up public health work	___/___/____

Resources

Resources

- http://www.rph.org.nz/content/f2f97f8e-8f80-4543-9bc8-af943ef940b5.html
- New Zealand Health Strategy
- http://www.sustaintrust.org.nz/
- http://www.healthyhousing.org.nz
- http://www.rph.org.nz/housing
- http://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga
- https://www.health.govt.nz
- www.cochranelibrary.com
- www.immune.org
- http://www.who.int/healthpromotion/conferences/previous/ottawa/en/
- http://www.health.govt.nz/our-work/regulation-health-and-disability-system/section-125-health-act-1956-medical-examination-children
- http://www.pha.org.nz
- https://3d.communityhealthpathways.org/

Online Learning/Reading Opportunities

- Te Tiriti o Waitangi | Treaty of Waitangi course on Ko Awatea Learn, if you haven't completed
- Ottawa Charter
- Introduction to Public Health Nursing in NZ
- Quota Refugee Programme
- Building Cultural Competency with Culturally & Linguistically Diverse (Groups) CALD
- COVID-19 Training https://learnonline.health.nz/

The following table gives you web links to click and learn about communicable diseases:

Te Whatu Ora Health New Zealand COVID-19 Information	The MoH COVID-19 website for the latest updates, information and advice, click here • Advice for all health professionals • Case definition and testing guidance for COVID-19 • PPE use in health care • Health & disability services at different alert levels • Contact tracing for COVID-19 • Protecting yourself and others from COVID-19 • COVID-19: Self-isolation Other references for interest (hyperlinked) • PHU Contact Tracing "Deep Dive": Rapid Reports • Assessment and testing for COVID-19
Te Whatu Ora Health New Zealand Health New Zealand	https://www.tewhatuora.govt.nz/ Communicable Disease Manual Healthy Homes Initiative
ESR Science for Communities	https://www.wellkiwis.co.nz/
World Health Organization	The WHO COVID-19 Dashboard provides the latest international health intelligence, click here
CDC Centers for Disease Control and Prevention	The CDC COVID-19 information page provides a range of health information for the public and for healthcare professionals, health departments and laboratories. Click here
External online COVID-19 case and contact management training courses	i. John Hopkins University COVID-19 Contact Tracing. Five hours to complete – with a certificate on completion ii. MoH COVID-19 Case Investigation training. Four modules, approx. 20 minutes each iii. ESR Introduction to basic case investigation process and case investigation process for COVID-19. 2 courses, approximately 20 minutes each.


Hello!

Sign-off

Please take some time and complete this survey at the end of your placement with us.

www.surveymonkey.com/r/F7C5QF5

Te Whatu Ora
Health New Zealand
Capital, Coast, Hutt Valley and Wairarapa

Created by Joe Moorman & Designed by Siobhan Murphy
Te Whatu Ora | National Public Health Service