

NEW CURRICULA

Curriculum standards

Advanced Training in Public Health Medicine

February 2025



RACP
Specialists. Together

About this document

The new Advanced Training in Public Health Medicine curriculum consists of curriculum standards and learning, teaching, and assessment (LTA) programs.

This document outlines the curriculum standards for Advanced Training in Public Health Medicine for trainees and supervisors. The curriculum standards should be used in conjunction with the Advanced Training in Public Health Medicine [LTA programs](#).

The new curriculum was approved by the College Education Committee in February 2025. Please refer to the [College website](#) for details on its implementation.

Contents

Program overview	3
Purpose of Advanced Training	3
Specialty overview	4
Advanced Training curricula standards	9
Professional Practice Framework.....	10
Learning, teaching, and assessment structure	11
Curriculum standards.....	12
Competencies.....	12
Entrustable Professional Activities	19
Knowledge Guides.....	72

Program overview

Purpose of Advanced Training

The RACP offers Advanced Training in 33 diverse medical specialties as part of Division, Chapter, or Faculty training programs.

The purpose of Advanced Training is to develop a workforce of physicians who:

- have received breadth and depth of focused specialist training, and experience with a wide variety of health problems and contexts
- are prepared for and committed to independent expert practice, lifelong learning, and continuous improvement
- provide safe, high quality health care that meets the needs of the communities of Australia and Aotearoa New Zealand.



The Australasian Faculty of Public Health Medicine respects Australian Aboriginal and Torres Strait Islander peoples and the Māori peoples of Aotearoa New Zealand as Indigenous peoples respectively of these two countries. We respectfully use the shorter phrase “Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)” in the remainder of the curriculum materials.

Specialty overview

Public health physicians are medical specialists with a duty of care for populations, rather than individuals. They lead multidisciplinary teams to solve complex health problems and make sound evidence-based decisions at a systems level to act effectively to protect and improve the health and wellbeing of whole populations, including Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua).

Public health medicine focuses on prioritising upstream prevention, bringing evidence-informed approaches and leading interventions across the broad determinants of health. Public health physicians mobilise action to protect, promote, and improve the health of populations. As a contemporary medical speciality, public health medicine recognises the historical and continuing conditions of British colonisation causing inequities in population health and wellbeing in both Australia and Aotearoa New Zealand.

Public health physicians work at the interface of population needs assessment, evidence generation, clinical medicine, health administration, and sociopolitical action. They recognise the critical role of the social determinants of health in shaping individual and population health outcomes.

Public health physicians work in multidisciplinary teams across a variety of settings, including:

- state and federal government
- non-governmental organisations
- Aboriginal, Torres Strait Islander, and Māori (tangata whenua) community-controlled peak bodies and service organisations
- research and educational institutions.

Public health physicians provide expert advice and leadership on a diverse range of public health issues by understanding critical structural determinants, interdependencies, risks, evidence, and uncertainty. They are most deeply cognisant of the ‘causes of the causes’ of ill health. They are also trained to identify and address health disparities, expanding focus to strengths-based strategies, sustainability, and proven enablers for positive health improvement.

Public health physicians protect, promote, and improve the health of populations through regulation, programs, and policy, and lead and manage staff in population health settings. They develop and contribute to strategies to prevent disease, including primordial prevention, action on social and physical environments, and individual prevention, such as national immunisation schedules and screening programs. They lead case, contact, and outbreak management. Public health physicians are also trained to communicate effectively with stakeholders and the community for social impact.

Public health physicians have knowledge and expertise in:

- **health research, epidemiology and surveillance, including:**
 - » gathering and assessing scientific evidence to translate findings to real-world policy and practice
 - » using quantitative and qualitative analytic methods to describe, monitor, and model disease occurrence and specific health needs within populations and determine the drivers of ill health
 - » research ethics, and emerging tools such as network analysis, big data and data linkage, whole genome sequencing, and artificial intelligence (AI)
- **systems thinking, including:**
 - » identifying and incorporating structural and upstream factors acting through non-linear, complex dynamics to population health problems
 - » applying concepts and engaging partners to accelerate health equity and prevent the preventable
- **communicable disease prevention and control, including:**
 - » management of outbreaks of infectious diseases
 - » cost-effective immunisation policies and practice
 - » protecting communities from existing and emerging health risks
- **non-communicable disease prevention and control, including:**
 - » chronic disease prevention and public health management
 - » assessing, ameliorating, and preventing risk factor exposure
- **environmental health risks, including:**
 - » health impact and environmental risk assessments to respond to risks, including work hazards
 - » global climate change
 - » emergency and disaster planning and response
 - » regulatory practice to reduce public health risks
 - » coordinating accurate disease and early lead indicator surveillance to detect and identify emerging health threats and risks
- **broader determinants of health, with a focus on equity, including:**
 - » identifying social, cultural, economic, political, historical, and commercial determinants of health
 - » identifying the relativity of these determinants as factors influencing population and public health
 - » identifying how these determinants of health appear as barriers in public health governance, policy, programs, and workplaces.

Public health medicine is complex, multidisciplinary, collaborative, and accountable over long-term timeframes to entire societies.

Public health physicians address complex population health needs to engage and lead in:

- **responses to urgent and/or evolving public health issues, including:**
 - » outbreaks of infectious diseases
 - » risks to health from environmental exposures, including climate change
 - » disasters and other emergencies with a health element

- **designing, developing, implementing, operating, and evaluating projects, programs, health services, regulatory bodies, and systems levels interventions for:**
 - » promotion, maintenance, and improvement of health and wellbeing
 - » prevention of ill health and disease
 - » assessing the health needs of populations, analysing proposals from economic, equity, and ethical perspectives, conducting priority setting, and planning, implementation, and evaluation
 - » gathering, critically appraising, analysing, and synthesising population health information to drive public health action
- **analysing, developing, and planning health policy and legislation:**
 - » providing technical expertise for policy decisions, including legislation and mobilising statutory regulatory actions
- **intersectoral and health service planning, operation, and management, including:**
 - » intersectoral systems and public health approaches
 - » healthcare service redesign, including effective strategies to eliminate institutional racism through codesign
 - » working across all branches of government
 - » high-value health care, quality, and safety.

Public health physicians combine their clinical knowledge and experience with the scientific foundations of epidemiology and other disciplines to inform their practice to promote, protect, and improve the health of populations. They collaborate with and enable populations and communities, clinicians, policymakers, and other health and non-health stakeholders to identify and manage health threats using robust, culturally appropriate evidence to guide practice.

To support self-determination by Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua), public health physicians exhibit cultural humility and, in acknowledging disciplinary limitations, foster effective culturally informed, multidisciplinary and participatory public health action.

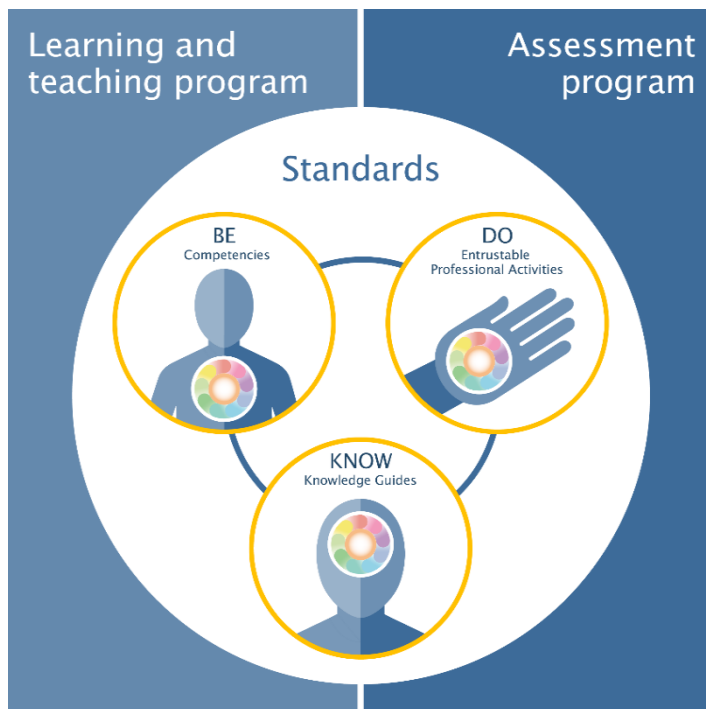
Public health physicians demonstrate the following attributes, behaviours and qualities:

- **leadership and accountability:**
 - » developing effective solutions for population and public health by combining public health disciplines with professional medical insights gained through clinical experience
 - » managing complex decision making in rapidly changing environments across a variety of portfolios
 - » leading and managing the public health workforce
 - » managing uncertainty
 - » accepting responsibility and accountability for decisions and actions
 - » adopting a flexible and tailored approach, leading, supporting, or linking depending on the needs of the situation and stakeholders
 - » acknowledging structural and historical social determinants of health, and mobilising capabilities and strengths at system, institutional, and individual levels, leading as required with discipline-specific expertise
- **teamwork and collaboration:**
 - » working in a variety of teams with health and non-health professionals

- **context and cultural awareness:**
 - » appreciating that population health and the uptake of public health strategies reflects social, cultural, political, and intergenerational factors, and practise accordingly
 - » tailoring and adapting roles to unmet needs in context, and amplifying public health action as required for the context of the public health problem
 - » acting as cross-cultural partners
 - » contextualising and sharing disciplinary knowledge
 - » identifying and addressing the impacts of colonisation and 'white capitalism' in public health systems on non-white populations, and acting to reverse these impacts
 - » seeking and incorporating the knowledge and ways of being, knowing, and doing of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)
 - » redressing power inequities that affect health and wellbeing
- **knowledge translation and effective communication:**
 - » bringing expertise in evidence gathering and interdisciplinary approaches to population and public health to initiate and sustain partnerships and increase capacity for more effective interventions, strategies, policy, and practice
 - » surveying and analysing disease trends and early lead indicators for health and wellbeing
 - » effective risk communication, including using mass media effectively
 - » tailoring health information to populations, media, colleagues, policymakers, and others using varied formats, feedback, and evaluation for precise, culturally appropriate, and effective health messages
- **quality improvement and safety:**
 - » regularly reviewing and evaluating their practice alongside peers and best practice standards
 - » conducting continuous quality improvement activities
- **lifelong learning and continuing professional development:**
 - » always practising safely and effectively
 - » ensuring personal and professional capabilities to practise in culturally responsive ways
 - » seeking feedback on cultural safety as a human right for Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)
- **mentoring, teaching, and supervision:**
 - » contributing to professional practice standards through workplace supervision, academic teaching, and collegial fellowship
 - » addressing structural impediments to equitable access to training, workforce, and career advancement
- **research:**
 - » supporting the creation, dissemination, and translation of knowledge and practices applicable to health
 - » critically appraising research and applying it to policy and practice to improve the health of populations
- **ethics and professional behaviour:**
 - » high standards of personal behaviour
 - » treating colleagues and community in a caring and respectful manner
 - » acting ethically in all facets of practice

- **advocacy:**
 - » applying medical and population health expertise to earn professional and public trust and advocate for better health for all people
 - » working with other organisations and groups who may be marginalised or discriminated against, including as a good 'ally'
 - » recognising when it is most appropriate for the organisation / group to lead and the public health physician to provide support, such as with technical skills, or taking the lead when appropriate in advocacy action
 - » leading by example, such as being environmentally responsible
- **equity:**
 - » contributing to positive health for all and the elimination of inequities in health outcomes in collaboration with priority populations
 - » recognising the institutionalisation of injustice and acknowledging the importance of the leadership of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) in ethical research methods and Indigenist enquiry.

Advanced Training curricula standards



The **RACP curriculum model** is made up of curricula standards supported by learning, teaching, and assessment programs.

Learning and teaching programs outline the strategies and methods to learn and teach curricula standards, including required and recommended learning activities.

Assessment programs outline the planned use of assessment methods to provide an overall picture of the trainee's competence over time.

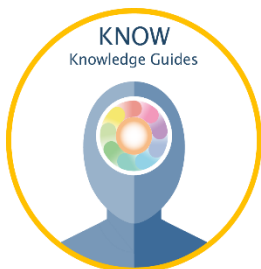
The **curricula standards** outline the educational objectives of the training program and the standard against which trainees' abilities are measured.



- **Competencies** outline the expected professional behaviours, values and practices of trainees in 10 domains of professional practice.



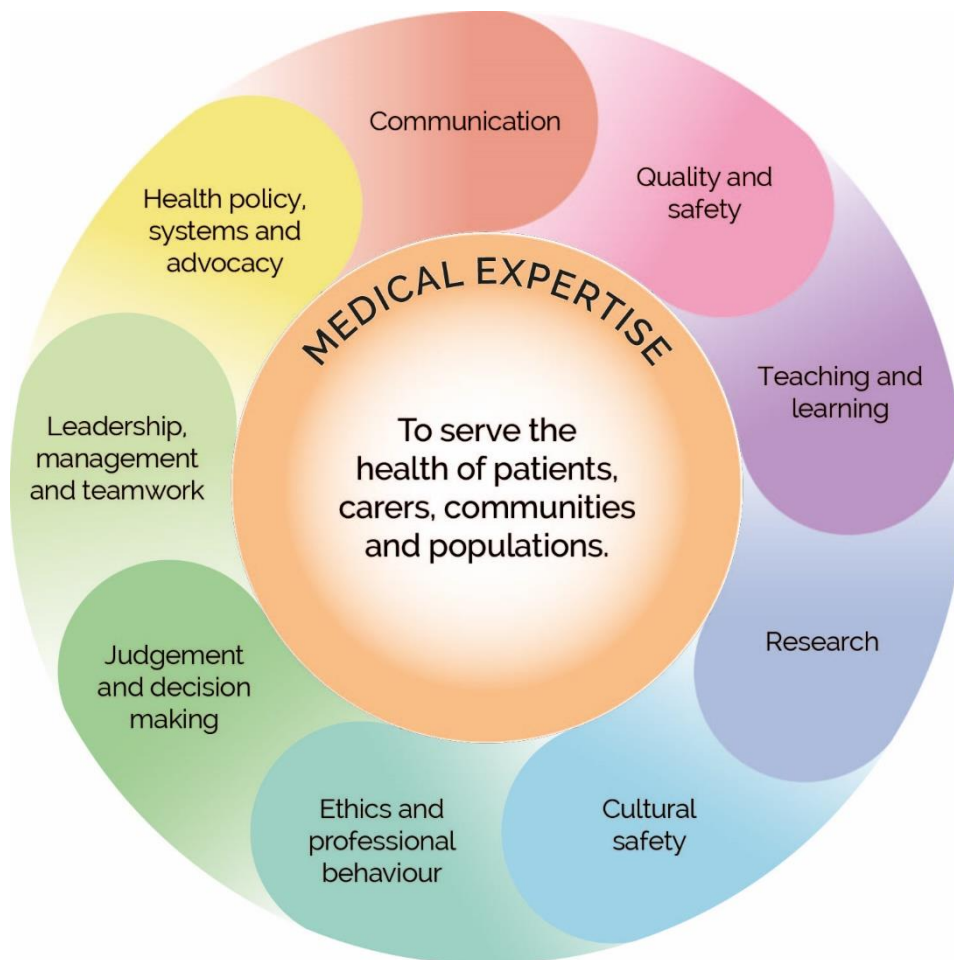
- **Entrustable Professional Activities** (EPAs) outline the essential work tasks trainees need to be able to perform in the workplace.



- **Knowledge guides** outline the expected baseline knowledge of trainees.

Professional Practice Framework

The Professional Practice Framework describes 10 domains of practice for all physicians.



Learning, teaching, and assessment structure

The learning, teaching, and assessment structure defines the framework for delivery.



Advanced Training learning, teaching, and assessment structure

- An **entry decision** is made before entry into the program.
- **Progress decisions**, based on competence, are made at the end of the specialty foundation and specialty consolidation phases of training.
- A **completion decision**, based on competence, is made at the end of the training program, resulting in eligibility for admission to Fellowship.

Advanced Training is a **hybrid time- and competency-based training program**.

There is a minimum time requirement of between three to five years' full-time equivalent experience, depending on the training program undertaken. Progress and completion decisions are based on evidence of trainees' competence.

Curriculum standards

Competencies

Competencies outline the expected professional behaviours, values, and practices that trainees need to achieve by the end of training.

Competencies are grouped by the 10 domains of the professional practice framework.

Competencies will be common across training programs.

About the RACP common competencies

The competencies are intended to be common across all Advanced Training programs. It has been recognised that some customisation of the competencies may be necessary for Public Health Medicine. The proposed customisations are reflected in this document as tracked changes and are subject to approval by the RACP College Education Committee.



Medical expertise

Professional standard: Physicians apply knowledge and skills informed by best available current evidence in the delivery of high-quality, safe practice to facilitate agreed health outcomes for individual patients¹ and populations.

Knowledge: Apply knowledge of the scientific basis of health and disease to the diagnosis and management of patients and the management of population-level health risks.

Synthesis: Gather relevant data via age- and context-appropriate means to develop reasonable differential diagnoses and management plans, recognising and considering interactions and impacts of comorbidities and the sociocultural environment.

Assessment and management: Develop assessment and action plans in partnership with patients, families (whānau), carers, and communities, and in collaboration with healthcare teams, partner organisations, and other relevant stakeholders, integrating an understanding of the public health issue with population circumstances, including population dynamics and collective strengths, epidemiology, and the sociopolitical context.

¹ References to patients in the remainder of this document may include their families, whānau, and/or carers.



Communication

Professional standard: Physicians collate information and share this information clearly, accurately, respectfully, responsibly, empathetically, and in a manner that is understandable.

Physicians share information responsibly with patients, families, carers, colleagues, community groups, the public, and other stakeholders to facilitate optimal health outcomes.

Effective communication: Use a range of effective and appropriate verbal, nonverbal, written, and other communication techniques, including active listening.

Communication with patients, families (whānau), carers, and communities: Use collaborative, effective, and empathetic communication with patients, families, carers, and communities.

Communication with professionals and professional bodies: Use collaborative, respectful, and empathetic clinical communication with colleagues, other health professionals and providers, professional bodies, partner organisations, and other agencies.

Written communication: Document and share information to optimise the health and safety of patients and communities.

Privacy and confidentiality: Maintain appropriate privacy and confidentiality and share information responsibly.



Quality and safety

Professional standard: Physicians practice in a safe, high-quality manner within the limits of their expertise.

Physicians regularly review and evaluate their own practice alongside peers and best practice standards, and conduct continuous improvement activities.

Patient and community safety: Demonstrate a safety focus and continuous improvement approach to own practice and health systems.

Harm prevention and management: Identify, record, and report risks, adverse events, and errors to improve own practice and health systems.

Quality improvement: Participate in quality improvement activities to improve quality of practice and safety of the work environment.

Engagement: Enable patients, families (whānau), and communities to contribute to the safety of their care and prioritise their concerns among quality improvement activities.



Teaching and learning

Professional standard: Physicians demonstrate a lifelong commitment to excellence in practice through continuous learning and evaluating evidence.

Physicians foster the learning of others in their profession through a commitment to mentoring, supervising, and teaching.²

Lifelong learning: Undertake effective self-education and continuing professional development.

Self-evaluation: Evaluate and reflect on gaps in own knowledge and skills to inform self-directed learning.

Supervision: Provide supervision for junior colleagues and/or team members.

Teaching: Apply appropriate educational techniques to facilitate the learning of colleagues and other health professionals.

Education of patients, families (whānau), groups, and communities: Apply appropriate educational techniques to promote understanding of health and disease amongst patients and populations.



Research

Professional standard: Physicians support the creation, dissemination, and translation of knowledge and practices applicable to health.²

They do this by engaging with and critically appraising research, and applying it in policy and practice to improve the health outcomes of patients and populations.

Evidence-based practice: Systematically search and critically analyse relevant literature and refer to evidence-based guidelines, policies, and frameworks, and apply these in daily practice.

Research: Apply research methodology to add to the body of knowledge and improve practice and health outcomes.

² Adapted from Richardson D, Oswald A, Chan M-K, Lang ES, Harvey BJ. Scholar. In: Frank JR, Snell L, Sherbino J, editors. The Draft CanMEDS 2015 Physician Competency Framework – Series IV. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2015 March.

Cultural safety



Professional standard: Physicians engage in iterative and critical self-reflection of their own cultural identity, power, biases, prejudices and practising behaviours. Together with the requirement of understanding the cultural rights of the community they serve; this brings awareness and accountability for the impact of the physician's own culture on decision-making and healthcare delivery. It also allows for an adaptive practice where power is shared between patients, family, whānau and/or community and the physician, to improve health outcomes.

Physicians recognise the patient and population's rights for culturally-safe care, including being an ally for patient, family, whānau and/or community autonomy and agency over their decision-making. This shift in the physician's perspective fosters collaborative and engaged therapeutic relationships, allows for strength-based (or mana-enhanced) decisions, and sharing of power with the recipient of the care, optimising health care outcomes.

Physicians critically analyse their environment to understand how colonialism, systemic racism, social determinants of health and other sources of inequity have and continue to underpin the healthcare context. Consequently, physicians then can recognise their interfacing with, and contribution to, the environment in which they work to advocate for safe, more equitable and decolonised services and create an inclusive and safe workplace for all colleagues and team members of all cultural backgrounds.³

Critical reflection. Engage in iterative and critical self-reflection and demonstrate cultural safety in the context of their own cultural identity, power, biases, prejudices and practising behaviours.

Allyship. Recognise the patient and population's rights to culturally-safe care, including being an ally for patient, family, whānau and/or community autonomy and agency over their decision-making.

Inclusive communication. Apply culturally-safe communication, acknowledging the sharing of power, and cultural and human rights to enable patients, families and whānau to engage in appropriate patient care decisions.

Culturally-safe environment. Contributes to a culturally-safe learning and practice environment for patients and team members. Respect patients may feel unsafe in the healthcare environment.

³ The RACP has adopted the Medical Council of New Zealand's definition of cultural safety (below):

Cultural safety can be defined as¹.

- The need for doctors to examine themselves and the potential impact of their own culture on clinical interactions and healthcare service delivery.
- The commitment by individual doctors to acknowledge and address any of their own biases, attitudes, assumptions, stereotypes, prejudices, structures, and characteristics that may affect the quality of care provided.
- The awareness that cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities.

1. Curtis et al. "Why cultural safety rather than cultural competency is required to achieve health equity". International Journal for Equity in Health (2019) 18:174



Ethics and professional behaviour

Professional standard: Physicians' practice is founded upon ethics, and physicians always treat patients, their families, communities, and populations in a caring and respectful manner.

Physicians demonstrate their commitment and accountability to the health and wellbeing of individual patients, communities, populations, and society through ethical practice.

Physicians demonstrate high standards of personal behaviour.

Beliefs and attitudes: Reflect critically on personal beliefs and attitudes, including how these may impact on the care of individuals and populations.

Honesty and openness: Act honestly, including reporting accurately, and acknowledging their own errors.

Patient and population welfare: Prioritise patients' welfare and community benefit above self-interest, with a focus on equity.

Accountability: Be personally and socially accountable.

Personal limits: Practice within their own limits and according to ethical principles and professional guidelines.

Self-care: Implement strategies to maintain personal health and wellbeing.

Respect for peers: Recognise and respect the personal and professional integrity, roles, and contribution of peers.

Interaction with professionals: Interact equitably, collaboratively, and respectfully with other health and non-health professionals.

Respect and sensitivity: Respect others, including patients, families (whānau), and communities, maintaining appropriate relationships, and behaving with a pro-equity approach.

Privacy and confidentiality: Protect and uphold the rights of patients, colleagues, and communities to privacy and confidentiality.

Compassion and empathy: Demonstrate a caring attitude towards patients and communities, and endeavour to understand their culture, values, and beliefs.

Health needs: Understand and address the physical and emotional health needs of patients, families (whānau), carers, colleagues, and communities.

Medical and health ethics and law: Practise according to current community and professional ethical standards and legal requirements.



Judgement and decision making

Professional standard: Physicians collect and interpret information, and evaluate and synthesise evidence, to make the best possible decisions in their practice.

Physicians negotiate, implement, and review their decisions and recommendations with patients, their families and carers, and other health professionals.

Evidence-based reasoning: Apply sound evidence-based reasoning to public health issues to make logical and safe planning and management decisions.

Resource allocation: Apply judicious and cost-effective use of health resources to their practice.

Task delegation: Apply good judgement and decision making to the delegation of tasks.

Limits of practice: Recognise their own scope of practice and consult others when required.

Shared decision making: Contribute effectively to shared decision-making processes.



Leadership, management, and teamwork

Professional standard: Physicians recognise, respect, and aim to develop the skills of others, and engage collaboratively to achieve optimal outcomes for patients and populations.

Physicians contribute to and make decisions about policy, protocols, and resource allocation at personal, professional, organisational, and societal levels.

Physicians work effectively in diverse multidisciplinary teams and promote a safe, productive, and respectful work environment that is free from discrimination, bullying, and harassment.

Managing others: Lead teams, projects, programs, and organisations, including setting directions, resolving conflicts, and managing individuals, teams, and partners.

Wellbeing: Consider and work to ensure the health and safety of colleagues and other health professionals.

Leadership: Act as a role model and leader in professional practice.

Teamwork: Negotiate responsibilities within the healthcare team and function as an effective team member.



Health policy, systems, and advocacy

Professional standard: Physicians apply their knowledge of the nature and attributes of local, national, and global health systems to their own practices. They identify, evaluate, and influence health determinants through local, national, and international policy.

Physicians deliver and advocate for the best health outcomes for all patients and populations.

Health needs: Respond to the health needs of the local community and the broader health needs of the people of Australia and Aotearoa New Zealand.

Prevention and promotion: Incorporate disease prevention, health promotion, and health surveillance into interactions with groups, collectives, and communities.

Equity and access: Work with communities, partners, and stakeholders to address determinants of health and support equitable access to health services and resources.

Stakeholder engagement: Work with communities and other stakeholders to identify strengths and priority problems and co-design solutions.

Advocacy: Advocate for prevention, promotion, equity, and access to support patient and population health needs within and outside the clinical environment.

Resource allocation: Understand the factors influencing resource allocation, promote efficiencies, and advocate to reduce inequities.

Sustainability: Manage the use of healthcare resources responsibly in everyday practice.

Entrustable Professional Activities

Entrustable Professional Activities (EPAs) outline the essential work tasks trainees need to be able to perform in the workplace.



#	Theme	Title
1	Leadership and accountability	Lead effective population and public health responses, programs, and organisations, adapting the leadership style to the situation
2	<i>Title TBA</i>	<i>The AFPHM is committed to co-designing this learning goal with Aboriginal, Torres Strait Islander and Māori (tangata whenua) leaders and experts</i>
3	Supervision and teaching	Provide high-quality learner-centred teaching and supervision for professional colleagues
4	Quality improvement	Identify and address opportunities to improve systems, investments, teams, and strategies to advance population health outcomes, including own practice
5	Incident response	Assess and respond to urgent and/or evolving public health issues, including communicable disease outbreaks, disasters, and events threatening population health
6	Population and public health interventions	Design, develop, implement, and evaluate projects, programs, and systems-level interventions to improve population health and prevent preventable mortality and morbidity
7	Population health information	Gather, critically appraise, analyse, and synthesise information to ensure public health actions are effective, equitable, and efficient
8	Communication and engagement for population health gain	Engage with communities and communicate complex health information, including preventive messages for population health gain
9	Inclusive public health	Identify, navigate, and practice within multisector, complex, trust-dependent, and culturally bounded societies and social systems
10	Policy analysis, development, and planning	Develop, influence, and lead policy to improve public health and purposefully address aspects of health inequities
11	Organisational unit management	Lead and manage organisational units effectively
12	Public health advocacy	Advocate effectively with diverse decision makers, communities, and stakeholders to prevent, promote, and protect the public's health

EPA 1: Leadership and accountability

Theme	Leadership and accountability		AT-EPA-01
Title	Lead effective population and public health responses, programs, and organisations, adapting the leadership style to the situation		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• identify the context you are working within• use an appropriate leadership style (for example, codesigning, delegating, participating, showing, listening, or integrating), dynamically switching styles according to the situation• apply a systems thinking approach to understand and manage complex problems• set priorities for action through consultation, establish and periodically review goals, recognise opportunities, and provide focus• manage uncertainty and unexpected challenges• inspire and enable others, and recognise and encourage individual contributions• effectively manage daily tasks, delegations, and time allocation, according to priorities• articulate individual responsibilities, expertise, and accountability of team members and staff• effectively resolve conflicts• establish effective partnerships and intersectoral action to achieve improved public health outcomes• scan for opportunities to mentor, coach, and support to strengthen current, emerging, and future leaders• undertake horizon scanning to identify emerging threats to public health and new technologies that can be implemented to advance public health• provide appropriate representation of your organisation (such as state, territory, district health board, or public health unit) on any committees or groups you sit on in your leadership role (for example, Communicable Diseases Network Australia or technical reference groups).		
Behaviours			
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision	
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity	
<u>Medical expertise</u>	The trainee will:	The trainee may:	
	<ul style="list-style-type: none">• demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony and advising governments• use evidence-based principles of practice to meet the needs of populations, adapting to cultural context and promoting self-determination	<ul style="list-style-type: none">• demonstrate understanding of some of the nuances of the operational context• apply medical knowledge to assess the impact and outcomes of management initiatives and decisions• practise as a member of multidisciplinary teams• demonstrate competence and skills in public health medicine	

	<ul style="list-style-type: none"> • change viewpoints rapidly and responsibly between macro and micro, working on either big picture or details, as required • identify salient potential issues across a broad range of situations, including from issue analysis, policy development, implementation, response, and public or stakeholder communications • translate public health perspectives and required outputs between people with different expertise, such as clinical, research, and government 	<ul style="list-style-type: none"> • recognise how the policy and practices of other sectors and organisations influence the health of the population • recognise the role of the public health physician within the broader health sector • recognise the role of the public health physician within the broader response landscape
Communication	<ul style="list-style-type: none"> • communicate effectively with a broad range of audiences, including writing, speaking, listening, sharing, and editing • demonstrate a transparent, consultative style by engaging patients⁴, families, whānau, carers, relevant professionals, and/or the public in shared decision making, taking into consideration cultural needs and styles of communication • collaborate across groups and identify shared understandings and core needs and goals to increase the efficiency and effectiveness of collaborations • work with stakeholders, other health professionals, and intersectoral colleagues to resolve conflict that may arise when planning and aligning goals • demonstrate rapport with people at all levels by tailoring messages to different stakeholders • present limitations and uncertainty honestly when communicating findings to others • produce effective reports, briefs, proposals, submissions, and articles on public health issues • deliver presentations in a variety of settings, tailoring the language and content to the audience and situation • demonstrate use of the principles of risk communication at a population level 	<ul style="list-style-type: none"> • recognise different communication approaches for different audiences and situations • develop presentation skills, under supervision, using available tools • develop media skills, under supervision, using available tools • respect the roles of team members • demonstrate excellent writing and word processing skills • use clear, concise language • use email and other written correspondence effectively • deliver presentations in a variety of settings • incorporate principles and methods of trauma-informed service delivery • be able to identify contextual factors that will frame risk communication, such as level of outrage

⁴ References to patients in the remainder of this document may include their families, whānau, and/or carers.

<p>Quality and safety</p>	<ul style="list-style-type: none"> • use frameworks to guide intersectoral action, such as in disaster management • identify opportunities to improve care by participating in surveillance and monitoring of adverse events and 'near misses' • identify activities within systems to reduce errors, improve patient and population safety, and implement cost-effective change • place safety and quality of care first in all decision making • co-design, implement, and use methods to check benefits and harms as experienced by populations affected by public health policies and practice • demonstrate the ability to prioritise professional duties effectively and appropriately when faced with multiple issues and problems • build and apply leadership techniques in daily practice through ongoing learning • maintain personal health and wellbeing and recognise the importance of self-care in the workplace 	<ul style="list-style-type: none"> • participate in audits and other activities that address the priorities of populations with greater health inequity and improve the quality and safety of the health system • participate in multidisciplinary collaboration to provide effective health services and operational change • use and promote information resources and the ethical use of electronic medical record technology where available • develop and share reflective practice using available tools • encourage others to practice continuous quality improvement • advocate for system improvements in response to audit findings • lead by example in quality improvement activities
<p>Teaching and learning</p>	<ul style="list-style-type: none"> • regularly self-evaluate personal professional practice, and implement changes based on the results • actively seek feedback from supervisors and colleagues on their own performance, and implement active processes to maintain and improve performance • identify personal gaps in skills and knowledge, and engage in self-directed learning • maintain up-to-date knowledge of new technologies, health priorities, and changing health needs • learn and use methods to be culturally competent, including anti-racist reflection • teach competently by imparting professional knowledge • manage and monitor learners' progress, providing regular assessment and feedback • evaluate the impact of educational material • advise on educational programs to improve practice 	<ul style="list-style-type: none"> • accept feedback constructively, and change behaviour in response • recognise the limits of personal expertise, and involve other health professionals as needed • demonstrate basic skills in facilitating colleagues' learning • develop skills, under supervision, using available tools • choose appropriate communication media

	<ul style="list-style-type: none"> • initiate and conduct skills training for junior staff • mentor junior colleagues and act as a role model • prioritise offers to Aboriginal and Torres Strait Islander and Māori (tangata whenua) colleagues to mentor, support, and learn 	
Research	<ul style="list-style-type: none"> • establish interdisciplinary collaborations • engage with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) and their political structures, and respect self-determination • display understanding of and support Indigenous-led research • apply for and secure funding • review research proposals • advocate for policy- and practice-relevant research • undertake and use systematic reviews to produce and implement best practice guidelines for the clinical and public health sectors • ensure that any protocol for human research is approved by a human research ethics committee, in accordance with national statements on ethical conduct in human research 	<ul style="list-style-type: none"> • recognise that participation in research is voluntary and based on an appropriate understanding about the purpose, methods, demands, risks, and potential benefits of research • undertake systematic reviews under supervision • write and submit ethics applications under supervision
Cultural safety	<ul style="list-style-type: none"> • demonstrate culturally competent relationships with professional colleagues and communities • demonstrate respect for diversity and difference • support Indigenous-led research • take steps to minimise unconscious bias, including the impact of gender, religion, cultural beliefs, and socioeconomic background on decision making • identify and apply the values and needs of potential health promotion partners, including Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) • co-design with and support self-determination of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) 	<ul style="list-style-type: none"> • demonstrate awareness of cultural diversity, unconscious bias, prejudice, racism in all its forms (including pervasive, systemic, sinuous, and overt racism), and other forms of discrimination • work effectively and respectfully with people from different cultural backgrounds • recognise that different leadership styles may be more or less appropriate within a specific cultural context

Ethics and professional behaviour	<ul style="list-style-type: none"> • promote a team culture of shared accountability for decisions and outcomes • encourage open discussion of ethical concerns • respect differences of multidisciplinary team members • demonstrate an understanding of the ethics of resource allocation • effectively consult with stakeholders, achieving a balance of alternative views • work in partnership with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua), including community-controlled health sector services and political governance structures • acknowledge personal conflicts of interest, racism, prejudice, other types of discrimination (such as sexism, misogyny, transphobia, ableism, and homophobia), and unconscious bias • act collaboratively to resolve behavioural incidents and conflicts such as harassment, bullying, racism, sexism, misogyny, transphobia, ableism, homophobia, and exclusion • identify and appropriately respond to relevant ethical issues arising in the care of individuals, families, groups, organisations, communities, and populations • show respect for knowledge and expertise of colleagues 	<ul style="list-style-type: none"> • support ethical principles in decision making • maintain standards of medical practice by recognising the health interests of patients and populations as primary responsibilities • respect the roles and expertise of other health professionals • work effectively as a member of a team • promote team values of honesty, discipline, and commitment to continuous improvement • demonstrate understanding of the negative impact of workplace conflict
Judgement and decision making	<ul style="list-style-type: none"> • use decision science approaches to formalise decision-making processes and optimise outcomes • make decisions when faced with multiple and conflicting perspectives • ensure medical input to organisational decision making • adopt a systems approach to analysing information from a variety of specialties to make decisions that accelerate health equity in populations • manage contracting processes for the purchase or provision of services, including specifying service and performance measures, selecting providers, and monitoring performance and outcomes 	<ul style="list-style-type: none"> • monitor services and provide appropriate advice • review new healthcare interventions and resources with a pro-equity approach to ensure systemic privilege is experienced by all • interpret appropriate data and evidence for decision making

Leadership,
management,
and teamwork

- switch between leadership styles as required by the situation
- identify, prioritise, and develop a plan of action for issues of importance to public health, especially those that are inequitable
- visualise a 'better' future, inspire with this vision, and consider the steps, resources, structures, and systems that will help achieve this (such as to enhance efficiency, improve access, and minimise harm)
- develop and lead effective multidisciplinary teams by:
 - » building effective relationships
 - » developing and implementing strategies to motivate others
 - » recognising the range of team members' skills, expertise, and roles
 - » combining team members' skills and expertise optimally
 - » expanding perspectives by including matua (elders) and others with expertise and wisdom
 - » collaborating with and motivating team members
 - » encouraging and adopting insights from team members
- ensuring all team members are accountable for their individual practice
- ensuring timely completion of agreed tasks
- adopting a coordination or non-leadership role when required
- give and receive positive and negative feedback
- facilitate and manage meetings, and contribute to good decision-making processes and information and knowledge sharing
- demonstrate understanding of public health legislation and regulations and relevant legislation in other sectors, including human rights commitments, such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and the United Nations Convention on the Rights of the Child (UNCRC)
- recognise the range of other team members' skills, expertise, and roles
- acknowledge and show respect for the contribution of all health professionals involved in improving the health of the population
- participate effectively and appropriately in multidisciplinary teams
- seek out and respect the perspectives of multidisciplinary team members when making decisions
- develop skills in chairing meetings, under supervision, using available tools

	<ul style="list-style-type: none"> • demonstrate understanding of human rights commitments to Aboriginal and Torres Strait Islander peoples and treaty obligations to Māori (tangata whenua) • lead and manage strategic planning, including business case development • lead and manage operational planning • lead organisational change • use processes for job enhancement, recognition, and dispute resolution • determine and analyse options and act within short timelines 	
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • apply principles of systems thinking to analyse and interrogate complex public health issues • identify the key elements of an effective public health advocacy campaign • identify key channels and mechanisms to conduct effective public health advocacy • use the media effectively • use negotiation skills effectively • influence the policy and practices of other sectors / organisations to promote, protect, and improve the health of the population • engage in appropriate consultation with stakeholders on the delivery of health care • advocate for the resources and support for healthcare teams to achieve organisational priorities • influence the development of organisational policies and procedures to optimise health outcomes • remove self-interest from solutions to health advocacy issues 	<ul style="list-style-type: none"> • communicate with stakeholders within the organisation about population health • apply methods used to allocate resources to provide high-quality population health care • promote the development and use of organisational policies and procedures • identify the determinants of health of the population, and mitigate barriers to access to care • recognise the perspectives of different sectors, organisations, cultural groups, and populations involved • recognise and prioritise the population health of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)

EPA 2: title TBA

EPA 2	<i>Title TBA</i>	<i>The AFPHM is committed to co-designing this learning goal with Aboriginal, Torres Strait Islander and Māori (tangata whenua) leaders and experts</i>
-------	------------------	---

EPA 3: Supervision and teaching

Theme	Supervision and teaching		AT-EPA-03
Title	Provide high-quality learner-centred teaching and supervision for professional colleagues		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> provide work-based teaching and support learning in a variety of settings support, facilitate, and model effective teaching of professional skills create a safe and supportive learning environment plan, deliver, and provide work-based assessments encourage learners to be self-directed, identify learning experiences, and engender a culture of lifelong learning supervise learners in day-to-day work, and provide feedback support learners to prepare for assessments. 		
Behaviours			
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision	
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	<ul style="list-style-type: none"> combine high-quality medical practice with high-quality teaching explain the rationale underpinning a structured approach to decision making seek and take account of the views of individuals and communities encourage learners to consider the wider ramifications of advice to individuals and populations encourage learners to consider the rationale and appropriateness of public health actions contribute to the development and delivery of teaching programs about public health supervise trainees from different disciplines to learn about public health 	<ul style="list-style-type: none"> teach learners using basic knowledge and skills impart public health knowledge with some opportunities for the audience to interact, raise questions, or give feedback teach general principles and practice of public health medicine to medical students and junior colleagues 	
Communication	<ul style="list-style-type: none"> establish rapport and demonstrate respect for junior colleagues, medical students, and other health professionals communicate effectively when teaching, assessing, and appraising learners actively encourage a collaborative and safe learning environment with learners and other health professionals 	<ul style="list-style-type: none"> demonstrate accessible, supportive, and compassionate behaviour give a presentation to health professionals on a public health topic provide instructions and convey expectations to medical students or junior colleagues under supervision 	

	<ul style="list-style-type: none"> listen and convey information clearly and considerately 	
Quality and safety	<ul style="list-style-type: none"> support learners to deliver quality medical practice while maintaining their own wellbeing apply lessons learned about safety (including cultural safety) for patients⁵ and communities by identifying and discussing risks with learners assess learners' competence, and provide timely feedback to minimise risks to safe medical practice maintain the safety of patients, communities, and organisations involved with education, and appropriately identify and action concerns maintain personal well-being 	<ul style="list-style-type: none"> observe learners to reduce risks and improve health outcomes reflect on own teaching abilities and style while seeking feedback to improve quality of teaching or supervision
Teaching and learning	<ul style="list-style-type: none"> demonstrate knowledge of the principles, processes, and skills of supervision provide direct guidance to learners in day-to-day work deliver training in a variety of settings (such as small group tutorials and lectures) work with learners to identify professional development and learning opportunities based on their individual learning needs offer feedback and role modelling participate in teaching and supervision professional development activities encourage self-directed learning and assessment develop a consistent and fair approach to assessing learners, recognising that different learners may have different learning needs, such as neurodiverse learners, disabled people, culturally and linguistically diverse populations, Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) tailor feedback and assessments to learners' goals seek feedback and reflect on own teaching by developing goals and strategies to improve 	<ul style="list-style-type: none"> demonstrate basic skills in the supervision of learners apply a standardised approach to teaching, assessment, and feedback, with some consideration for individual learner needs implement teaching and learning activities that capture some of the learning goals adopt a collaborative teaching style provide some guidance to students in self-directed learning

⁵ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	<ul style="list-style-type: none"> establish and maintain effective mentoring through open dialogue support learners to identify and attend formal and informal learning opportunities recognise the limits of personal expertise, and involve others appropriately provide effective and timely reports of training (and continuing professional development activities) to meet faculty and medical council / board requirements 	
Research	<ul style="list-style-type: none"> clarify junior colleagues' research project goals and requirements, including ethics, and provide feedback regarding the merits or challenges of proposed research monitor the progress of learners' research projects regularly, and review research project reports prior to submission support learners to find forums to present research projects encourage and guide learners to seek out relevant research to support practice, including identifying ethnicity within research and its potential impact on outcomes 	<ul style="list-style-type: none"> guide learners with respect to the choice of research projects ensure that planned research projects are feasible and of suitable standard guide learners on developing research questions teach and guide learners on appropriate epidemiological study methods and data analysis
Cultural safety	<ul style="list-style-type: none"> role model a culturally appropriate approach to teaching encourage learners to seek out opportunities to develop and improve their own cultural competence encourage learners to ensure culturally appropriate interactions with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) consider cultural, ethical, and religious values and beliefs in teaching and learning 	<ul style="list-style-type: none"> function effectively and respectfully when working with and teaching people from different cultural backgrounds
Ethics and professional behaviour	<ul style="list-style-type: none"> apply principles of ethical practice to teaching scenarios act as a role model to promote professional responsibility and ethics among learners respond appropriately to learners seeking professional guidance 	<ul style="list-style-type: none"> demonstrate professional values, including commitment to high-quality standards of medical practice, compassion, empathy, and respect provide learners with feedback to improve their experiences
Judgement and decision making	<ul style="list-style-type: none"> prioritise workloads and manage learners with different levels of professional knowledge or experience 	<ul style="list-style-type: none"> provide general advice and support to learners

	<ul style="list-style-type: none"> • link theory and practice when explaining professional decisions • promote joint problem solving • support a learning environment that allows for independent decision making • use sound and evidence-based judgement during assessments and when giving feedback to learners • escalate concerns about learners appropriately 	<ul style="list-style-type: none"> • use health data logically and effectively to manage public health issues • recognise when a learner needs additional support
Leadership, management, and teamwork	<ul style="list-style-type: none"> • maintain personal and learners' effective performance and continuing professional development • maintain professional, research, and/or administrative responsibilities while teaching • create an inclusive environment in which learners feel part of the team • help shape organisational culture to prioritise quality and work safety through openness, honesty, shared learning, and continued improvement • demonstrate commitment to ongoing learning and development in leadership and management 	<ul style="list-style-type: none"> • demonstrate the principles and practice of professionalism and leadership in health care • participate in mentor programs, career advice, and general counselling • demonstrate understanding of responsibility, accountability, and roles within a multidisciplinary team
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • advocate for suitable resources to provide quality supervision and maintain training standards • explain the value of health data in improving population health outcomes for populations • support innovation in teaching and training • support, encourage, and identify opportunities to learn through involvement in policy writing and review 	<ul style="list-style-type: none"> • demonstrate some integration of public health principles into teaching and practice • demonstrate and teach basic application of systems thinking

EPA 4: Quality improvement

Theme	Quality improvement	AT-EPA-04
Title	Identify and address opportunities to improve systems, investments, teams, and strategies to advance population health outcomes, including own practice	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">continuously improve public health strategies and programs to meet agreed objectives as monitored and measured, including health protection, population health, and health care access and provisioncontribute to the development, implementation, or evaluation of quality improvement initiatives designed to improve the health of patients⁶ and populations using methods and tools to measure and evaluate processes, impacts, and outcomes of policies and practicesconsider sustainability and climate change impacts of quality improvement activitiesmonitor own practice as a public health physician, and develop individual improvement plans to continuously improve contribution to teams-based actionswrite reports on quality improvement activities for the workplace.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision
	<p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p> <p>The trainee will:</p>	<p>Possible behaviours of a trainee who needs some supervision to perform this activity</p> <p>The trainee may:</p>
Medical expertise	<ul style="list-style-type: none">use population health outcomes to identify opportunities for improvement in health careuse standardised protocols to adhere to best practice and prevent the occurrence of errors in health care and population health managementmonitor personal professional performance regularly	<ul style="list-style-type: none">contribute to processes or identified opportunities for evaluation and improvementrecognise the importance of prevention and early detection of errors and poorly functioning programsrecognise the value of guidelines to direct decision making and actions
Communication	<ul style="list-style-type: none">support individuals and communities to have access to, and use, easy-to-understand, high-quality information about their healthengage communities to share decision making about their own health, to the extent they chooseimplement the organisation’s open disclosure policy	<ul style="list-style-type: none">demonstrate awareness of the evidence for consumer engagement and its contribution to quality improvement in careapply knowledge of how health literacy might affect the way individuals and populations gain access to, understand, and use health informationdiscuss with individuals and communities any safety and quality concerns they have relating to their health

⁶ References to patients in the remainder of this document may include their families, whānau, and/or carers.

		<ul style="list-style-type: none"> communicate systems and pathways for complaints and feedback
Quality and safety	<ul style="list-style-type: none"> participate in organisational quality and safety activities, including critical incident reviews, clinical practice improvement activities, root cause analyses, system analyses, and corrective and preventative action plans identify and report actual and potential 'near miss' errors undertake system improvement activities select performance indicators and develop ongoing monitoring processes be aware of and use tools to improve health care, including clinical audits, data on patients' experiences and outcomes, feedback and complaints, and formal and informal program evaluations use statistical process control charts maintain personal physical and mental wellbeing use systems thinking and lean thinking methodologies to plan quality improvement 	<ul style="list-style-type: none"> demonstrate understanding of a systems approach to improving the quality and safety of health care demonstrate safety skills, including infection control, adverse event reporting, and effective handovers use a quality framework keep accurate records of work use plan-do-study-act cycles be readily accessible when on duty, and arrange suitable cover participate in systems for surveillance and monitoring of adverse events and 'near misses', including reporting such events ensure that identified opportunities for improvement are raised and reported appropriately
Teaching and learning	<ul style="list-style-type: none"> translate quality improvement approaches and methods into practice supervise and manage the performance of junior colleagues in the delivery of high-quality, safe medical practice 	<ul style="list-style-type: none"> work within organisational quality and safety systems for the delivery of high-quality medical practice use opportunities to learn about safety and quality theory and systems participate in professional training in quality and safety to ensure a contemporary approach to safety system strategies
Research	<ul style="list-style-type: none"> ensure that any protocol for human research is approved by an appropriate ethics committee in accordance with national standards ensure that any protocol involving Aboriginal and Torres Strait Islander peoples or Māori (tangata whenua) is approved by an appropriate Indigenous ethics committee make use of systems thinking and lean thinking methodologies 	<ul style="list-style-type: none"> recognise that participation in research is voluntary and based on an appropriate understanding about the purpose, methods, demands, risks, and potential benefits of the research

Cultural safety	<ul style="list-style-type: none"> • undertake professional development opportunities that address the impact of cultural bias, colonisation, and racism on health outcomes, guidelines, and policies • demonstrate understanding of the role of racism and other types of discrimination in accessing and using preventive services 	<ul style="list-style-type: none"> • communicate effectively with patients and communities from a range of cultural backgrounds
Ethics and professional behaviour	<ul style="list-style-type: none"> • align improvement goals with the priorities of the organisation • contribute to developing an organisational culture that enables and prioritises safety and quality in health care for patients and communities 	<ul style="list-style-type: none"> • comply with professional regulatory requirements and codes of conduct
Judgement and decision making	<ul style="list-style-type: none"> • use decision-making support tools, such as guidelines, protocols, pathways, and reminders • analyse and evaluate current processes to improve care 	<ul style="list-style-type: none"> • access information and advice from other sources, including other healthcare practitioners, to identify, evaluate, and improve management of the health of patients and communities
Leadership, management, and teamwork	<ul style="list-style-type: none"> • formulate and implement quality improvement strategies as a collaborative effort involving all key health professionals • support multidisciplinary team activities to promote interdisciplinary programs of care that improve quality and reduce the risks of harm to patients and communities • actively involve experts in other areas to reduce error and optimise care, such as emergency services personnel in responding to disasters 	<ul style="list-style-type: none"> • demonstrate attitudes of respect and cooperation among members of different professional teams • partner with other professionals to ensure best practice healthcare and information for patients and communities
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • participate in all aspects of the development, implementation, evaluation, and monitoring of governance processes for: <ul style="list-style-type: none"> » defining the scope of medical practice » performance monitoring and management » safety and quality education and training • measure, analyse, and report a set of specialty-specific processes, impact and outcome indicators, and a set of generic safety indicators • identify areas within the system where systemic privilege exists, and challenge this as part of a pro-equity approach within the health system 	<ul style="list-style-type: none"> • maintain communication with service managers about issues that affect the health of individuals and communities • contribute to relevant organisational policies and procedures • demonstrate an understanding of governance, healthcare standards, and current guidelines for the management of public health issues • participate regularly in multidisciplinary meetings where quality and safety issues are standing agenda items, and where innovative ideas and projects for improving practice are actively encouraged

-
- | | |
|--|---|
| <ul style="list-style-type: none">• identify opportunities for quality improvement in population health programs | <ul style="list-style-type: none">• help shape an organisational culture that prioritises safety and quality through openness, honesty, learning, and quality improvement |
|--|---|
-

EPA 5: Incident response

Theme	Incident response	AT-EPA-05
Title	Assess and respond to urgent and/or evolving public health issues, including communicable disease outbreaks, disasters, and events threatening population health	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• know and work within your / your organisation's role within the incident management structure• respond to public health situations appropriately and in a timely manner• obtain relevant detail on the incident(s) and related public health risks• rapidly ascertain the importance and urgency of situations• decide whether action needs to be undertaken immediately or if further investigation is required• request assistance when required• engage with relevant other intersectoral professionals, such as emergency services• use mechanisms for communicating and coordinating between public health stakeholders and with other sectors involved in emergency and disaster management• apply a recognised framework / guideline if appropriate, such as for an outbreak investigation, cluster investigation, or environmental risk assessment• rapidly locate and appraise suitable evidence and other relevant public health information, including to characterise risk• synthesise findings to develop public health management plans, including formulating clear and realistic recommendations• communicate assessments and recommendations in a manner that is most suitable to the given circumstances and audience (such as oral, written, or both)• manage media enquiries if relevant• determine incident closure criteria and enact incident closure• develop plans for and conduct post-incident evaluations• document incidents (possibly including for publication) and present results to the community, other health professionals, and policymakers, as relevant.	
Behaviours		
Professional practice framework domain	Ready to perform without supervision	Requires some supervision
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity
Medical expertise	The trainee will:	The trainee may:
	<ul style="list-style-type: none">• recognise immediate threats to public health and respond appropriately• prioritise public health threats based on sound public health principles• consider psychosocial and physical safety, and contextual factors	<ul style="list-style-type: none">• identify health risks and the communities involved, including specific at-risk groups• identify relevant team members and stakeholders• identify and access sources of relevant information

	<ul style="list-style-type: none"> • elicit accurate, organised, and problem-focused contexts for situations, including timelines, individuals and populations involved, immediate risks to health, and steps taken so far • seek additional relevant information, such as from literature, experts, or laboratories • synthesise and interpret information from relevant sources to devise immediate next steps • assess the likelihood of any exposure and the risk to public health • develop management plans based on relevant guidelines, and consider the balance of benefit and harm by taking account of the social, cultural, and political environment • analyse options for prevention of future similar situations, using health protection and health promotion strategies • demonstrate effective application of knowledge and awareness in the immediate response 	<ul style="list-style-type: none"> • identify relevant framework / guidelines
Communication	<ul style="list-style-type: none"> • communicate openly, listen, and take community concerns seriously, giving adequate opportunity to ask questions • communicate up to department / minister early on and ongoing as appropriate • communicate health risks effectively to the public • use different media effectively • assess the level of outrage in the community • respond to complaints • develop consultation and communication strategies • communicate an appropriate level of concern • communicate clearly, effectively, respectfully, and promptly with other relevant professionals 	<ul style="list-style-type: none"> • anticipate, read, and respond to verbal and nonverbal cues • demonstrate active listening skills • communicate clearly with other health professionals, communities, and others involved in situation responses • use standardised verbal and written templates to improve the reliability of information transfer and prevent errors and omissions • communicate accurately and in a timely manner to ensure effective handover and quality of situation management
Quality and safety	<ul style="list-style-type: none"> • demonstrate safety skills, including infection control, adverse event reporting, and effective handover • recognise and effectively deal with aggressive and violent behaviours through appropriate training • maintain personal physical and mental wellbeing 	<ul style="list-style-type: none"> • perform hand hygiene, and take infection control precautions at appropriate moments • document the progress of situations, and synthesise with clarity and completeness

	<ul style="list-style-type: none"> • ensure communities are informed of the material risks associated with any part of proposed management plans • demonstrate an understanding of legal responsibilities of health professionals and others • ensure all outstanding information critical to the response is followed up appropriately 	<ul style="list-style-type: none"> • ensure handovers are complete, and work to mitigate risks if incomplete • maintain confidentiality of information from individuals and the community, adhering to relevant privacy legislation
Teaching and learning	<ul style="list-style-type: none"> • take opportunities within situations to teach and guide trainees and other health professionals, taking account of their skill and confidence levels • regularly reflect upon and self-evaluate professional development • provide constructive feedback to junior colleagues to contribute to improvements in individuals' skills 	<ul style="list-style-type: none"> • set positive and attainable goals for self-learning • self-reflect as a responsible learner and team member • take opportunities to teach junior colleagues during handover, as necessary • provide feedback to junior colleagues
Research	<ul style="list-style-type: none"> • search for, find, compile, analyse, interpret, and evaluate information relevant to situations • use appropriate tools to describe data in terms of time, place, and person • use appropriate statistics to analyse data to assess risks to public health 	<ul style="list-style-type: none"> • refer to guidelines and medical literature to assist when required • demonstrate an understanding of the limitations of evidence and the challenges of applying research in daily practice
Cultural safety	<ul style="list-style-type: none"> • identify populations at increased risk, or who are particularly impacted, or for whom there may need to be specifically tailored management • use plain language education materials, and demonstrate cultural sensitivity • demonstrate effective and culturally competent care and communication, including consideration of different needs, such as culture, religion, identity, education, and ability • use a professional interpreter, health advocate, or a family or community member to assist in communication, and understand the potential limitations of each • acknowledge community beliefs and values, and how these might impact on health and proposed management plans 	<ul style="list-style-type: none"> • display respect for different cultures, and attentiveness to the social determinants of health • display an understanding of cultural practices relevant to place-based population health practices, and an appreciation of sensitivities and values • appropriately access interpretive or culturally focused services

Ethics and professional behaviour	<ul style="list-style-type: none"> • demonstrate professional values, including compassion, empathy, respect for diversity, integrity, honesty, and partnership with communities • maintain confidentiality, unless the release of information is required by law or public interest 	<ul style="list-style-type: none"> • demonstrate professional conduct, honesty, and integrity • maintain respect for individuals, communities, and other healthcare professionals, including respecting privacy and confidentiality • consider the community's decision-making capacity • identify community preferences regarding management and decision making • not advance personal interest or that of professional agendas at the expense of the community's wellbeing
Judgement and decision making	<ul style="list-style-type: none"> • apply knowledge and experience to identify community issues and make logical, rational decisions to achieve positive outcomes for communities • use a holistic approach to health, considering comorbidity, uncertainty, and risk • use the best available evidence for the most effective management strategies to ensure optimal health outcomes 	<ul style="list-style-type: none"> • demonstrate medical reasoning by gathering focused information relevant to community wellbeing • recognise personal limitations and seek help in an appropriate way when required
Leadership, management, and teamwork	<ul style="list-style-type: none"> • use a leadership style (such as delegating, participating, selling, or telling) appropriate to the situation • identify reporting lines and resources available, including personnel, time, and funds • identify relevant team members and stakeholders • manage team and stakeholder meetings • work effectively as a member of multidisciplinary teams to achieve the best population health outcome • demonstrate awareness of colleagues in difficulty, and work within the appropriate structural systems to support them while maintaining community safety 	<ul style="list-style-type: none"> • share relevant information with members of the public health response team • participate as a team member
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • participate in health promotion, disease prevention and control, screening, and reporting notifiable diseases • advocate for timely, effective action in response to important threats to public health • advocate effectively for an equity focus to achieve equitable health and wellbeing 	<ul style="list-style-type: none"> • identify and access relevant community resources • identify the role of the health system and public health physician within the situation's response • identify causes of inequity in any specific situational response

EPA 6: Population and public health interventions

Theme	Population and public health interventions		AT-EPA-06
Title	Design, develop, implement, and evaluate projects, programs, and systems-level interventions to improve population health and prevent preventable mortality and morbidity		
Description	<p>This activity demonstrates the ability to:</p> <ul style="list-style-type: none">• identify and engage key stakeholders• determine the relevant health needs of populations of interest• define problems to be addressed and match the problem type (such as technical or systemic) to an appropriate level of intervention• map the nature and extent of resources available, such as time, financial, and people• formulate clear goals for interventions and implementation plans, including considering benefits, costs, and risks• consider the operation and management of projects, programs, and interventions• consider mechanisms to evaluate projects, programs, and interventions, incorporating quality improvement and data-driven decisions• write up reports and make recommendations on program implementation and evaluations, communicating to stakeholders and the department / minister as appropriate.		
Behaviours			
<u>Professional practise framework domain</u>	Ready to perform without supervision	Requires some supervision	
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity	
<u>Medical expertise</u>	The trainee will:	The trainee may:	
	<ul style="list-style-type: none">• determine the health and healthcare service needs of populations• adopt a systems thinking approach to problem specification• determine the optimal use of prevention measures in primary care within a specific setting• use health promotion principles, theories, and frameworks• consider the balance of systemic, population-level and targeted or high-risk approaches• consider the relative importance of chronic diseases, mental illness, and injury for specific populations and cultural groups• describe measures to manage disability, and support people with a disability• define the remediable determinants of disease in the	<ul style="list-style-type: none">• focus on targeted treatment of individuals at highest risk, without considering population-level prevention• demonstrate an understanding of the principles of health and healthcare needs assessments• access guidelines on the development of health promotion programs• interpret findings from surveillance data	

	<p>population, including social, environmental, and commercial determinants, smoking, inactivity, poor nutrition, and others</p> <ul style="list-style-type: none"> • design, operate, and evaluate disease and hazard surveillance systems, including pharmacovigilance and risk management systems • design, operate, and evaluate screening programs • consider regulatory frameworks relating to population health • use recognised criteria and critical evaluation of evidence to guide decisions about the implementation and continuation of programs, such as disease screening and surveillance • advise on optimal development and operation of the healthcare sector at primary, secondary, and tertiary levels 	
Communication	<ul style="list-style-type: none"> • initiate and maintain relevant communication channels with multidisciplinary team members, stakeholders, supervisors, and the community • maintain excellent documentation of all meetings • maintain excellent documentation of information, decisions, options, and reasons for choices • include effective communication in evaluation plans • consult relevant stakeholders on optimal healthcare services, including the public, consumers, service providers, non-government organisations, the voluntary sector, collaborating organisations, and cultural groups 	<ul style="list-style-type: none"> • identify relevant team members and stakeholders • work in partnership with communities • ensure consistent messages are given to communities about options, risks, benefits, and likely future outcomes
Quality and safety	<ul style="list-style-type: none"> • use electronic tools (where available) to securely store and retrieve reference information, taking a structured, searchable, approach • use structured information sources, such as online information repositories, including libraries, and other information sources • use reference management software • include safety (including physical, mental health, and cultural) in evaluation plans 	<ul style="list-style-type: none"> • participate in continuous quality improvement processes • identify activities that may improve the processes in program development, implementation, and/or evaluation • contribute to identification of performance markers of safety and quality in evaluation plans

Teaching and learning	<ul style="list-style-type: none"> regularly reflect upon and self-evaluate professional development provide supervision, support, and teaching to develop the skills of junior colleagues and other health professionals through the program development, implementation, operation, and evaluation phases 	<ul style="list-style-type: none"> mentor and train others to enhance team effectiveness participate in teaching junior colleagues encourage junior colleagues to present progress at team meetings
Research	<ul style="list-style-type: none"> plan and deliver effective analyses of public health issues consider / engage in ethical and governance review processes, as appropriate to the research / evaluation activity use appropriate study designs and statistical methods to describe the health needs of populations undertake systematic reviews to identify actionable risk factors and intervention strategies search for and critically appraise evidence to resolve areas of uncertainty critically review quantitative and qualitative data and grey literature select appropriate data sources, including routinely collected data present findings in a clear, well-structured manner, including their limitations select appropriate evaluation types, including formative, process, impact, and outcomes use a program logic approach to evaluation 	<ul style="list-style-type: none"> undertake basic descriptive epidemiology recognise the value and limitations of packages such as Excel recognise appropriate use of review articles review original research without taking a systematic or critical appraisal approach
Cultural safety	<ul style="list-style-type: none"> work with community / cultural groups across the lifespan of programs or interventions use culturally appropriate and relevant health promotion strategies to achieve health gain for culturally diverse groups communicate with careful consideration to health literacy, language barriers, and culture about community preferences, and whether they are realistic and possible, respecting community decisions demonstrate recognition of timing, location, privacy, and appropriateness of sharing information with communities 	<ul style="list-style-type: none"> include relevant information regarding cultural or ethnic background in handovers, and whether an interpreter is required use appropriate language when communicating with communities advise on culturally appropriate initiatives in program development, implementation, and evaluation

	<ul style="list-style-type: none"> • demonstrate understanding of the role of discrimination and racism in accessing and using preventive services • titrate project planning, expectations, and outcomes by incorporating trust, relationships (nature and duration), and power differentials 	
Ethics and professional behaviour	<ul style="list-style-type: none"> • balance risks and benefits • demonstrate understanding of the ethical and legal constraints on information disclosure • share information about individuals and communities consistent with privacy law and professional guidelines on confidentiality • demonstrate understanding of the additional complexity related to some types of information, such as genetic information and blood-borne virus status, and seek appropriate advice about disclosure of such information • manage the collection of and access to required public health data • manage resources to deliver interventions in accordance with implementation plans to achieve the intended outcomes • explicitly consider the ethical and legal implications of the program being developed during development, implementation, operation, and evaluation 	<ul style="list-style-type: none"> • maintain respect for community members and other health professionals, including respecting privacy and confidentiality • be aware of risks and benefits • interact in a collegiate and collaborative way with professional colleagues • ensure community engagement in all stages of programs / projects • apply ethical principles (such as respect, beneficence, non-maleficence, justice, and autonomy) to all interactions with colleagues and communities
Judgement and decision making	<ul style="list-style-type: none"> • apply knowledge and experience to identify community issues and make logical, rational decisions to achieve positive outcomes for communities • use a holistic approach to health, considering comorbidity, uncertainty, and risk • integrate the best available evidence into decision making to deliver the most effective management strategies to ensure optimal health outcomes • reconcile conflicting evidence, applying judgement in making decisions in the presence of uncertainty 	<ul style="list-style-type: none"> • demonstrate medical reasoning by gathering focused information relevant to community wellbeing • recognise personal limitations and seek help in an appropriate way when required • involve additional staff to assist in a timely fashion when required
Leadership, management, and teamwork	<ul style="list-style-type: none"> • use a leadership style appropriate to the situation (such as delegating, participating, selling, or telling) 	<ul style="list-style-type: none"> • participate in multidisciplinary teams • share relevant information with team members

	<ul style="list-style-type: none"> manage staff and junior colleagues appropriately, according to their expertise or confidence demonstrate understanding of the differing roles of team members show respect for the roles and expertise of other health professionals, and work effectively as a member of professional teams ensure that multidisciplinary teams provide the opportunity for engagement and participation of community members when appropriate demonstrate awareness of colleagues in difficulty, and work within the appropriate structural systems to support them while maintaining community safety offer options that are well-analysed with potential consequences, make decisions, and manage the consequences 	<ul style="list-style-type: none"> undertake assigned tasks efficiently and effectively document progress in all program stages
Health policy, systems, and advocacy	<ul style="list-style-type: none"> define how the new program fits within the overall health system contribute to processes for managing risks, and identify strategies for improvement in project management engage in organisational processes to improve project management, such as formal surveys advocate for the adoption of health programs demonstrate understanding of organisation and funding arrangements that support public health gain and reduce inequity at all levels of care participate in government initiatives for chronic diseases management to reduce hospital admissions and improve patients' quality of life 	<ul style="list-style-type: none"> identify and access relevant community resources demonstrate awareness of government initiatives and services available for patients⁷ with chronic diseases and disabilities, and display knowledge of how to access them demonstrate understanding of the different healthcare system elements and how they interact and relate to each other

EPA 7: Population health information

Theme	Population health information	AT-EPA-07
-------	-------------------------------	-----------

⁷ References to patients in the remainder of this document may include their families, whānau, and/or carers.

Title	Gather, critically appraise, analyse, and synthesise information to ensure public health actions are effective, equitable, and efficient	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• use suitable information sources, including advances in technology, to efficiently gather, analyse, and synthesise information to describe the health of populations• design, execute, and write up systematic literature reviews as a rigorous tool for public health decision making• critically appraise published literature, including theoretical, descriptive, and interventional research• distinguish and contextualise high-quality evidence for specific decisions• synthesise and communicate population health information in a meaningful way, including the risk of adverse events• consider Indigenous data sovereignty and research principles• generate solutions for specific public health issues, including appraisals of their likely impact, ethics, cost, feasibility, and acceptability• recognise and make recommendations on health and public health information systems• consider and make recommendations on relevant health determinants and inequalities affecting various age, gender, and cultural groups• consider and make recommendations, including in written reports, on the implications of international events for public health.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none">• clearly identify public health questions and scopes• describe key demographic trends, such as age, gender, and ethnic status• advise on key health challenges for different population groups, such as according to age, gender, and culture	<ul style="list-style-type: none">• focus on individual clinical risks, rather than a population perspective• describe health challenges within populations
Communication	<ul style="list-style-type: none">• use written and oral communications to describe the health status and health risks of different population groups• use written and oral communications to convey the breadth of risks (such as financial, reputational, and political) to the organisation, using a variety of media• use the principles of science communication to share information clearly, accurately, respectfully, responsibly, and empathetically	<ul style="list-style-type: none">• present health information in a variety of forms, including written and oral• present health information to different audiences using a standardised format and language• ensure documentation is structured, formatted, and referenced appropriately

	<ul style="list-style-type: none"> • identify and act on misinformation as a deliberate barrier to fact-based understanding of the world • appropriately communicate research findings and data on markers of health and disease risk in the population • appropriately communicate results of epidemiological studies, including the difference between absolute and relative risk, and its relevance • tailor communication formats and styles as appropriate for specific audiences 	
Quality and safety	<ul style="list-style-type: none"> • employ health information systems, registers, and disease coding • critically appraise the quality of information • use informatics and information and communications technology, including new developments • ensure safety and quality are key considerations in providing public health information 	<ul style="list-style-type: none"> • ensure the requirements for mandatory notification are met • ensure privacy and security of information
Teaching and learning	<ul style="list-style-type: none"> • demonstrate effective supervision skills and teaching methods that are adapted to the training context • encourage questioning among junior colleagues and students • organise and participate in in-service training on new technologies • provide specific and constructive feedback and comments to junior colleagues • regularly reflect upon and self-evaluate professional development • set defined objectives for teaching encounters, and solicit feedback on mutually agreed goals 	<ul style="list-style-type: none"> • provide constructive feedback to junior colleagues to contribute to improvements in individuals' skills • supervise and coordinate teaching for junior colleagues • participate in continuing professional development • actively seek feedback on personal practice
Research	<ul style="list-style-type: none"> • recognise and use Indigenous research principles, including reciprocity and involvement of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) • recognise and support Indigenous data sovereignty • access and use appropriate information sources • systematically search published and 'grey' literature 	<ul style="list-style-type: none"> • demonstrate efficient searching of literature databases to retrieve evidence • identify and critique information from credible sources to aid in decision making • appraise the literature using appropriate tools for the study design • refer to evidence-based guidelines and protocols

	<ul style="list-style-type: none"> document the search strategy select studies based on predefined criteria, with formal assessment of bias demonstrate an understanding of the appropriate use and correct interpretation of null hypothesis significance testing (p-values and confidence intervals) based on contemporary best practice interpret the results of studies in terms of both relative and absolute risks and benefits, costs, and feasibility assess internal and external validity interpret meta-analyses consider issues of causality (chance, bias, confounding, and reverse causality) demonstrate an understanding of the strengths and weaknesses of research designs grade evidence evaluate the applicability of the results to the relevant population present well-reasoned conclusions and recommendations use national sources of information, such as bureaus of statistics and disease registries 	<ul style="list-style-type: none"> demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
Cultural safety	<ul style="list-style-type: none"> consider cultural and religious values and beliefs when providing public health information consider the values, beliefs, practices, models of health, biological factors, and unique health needs of specific population groups work with affected cultural groups to ensure information is culturally appropriate show respect for knowledge and expertise of colleagues and communities 	<ul style="list-style-type: none"> practice cultural safety appropriate for the relevant community proactively identify risks in the communication of public health information to different groups, including through different types of media
Ethics and professional behaviour	<ul style="list-style-type: none"> consider ethical requirements, and adhere to legal requirements, when managing and sharing public health information 	<ul style="list-style-type: none"> identify ethical principles relevant to the provision of public health information
Judgement and decision making	<ul style="list-style-type: none"> balance risks and benefits in communicating public health information use the principles of decision science to formalise decision-making processes 	<ul style="list-style-type: none"> identify risks and benefits in communicating public health information

Leadership, management, and teamwork	<ul style="list-style-type: none"> • work collaboratively with other staff • lead teams, maintaining engagement and a focus on outcomes • maintain strong communication with other health and intersectoral professionals about the appropriate release of public health information • work in collaboration with finance / accounting colleagues to make good financial decisions 	<ul style="list-style-type: none"> • collaborate with and engage other team members, based on their roles and skills • ensure appropriate multidisciplinary engagement • encourage an environment of openness and respect • attend relevant meetings regularly • use available tools, under supervision, to build skills in chairing meetings • use spreadsheets effectively • prepare for and conduct meetings in a well-organised and time-efficient manner • work effectively as a member of multidisciplinary teams or other professional groups
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • use a considered and rational approach to the responsible use of resources, balancing costs against outcomes • have an equity focus, and consider available healthcare resources • advise on global trends in health and emerging health risks • maintain good relationships with health agencies and services • apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs • use effective methods of advocacy appropriate to the issues being considered and the organisational context 	<ul style="list-style-type: none"> • demonstrate an understanding of the role of physician leadership and advocacy in appraising population health and systems of care to improve population health outcomes • demonstrate awareness of the role and place of different organisations within the healthcare system

EPA 8: Communication and engagement for population health gain

Theme	Communication and engagement for population health gain		AT-EPA-08
Title	Engage with communities and communicate complex health information, including preventive messages for population health gain		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• select a suitable context and include community representatives, stakeholders, and other team members• select and use appropriate modalities and communication strategies, including written material and oral presentations• communicate information at a literacy level appropriate for the target audience, ensuring the information and delivery is culturally appropriate• communicate information at an intensity and using a medium that is proportionate to the risk• verify audience understanding of information conveyed• ensure communications / conversations are documented to support decision making, actions, and medicolegal accountabilities.		
Behaviours			
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision	
	<p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p> <p>The trainee will:</p> <ul style="list-style-type: none">• anticipate and be able to correct any misunderstandings communities may have about their health and/or risk factors / exposures• inform communities of all aspects of public health management, including assessments and investigations, and give them adequate opportunity to question or refuse interventions• seek to understand the concerns and goals of communities, and plan management in partnership with them• provide information to communities and the public to enable them to make informed decisions about strategies to protect health	<p>Possible behaviours of a trainee who needs some supervision to perform this activity</p> <p>The trainee may:</p> <ul style="list-style-type: none">• apply knowledge of the scientific basis of health and disease to population health practice• demonstrate an understanding of the population health issues being discussed• formulate future directions in partnership with communities	
Medical expertise			
Communication	<ul style="list-style-type: none">• use appropriate (including culturally appropriate) communication strategies and modalities for communication, such as emails, face-to-face, and phone calls for individuals, small groups, and mass media (such as social media, websites, and radio) for greater reach to communities and populations	<ul style="list-style-type: none">• select appropriate modes of communication• engage communities in discussions, avoiding the use of jargon• check community understanding of information• collaborate with other health professionals as required	

	<ul style="list-style-type: none"> • elicit community members' views, concerns, and preferences, promoting rapport • provide information to communities in plain language, avoiding jargon, acronyms, and complex medical terms • encourage questions, and answer them thoroughly • ask community members to share their thoughts or explain the management plan affecting their community in their own words, to verify understanding • convey information considerately and sensitively to communities, seeking clarification if unsure of how best to proceed • treat children and young people respectfully, and listen to their views • recognise the role of family and whānau, and, when appropriate, encourage their involvement in decisions about management options • use presentation software and other tools effectively • ensure team members are confident and competent in their assigned roles • ensure communications are honest, transparent, and evidence-based regarding uncertainties 	<ul style="list-style-type: none"> • adapt communication style in response to community characteristics, including age, developmental level, and cognitive, physical, cultural, socioeconomic, and situational factors
Quality and safety	<ul style="list-style-type: none"> • discuss with communities the situations / issues and available management options, including potential benefits and harms • provide information to communities in a way they can understand before asking for their agreement • recognise and take precautions where communities may be at particular risk, such as in relation to issues such as child protection, self-harm, or elder abuse • participate in processes to manage complaints 	<ul style="list-style-type: none"> • inform communities of the material risks associated with proposed management plans • treat information about individuals as confidential
Teaching and learning	<ul style="list-style-type: none"> • discuss the aetiology of diseases and their determinants • explain the purpose, nature, and extent of any assessments to be conducted 	<ul style="list-style-type: none"> • respond appropriately to information sourced by community members and to community knowledge regarding their situations / issues

	<ul style="list-style-type: none"> obtain informed consent or other valid authority before involving community members in teaching 	
Research	<ul style="list-style-type: none"> provide information to communities that is based on guidelines issued by the National Health and Medical Research Council and/or Health Research Council of NZ provide information to potential participants in a way they can understand before asking for their consent to participate in research obtain informed consent or other valid authority before involving individuals in research 	<ul style="list-style-type: none"> refer to evidence-based guidelines demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice
Cultural safety	<ul style="list-style-type: none"> demonstrate effective and culturally competent communication with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) effectively communicate with members of other ethnic groups by meeting their specific language, cultural, and communication needs use qualified language and/or cultural interpreters to help meet communication needs provide plain language and culturally appropriate written materials to communities when possible 	<ul style="list-style-type: none"> identify when to use interpreters invest time and effort in overcoming linguistic and cultural barriers
Ethics and professional behaviour	<ul style="list-style-type: none"> encourage and support communities to be engaged in their health care, and to use information wisely when they make decisions encourage and support communities, and, when relevant, their families and whānau, in caring for themselves and managing their health demonstrate respectful professional relationships with community members and other professionals prioritise honesty and community wellbeing and benefit above self-interest develop a high standard of personal conduct, consistent with professional and community expectations 	<ul style="list-style-type: none"> respect the preferences of communities communicate appropriately, consistent with the context, and respect community needs and preferences maximise autonomy of community members, and support their decision making avoid sexual, intimate, and/or financial relationships with clients demonstrate a caring attitude towards communities respect community members, including protecting their rights to privacy and confidentiality behave equitably towards all, irrespective of gender, age, culture, socioeconomic status, sexual identity and preferences, beliefs, contribution to society, illness-related behaviours or the illness itself

		<ul style="list-style-type: none"> • use social media ethically and according to legal obligations to protect confidentiality and privacy
Leadership, management, and teamwork	<ul style="list-style-type: none"> • communicate effectively with team members and stakeholders, in a way that is responsive to their needs • discuss public health implementation plans with communities and healthcare and other professionals, working collaboratively with all • discuss community health and care needs with healthcare team members to align them with the appropriate resources • facilitate an environment in which all team members feel they can contribute and their opinion is valued • communicate accurately and succinctly, and motivate others on the healthcare team 	<ul style="list-style-type: none"> • answer questions from team members • summarise, clarify, and communicate responsibilities of healthcare team members • keep healthcare team members focused on community health outcomes
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • consult effectively with stakeholders to inform policy development and implementation • prepare written policy or guidelines for submission or approval • communicate policy and advocate effectively, using methods appropriate for the target audience 	<ul style="list-style-type: none"> • communicate with and involve other health professionals as appropriate • prepare draft policy or guidelines of a standard that could be submitted for approval

EPA 9: Inclusive public health

Theme	Inclusive public health	AT-EPA-09
Title	Identify, navigate, and practice within multisector, complex, trust-dependent, and culturally bounded societies and social systems	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• work in partnership with cultural and population groups based on need, and facilitate codesign and engagement• identify the landscape of practice, including different cultural and population groups, the political environment, and organisational priorities• identify policy and practice opportunities for population health gain, effectively leveraging these opportunities to identify relevant stakeholders and cross-cultural partnerships and manage a stakeholder team, if relevant• establish effective cross-cultural partnerships using principles of cultural awareness and respect• identify health inequities across relevant domains of culture and context, and propose public health action to address those inequities• collaborate with stakeholders from diverse cultural and population groups to develop, select, and implement options for action, applying principles of cultural respect and safety• exercise reflexivity by recognising personal biases towards people of different cultures or population groups, or those with political or religious viewpoints• identify contrasting perspectives, cultural barriers, and enablers of health and related issues, or agendas for action, from different cultural and population groups• consider the wider consequences of public health programs and interventions across diverse cultural and population groups• communicate effectively to audiences from diverse cultural and population groups using appropriate communication methods• acknowledge and manage uncertainty effectively (such as due to incomplete data), including through communication to participant groups• share power authentically with cultural groups, and promote their leadership and self-determination.	
Behaviours		
Professional practice framework domain	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity
	The trainee will:	The trainee may:
Medical expertise	<ul style="list-style-type: none">• advise on the public health issues affecting different cultural and population groups, including the complex interplay of drivers of suboptimal health outcomes• advise on public health measures to manage and support health issues affecting different cultural and population groups	<ul style="list-style-type: none">• recognise disparities in health across different cultural and population groups• recognise disparities in risk exposures across different cultural and population groups• identify the potential effects of public health interventions, programs, and/or responses on the physical and mental health of different cultural and population groups

		<ul style="list-style-type: none"> describe the biological underpinnings of health disadvantage due to racism and discrimination characterise the different forms of disability and the impact of disability on individuals and society
Communication	<ul style="list-style-type: none"> demonstrate effective communication, including written and oral, across diverse population groups and settings, and understand the barriers that may limit this seek feedback on performance from community sources, cultural navigators, and experts use interpreters, translators, and cultural navigators when required 	<ul style="list-style-type: none"> provide written and oral communications that are appropriate to the audience to diverse cultural and population groups seek advice and training on culturally safe communication provide a suitable opening to team meetings and presentations that acknowledges the traditional custodians of the land use and demonstrate the principles of cultural awareness, respect, and safety in interactions with people from different cultural and population groups identify appropriate channels, including cultural or community leaders, through which to communicate, consult, and collaborate with communities
Quality and safety	<ul style="list-style-type: none"> challenge the cultural bias of individual colleagues and systemic bias within healthcare services and other organisations ensure quality and safety activities that impact cultural groups, such as audits, are culturally safe and conducted according to best practice cultural governance frameworks evaluate access to health services using a cultural lens 	<ul style="list-style-type: none"> demonstrate an understanding of cultural awareness and safety, and apply this understanding consistently demonstrate an understanding of institutional discrimination and its impact on health and wellbeing
Teaching and learning	<ul style="list-style-type: none"> seek opportunities to build capacity across diverse cultural and/or non-dominant population groups to contribute to public health improve health and public health literacy within organisations, including among clinicians and organisation managers partner and codesign effectively with members of cultural and population groups different to one's own use diverse teaching methods, recognising different ways of learning across diverse population groups 	<ul style="list-style-type: none"> teach and supervise using standard methods, with some recognition of cultural influences participate in continuing professional development to maintain and improve one's cultural competence actively seek feedback on personal skills until competent

Research	<ul style="list-style-type: none"> • use culturally appropriate consumer and community participation strategies • select culturally suitable research methods and strategies • apply rigorous ethical processes and methodologies that are acceptable to the population under study • collect ethnicity and cultural identity data according to best practice policies • present results in a way that is comprehensible and meaningful to the audience, including different cultural groups, clinical colleagues, and organisational management • develop conclusions using data from both scientific and cultural sources • demonstrate recognition of data sovereignty, data governance, and return of data collected to the community 	<ul style="list-style-type: none"> • use methods that may have been developed in partnership with the community of study • focus on the return of findings to the community of study, rather than the publication of findings • frame a suitable research question • present the findings of research at scientific meetings or in publications with consultation and/or inclusion of members of the community of study
Cultural safety	<ul style="list-style-type: none"> • identify key concepts and stages in developing cultural consciousness • recognise how policy and practices of dominant cultures influence the health of other groups • identify the values and needs of non-dominant population groups in partnership with those groups 	<ul style="list-style-type: none"> • undertake continuing professional development to maintain and improve one's cultural competence • use appropriate individuals, organisations, and representative networks to seek information and advice when working with other cultural and population groups • demonstrate an understanding of culture as a determinant of health • describe the cultural composition of workforces in health settings • reflect on their own cultural identity and critically assess development needs • appreciate the interactions and interconnectedness between aspects of a group's identity, such as race or gender, and attitudes, systems, structures, and organisations which can magnify inequity • recognise the impact of colonisation on epistemic justice, decolonising actions, and Indigenist approaches to partnerships, knowledge generation, knowledge translation, and capacity building
Ethics and professional behaviour	<ul style="list-style-type: none"> • demonstrate an understanding of the impact of their own culture on their practice 	<ul style="list-style-type: none"> • recognise and implement general ethical principles • work respectfully with colleagues

	<ul style="list-style-type: none"> advise colleagues on non-discriminatory work practices, and advocate for change when discriminatory work practices are displayed model interpersonal interactions with colleagues and stakeholders that demonstrate courtesy, fairness, and respect recognise and implement ethical principles for working with community and cultural groups promote and support self-determination of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) prioritise population impact and value, and sustainability and accountability 	<ul style="list-style-type: none"> demonstrate professional values, including compassion, empathy, respect for diversity, integrity, honesty, and partnership across diverse groups within the landscape of practise
Judgement and decision making	<ul style="list-style-type: none"> discuss options and make decisions in genuine partnership with communities and diverse population groups identify uncertainty and estimate the possible effects on different facets of health and equity for different population groups maintain personal and professional integrity in the face of political, professional, or organisational pressures that disadvantage a particular population 	<ul style="list-style-type: none"> recognise personal limitations and seek help in an appropriate way when required
Leadership, management, and teamwork	<ul style="list-style-type: none"> switch leadership styles (delegating, participating, selling, or telling) according to the situation manage culturally diverse teams effectively, including co-leadership manage stakeholder committees with diverse cultures, interests, and agendas collaboratively design, implement, and evaluate interventions with stakeholders from diverse and non-dominant population groups 	<ul style="list-style-type: none"> be an effective member of culturally diverse teams respect all members of culturally diverse teams work collaboratively with researchers, policy makers, and experts from other cultural and population groups maintain a focus on health equity
Health policy, systems, and advocacy	<ul style="list-style-type: none"> collaborate meaningfully with community-controlled health services use processes and protocols that are culturally respectful and safe and uphold self-determination in providing services to non-dominant populations advocate for choice in health services for Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) 	<ul style="list-style-type: none"> recognise the benefits and harms Westernised health services have played in the health of people of non-Western cultures recognise cultural and other bias within healthcare services and other organisations, and seek guidance on an appropriate course of action when required

-
- identify and act on cultural and other bias within healthcare services and other organisations
 - evaluate access to health services using a cultural lens
 - recognise the differential impacts of health policy and health systems on equity across diverse cultural and population groups
-

EPA 10: Policy analysis, development, and planning

Theme	Policy analysis, development, and planning		AT-EPA-10
Title	Develop, influence, and lead policy to improve public health and purposefully address aspects of health inequities		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• identify the public health context and prevention objectives• identify, consult, and engage with key internal and external stakeholders across the policy development cycle• gather and analyse public health information and evidence to support policy planning, development, and analysis• identify policy gaps and options, and assess their benefits, costs, and risks• apply priority setting methods to identify policy recommendations for action, including consideration of ethical criteria, demonstrating accountability for providing recommendations• prepare well-written policies or guidelines for submission or approval, including a clear public health rationale, demonstrating the ability to make decisions in setting policy• determine the best policy options, demonstrating accountability and the ability to make decisions in policy development.		
Behaviours			
<u>Professional practise framework</u> Domain	Ready to perform without supervision	Requires some supervision	
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	<ul style="list-style-type: none">• use process guidelines to determine the health needs of populations to inform policy development• use process guidelines to determine the health impacts of planned policies, such as new zoning laws for industrial use• develop and use goals, targets, and indicators suitable for the purpose and context• identify and use relevant tools to define criteria for the assessment of priority, such as the burden of disease, effectiveness, value for money, acceptability, ethics, and equity• develop policy options for further discussion	<ul style="list-style-type: none">• outline the approach to assessing the health needs of the population• suggest goals, targets, and indicators appropriate to the context• identify different measures of health burden in the population	
	Communication	<ul style="list-style-type: none">• explain the potential benefits, risks, costs, and potential consequences of policy options• use clear language appropriate to the audience	<ul style="list-style-type: none">• use available tools, under supervision, to communicate to diverse audiences• seek feedback on communication skills in different settings

	<ul style="list-style-type: none"> • identify stakeholder concerns and expectations, and provide adequate explanations on the rationale for chosen options • use written or visual material or other aids that are accurate and up to date to support discussions with the team, stakeholders, and policy makers 	
Quality and safety	<ul style="list-style-type: none"> • include evaluation and quality improvement in policy steps and policy writing • use goals, targets, and indicators as part of performance monitoring frameworks • identify adverse outcomes that may result from proposed policy options • analyse quality and safety outcomes for a range of cultural and population groups • analyse quality and safety outcomes for self-determination of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) • prioritise population impact and value, and sustainability and accountability 	<ul style="list-style-type: none"> • describe quality indicators relevant to policy development
Teaching and learning	<ul style="list-style-type: none"> • use appropriate guidelines, evidence sources, and decision support tools • make and use opportunities to teach junior colleagues • undertake continuing professional development to maintain currency in policy skills 	<ul style="list-style-type: none"> • undertake professional development to build policy skills
Research	<ul style="list-style-type: none"> • define populations or communities that are likely to be impacted by policies • gather and synthesise relevant information to use evidence and information • use suitable quantitative and qualitative methods to describe health needs and impacts • use evidence to support policy rationale and define policy options 	<ul style="list-style-type: none"> • consult current research or investigations • identify and source suitable evidence under direction
Cultural safety	<ul style="list-style-type: none"> • assess policy from historical, cultural, and inequity perspectives • engage early and respectfully with culturally diverse communities, including Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua), for policy development and evaluation 	<ul style="list-style-type: none"> • consider cultural and religious backgrounds, attitudes, and beliefs, and how these might impact potential policy options

	<ul style="list-style-type: none"> consult with communities and stakeholders to identify preferred policy options consider obligations to Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) in priority settings and their rights to define cultural safety develop policy that is intersectoral and cross-jurisdictional 	
Ethics and professional behaviour	<ul style="list-style-type: none"> analyse policy from an equity perspective identify and apply ethical criteria and principles, such as autonomy, beneficence, non-maleficence, justice, utility, proportionality, transparency, and negative externalities promote and support self-determination for Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) prioritise population impact and value, and sustainability and accountability, in policy analysis and development 	<ul style="list-style-type: none"> access national statements on ethics, including across diverse populations be aware of processes and frameworks for ethical decision making
Judgement and decision making	<ul style="list-style-type: none"> evaluate the costs, benefits, and potential risks of each policy option demonstrate understanding of appropriate economic evaluation of policy options, such as cost minimisation analysis, cost effectiveness analysis, and cost benefit analysis consider important economic issues, such as efficiency, equality, opportunity cost, margin, and discounting, and value judgements and limitations consider the potential trade-offs between equity and efficiency recognise the contextual influences on policy development, such as economic, political, sociocultural, technological, legal, and historical factors 	<ul style="list-style-type: none"> recognise personal limitations and seek help in an appropriate way when required recognise the contextual influences on policy development and implementation, such as economic, political, and sociocultural factors
Leadership, management, and teamwork	<ul style="list-style-type: none"> lead team and stakeholder meetings manage suitable consultation processes 	<ul style="list-style-type: none"> lead team and stakeholder meetings under direct supervision
Health policy, systems, and advocacy	<ul style="list-style-type: none"> manage resource use and limitations in the context of policy development and planning identify strategies that enable successful policy implementation 	<ul style="list-style-type: none"> recognise stages in policy development

-
- identify factors that may lead to the failure of policy implementation, and how these can be managed
-

EPA 11: Organisational unit management

Theme	Organisational unit management		AT-EPA-11
Title	Lead and manage organisational units effectively		
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none"> • apply and evaluate the organisational context and structure • apply and evaluate the role of the organisation and its chain of command during emergency responses • apply understanding of workplace diversity, including the consideration of disability and gender and sexual diversity • apply understanding of work health and safety / occupational health requirements within the workplace • operate within a hierarchy of responsibility, and seek advice when appropriate • access organisational information, such as policies, procedures, systems, processes, and plans • apply effective management principles to public health and other relevant organisations • demonstrate effective planning, timely delivery of outputs, and effective reporting • relate and link work plans to organisational and wider public health priorities • keep required records in a secure, structured, and accessible manner • follow allocated financial responsibilities, and understand basic accounting and budgeting processes • responsibly use and distribute public resources • oversee quality improvement activities and apply performance management techniques to improve public health practice • liaise with other health professionals and team members to ensure team cohesion, maximise impact, and reduce duplication and waste of human resources • advise on organisational governance issues • facilitate strategic and business planning • recognise and implement organisational anti-racist strategies to improve outcomes for Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua). 		
Behaviours			
<u>Professional practice framework domain</u>	Ready to perform without supervision	Requires some supervision	
	Expected behaviours of a trainee who can routinely perform this activity without needing supervision	Possible behaviours of a trainee who needs some supervision to perform this activity	
	The trainee will:	The trainee may:	
Medical expertise	<ul style="list-style-type: none"> • provide relevant medical expertise to guide decision making, such as on priority setting 	<ul style="list-style-type: none"> • recognise opportunities where medical expertise can add value 	
Communication	<ul style="list-style-type: none"> • demonstrate effective and context-appropriate consultation methods • conduct meetings effectively 	<ul style="list-style-type: none"> • suggest appropriate communication methods and audiences relevant to the task • chair and/or take minutes at meetings 	

	<ul style="list-style-type: none"> • ensure that all important discussions with colleagues, multidisciplinary team members, and relevant stakeholders are appropriately documented • review communications written by junior colleagues • ensure appropriate use of interpreter services and translated materials 	
Quality and safety	<ul style="list-style-type: none"> • adopt a systematic approach to the review and improvement of professional practice in the organisational setting • appraise options for organisational change to improve quality, including those based on theory of change • identify steps required to achieve organisational change, and use appropriate processes • identify and act on work health and safety issues • identify and act on diversity issues within the workplace • maintain personal physical and mental health and wellbeing • recognise and manage the impacts of organisational change 	<ul style="list-style-type: none"> • take reasonable steps to address issues if the safety of peers or community members may be compromised • use a systems approach to improve the quality and safety of care • participate in organisational quality and safety activities, including critical incident reviews • address racism in organisations, including those affecting Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)
Teaching and learning	<ul style="list-style-type: none"> • evaluate their own professional practice • demonstrate learning behaviour and skills in educating junior colleagues • contribute to the generation of knowledge • maintain professional continuing education standards 	<ul style="list-style-type: none"> • recognise the limits of personal expertise, and involve other professionals as needed • use information technology appropriately as a resource for modern medical practice
Research	<ul style="list-style-type: none"> • analyse opportunities, threats, benefits, costs, and risks • undertake research on organisational change • implement management models and organisational theory 	<ul style="list-style-type: none"> • source data on options for priority setting • use appropriate secure information technology to store and access data
Cultural safety	<ul style="list-style-type: none"> • apply principles of cultural awareness, respect, and safety, and ensure that services are inclusive of and relevant to the community • mitigate the influence of their own culture and beliefs on interactions with communities and decision making 	<ul style="list-style-type: none"> • acknowledge the social, economic, cultural, and behavioural factors influencing health, both at individual and population levels

Ethics and professional behaviour	<ul style="list-style-type: none"> • respect the roles and expertise of other health professionals and relevant stakeholders • ensure that documentation and the use of social media and emerging technologies is consistent with ethical and legal obligations • demonstrate awareness of financial and other conflicts of interest 	<ul style="list-style-type: none"> • recognise the responsibility to protect and advance the health and wellbeing of individuals and communities • maintain the confidentiality of documentation
Judgement and decision making	<ul style="list-style-type: none"> • demonstrate understanding of the operation of relevant organisations, including public health, health care, disability support, research, teaching, policy, and other organisations influencing public health • demonstrate understanding of optimal governance structures, election and appointment processes, and responsibilities and accountabilities of board and committee members • gather and synthesise relevant information to inform decisions in the context of organisational management • demonstrate the ability to make, and take accountability for, decisions in the context of organisational management 	<ul style="list-style-type: none"> • demonstrate growing understanding of organisational governance
Leadership, management, and teamwork	<ul style="list-style-type: none"> • lead and manage strategic planning, including business case development • lead and manage operational planning • lead and manage evaluation of a public health program • recruit, train, performance manage, motivate, and discharge staff • manage organisational change • manage a project, organisation, health service, or business unit • develop and manage a budget, including understanding accounting principles, financial reports, budget planning, and ongoing review and reporting processes • use processes for job enhancement, recognition, and dispute resolution • manage / mediate conflict 	<ul style="list-style-type: none"> • attend relevant meetings regularly • use available tools, under supervision, to build skills in chairing meetings • use spreadsheets effectively • prepare for and conduct meetings in a well-organised and time-efficient manner • work effectively as a member of multidisciplinary teams or other professional groups • have knowledge of business and operational processes • demonstrate an awareness of business, financial, and operational processes

	<ul style="list-style-type: none"> • demonstrate comprehension of budget development and management, including understanding accounting principles, financial reports, budget planning, and ongoing review and reporting processes • take a coordinated systems approach to all management tasks • determine and analyse options, and act within short timelines • act on financial information • critically analyse financial statements and business cases 	
Health policy, systems, and advocacy	<ul style="list-style-type: none"> • maintain good relationships with health agencies and services • apply the principles of efficient and equitable allocation of resources to meet individual, community, and national health needs • use effective methods of advocacy appropriate to the issues being considered and the organisational context 	<ul style="list-style-type: none"> • describe the value and role of different organisations within the healthcare system

EPA 12: Public health advocacy

Theme	Public Health Advocacy	AT-EPA-12
Title	Advocate effectively with diverse decision makers, communities, and stakeholders to prevent, promote, and protect the public's health	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• maintain active horizon scanning and critical reflection to identify issues with public health ramifications for populations or population subgroups that present an opportunity for advocacy• undertake review of available evidence, including critical analysis of original work and creditable review documents• describe the intended or desired changes• assess the feasibility and impact of planned advocacy• determine the systems that the issue(s) exist within, and identify key decision makers and audiences• understand the knowledge or perception of the key audiences, their source(s) of information, and intended message objectives• define the goals of the advocacy (SMART goals)• build a base of credibility, and be transparent, professional, and communicate clearly• define targeted, values-based messages for each audience, and determine the most effective communication channels for message delivery• influence through established relationships• mobilise external pressure when required• establish a timeline and responsible party for each activity• evaluate whether objectives have been reached• write reports and/or reflections to aid future advocacy.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision Expected behaviours of a trainee who can routinely perform this activity without needing supervision The trainee will:	Requires some supervision Possible behaviours of a trainee who needs some supervision to perform this activity The trainee may:
Medical expertise	<ul style="list-style-type: none">• use evidence-based principles of practice to identify advocacy opportunities and potential solutions• apply medical knowledge to assess the impact and potential outcomes of current and emerging issues• identify the determinants of health of the population, and mitigate barriers to access to care	<ul style="list-style-type: none">• demonstrate knowledge of current and emerging population health issues• demonstrate understanding of individual (patient⁸) versus population-focused advocacy• assess the spectrum of problems to be addressed

⁸ References to patients in the remainder of this document may include their families, whānau, and/or carers.

	<ul style="list-style-type: none"> translate public health perspectives between people with different expertise, such as clinical, research, and government staff 	
Communication	<ul style="list-style-type: none"> communicate effectively with a broad range of audiences, including writing and editing demonstrate a transparent, consultative style by engaging stakeholders, including government, communities, non-governmental organisations (NGOs), and others collaborate across groups and identify shared understandings and core needs and goals to increase the efficiency and effectiveness of collaborations work with stakeholders, other health professionals, and intersectoral colleagues to resolve conflict that may arise when planning and aligning goals demonstrate rapport with people at all levels by tailoring messages to different stakeholders, using values-based messaging or other approaches present limitations and uncertainty honestly when communicating findings to others demonstrate excellent writing and word processing skills use clear, concise language appropriate to the target audience use email and other written correspondence effectively produce effective proposals, submissions, and articles on public health issues deliver presentations in a variety of settings 	<ul style="list-style-type: none"> recognise different communications approaches for different audiences and situations develop presentation skills, with supervision, using available tools develop media skills, with supervision, using available tools respect the roles of team members use clear, concise language be able to identify contextual factors that will frame communication, such as anger
Quality and safety	<ul style="list-style-type: none"> place safety and quality of care first in all actions and decision making demonstrate the ability to prioritise professional duties effectively and appropriately when faced with multiple issues and problems ensure the safety of people and communities impacted by the advocacy issue, including their confidentiality and cultural considerations 	<ul style="list-style-type: none"> participate in audits and other activities that affect the quality and safety of health care participate in multidisciplinary collaboration to provide effective health services and operational change use current and emerging information resources where available develop reflective practice using available tools

	<ul style="list-style-type: none"> co-design, implement, and use methods to check benefits and harms as experienced by populations at the heart of advocacy issues maintain personal health and wellbeing and recognise the importance of self-care in the workplace 	
Teaching and learning	<ul style="list-style-type: none"> regularly self-evaluate personal professional practice, and implement changes based on the results actively seek feedback from supervisors and colleagues on their own performance, and implement active processes to maintain and improve performance identify personal gaps in skills and knowledge related to public health advocacy, and engage in self-directed learning maintain up-to-date knowledge of new technologies, health priorities, and changes in population health needs 	<ul style="list-style-type: none"> accept feedback constructively, and change behaviour in response recognise the limits of personal knowledge and expertise, and involve other health professionals and supervisors for advice and support as needed
Research	<ul style="list-style-type: none"> establish interdisciplinary collaborations engage with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) for research input and to respect self-determination advocate for effective research, including research funding critically and systematically review relevant literature, taking account of levels of evidence to clearly define issues and potential solutions 	
Cultural competence	<ul style="list-style-type: none"> demonstrate culturally competent relationships with professional colleagues, communities, and advocacy targets, such as government take steps to minimise unconscious bias, including the impact of gender, religion, cultural beliefs, and socioeconomic background identify and apply the values and needs of potential health promotion partners, including Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) 	<ul style="list-style-type: none"> demonstrate awareness of cultural diversity, unconscious bias, prejudice, and racism in all its forms, including pervasive, systemic, and sinuous and overt racism, and other forms of discrimination

	<ul style="list-style-type: none"> co-design advocacy initiatives with affected communities, including Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua) demonstrate respect for diversity and differences 	
Ethics and professional behaviour	<ul style="list-style-type: none"> promote a team culture of shared accountability for decisions and outcomes encourage open discussion of ethical concerns respect differences of multidisciplinary team members demonstrate an understanding of the ethics of resource allocation effectively consult with stakeholders, achieving a balance of alternative views acknowledge personal conflicts of interest, unconscious bias, and other types of bias, such as homophobia, transphobia, and sexism work in partnership with Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua), including their political governance structures identify and appropriately respond to relevant ethical issues arising for groups, organisations, communities, and populations show respect for knowledge and expertise of colleagues 	<ul style="list-style-type: none"> understand and support ethical principles in decision making maintain standards of medical practice by recognising the health of populations as a primary responsibility respect the roles and expertise of other health professionals work effectively as a member of a team
Judgement and decision making	<ul style="list-style-type: none"> use objective processes to identify issues for advocacy action make decisions when faced with multiple and conflicting perspectives ensure public health medical input to organisational decision making adopt a systems approach to analysing information from a variety of spheres to develop and undertake advocacy action 	<ul style="list-style-type: none"> monitor current and emerging public health issues, including for impacts on equity and the health and wellbeing of population subgroups interpret appropriate data and evidence for decision making
Leadership, management, and teamwork	<ul style="list-style-type: none"> identify, prioritise, and develop plans of action for advocacy on issues of importance to public health, especially those that are inequitably experienced visualise a 'better' future, inspire with this vision, and consider the steps, resources, structures, and systems that will help achieve this for effective advocacy action 	<ul style="list-style-type: none"> understand the range of personal and other team members' skills, expertise, and roles participate effectively and appropriately in multidisciplinary teams

	<ul style="list-style-type: none"> • develop and lead effective multidisciplinary teams by facilitating effective and collaborative relationships in and between teams • ensure all team members are accountable for their individual practice • facilitate and manage meetings, and contribute to good decision-making processes and information and knowledge sharing • represent organisations such as state or territory public health units or reference groups and state and national bodies to undertake public health advocacy 	<ul style="list-style-type: none"> • seek out and respect the perspectives of multidisciplinary team members when making decisions
<p>Health policy, systems, and advocacy</p>	<ul style="list-style-type: none"> • identify the key elements of an effective public health advocacy campaign • identify key channels and mechanisms to conduct effective public health advocacy • use the media effectively • use negotiation skills effectively • take account of the perspectives of different sectors, organisations, cultural groups, and populations involved • influence the policy and practices of other sectors / organisations to promote, protect, and improve the health of the population • engage in appropriate consultation with stakeholders on the delivery of health care • advocate for resources and support for healthcare teams to achieve organisational priorities • influence the development of organisational policies and procedures to optimise health outcomes • remove self-interest from solutions to health advocacy issues • demonstrate understanding of public health legislation and regulations and relevant legislation in other sectors, including human rights commitments such as the United Nations Convention on the Rights of Persons with Disabilities (UNCPRD) and the United Nations Convention on the Rights of the Child (UNCRC) 	<ul style="list-style-type: none"> • communicate with stakeholders within the organisation about population health • understand methods used to allocate resources to provide high-quality population health care • promote the development and use of organisational policies and procedures • undertake media and advocacy training

-
- demonstrate understanding of human rights commitments to Aboriginal and Torres Strait Islander peoples and treaty obligations to Māori (tangata whenua)
-

Knowledge Guides

Knowledge guides (KGs) provide detailed guidance to trainees on the important topics and concepts trainees need to understand to become experts in their chosen specialty.

Trainees are not expected to be experts in all areas or have experience related to all items in these guides.



#	Title
1	Scientific foundations of public health medicine
2	<i>The AFPHM is committed to co-designing this learning goal with Aboriginal, Torres Strait Islander, and Māori (tangata whenua) leaders and experts</i>
3	Communicable disease prevention and control
4	Non-communicable diseases and conditions, prevention, and control
5	Preventing, detecting, and managing environmental risks to health
6	Determinants of health

The PHM Curriculum Review Group have requested that lists within these knowledge guides remain as they are and not be alphabetised.

EPIDEMIOLOGY AND RESEARCH METHODS

Advanced Trainees will have in-depth knowledge of the epidemiological concepts and statistical methods listed. Trainees should be able to describe the underlying rationale, the indications for using one study design or statistical method over another, the strengths and weaknesses of different methods / designs, and the correct interpretation of the results.

For issues in study conduct, trainees should be able to describe the threats to study precision, validity, and accuracy, and relevant measures to manage these threats.

Epidemiology

- Causation and causal inference:
 - » causal 'criteria'
 - » sufficient and component causes
 - » other methods contributing to causal inference, such as Bayesian methods, structural equation modelling, and mediation analysis
- Measures of disease burden:
 - » disability adjusted life years (DALYs)
 - » health adjusted life years (HALYs)
 - » morbidity
 - » mortality
 - » quality adjusted life years (QALYs)
- Measures of disease frequency:
 - » cumulative incidence
 - » incidence
 - » incidence rate
 - » prevalence
- Study designs:
 - » systematic review
 - » qualitative methods:
 - focus groups
 - in-depth interviews
 - participant observation
 - » quantitative methods:
 - ecological
 - cross-sectional
 - case-control
 - cohort
 - randomised trials
 - data linkage / big data
 - modelling
 - spatial
 - meta-analysis
- Study conduct:
 - » sampling strategies and study power
 - » ethical issues and ethics approval
 - » measurement of exposure(s), outcome, and confounders
 - » precision, validity, and accuracy:
 - chance
 - measurement bias
 - selection bias
 - confounding (including matching)
 - effect modification
- Quantitative data analysis:
 - » data types:
 - categorical
 - continuous
 - discrete
 - ordinal
 - » descriptive statistics:
 - frequency
 - mean and standard deviation
 - median, interquartile range, and percentiles
 - standardisation

-
- » analytic statistics:
 - confidence intervals (and p-values)
 - multivariable analyses, including linear and logistic regression, Cox regression, and Poisson regression
 - survival analysis
 - sensitivity analyses
 - meta-analysis
 - Measures of effect and association:
 - » absolute risk
 - » attributable risk, attributable difference, attributable proportion, and attributable fraction
 - » hazard ratio
 - » number needed to:
 - treat
 - harm
 - screen
 - » odds ratio
 - » relative risk
 - Qualitative data analysis:
 - » content analysis
 - » discourse analysis
 - » grounded theory analysis
 - » narrative analysis
 - » thematic analysis
 - Standard reporting templates:
 - » CONSORT (Consolidated Standards of Reporting Trials)
 - » PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
 - » STROBE (Strengthening the Reporting of Observational Studies in Epidemiology)

Research methods

- Framing a testable research question
 - Identifying the relevant study population and study sample
 - Awareness of Indigenous research methods
 - Data collection instruments:
 - » objective
 - » subjective
 - » piloting
 - » pre-testing
 - » test characteristics, such as internal consistency
 - Database design
 - Analytical software:
 - » spreadsheet
 - » statistical software or programming packages
 - Documentation:
 - » issues in study conduct
 - » methods, including changes during study
 - » rationale
 - Journal publication:
 - » co-authorship
 - » peer review processes
 - » responses to reviewer comments
 - Using reference management software
 - Writing grant proposals
-

IMPORTANT SPECIFIC ISSUES

Environmental epidemiology

- Exposure assessment
- Exposure versus dose
- Group-level versus individual level
- Objective

Advanced Trainees will identify important specific situations and the related epidemiological and statistical tools

- Subjective
- Modelling
- Biomarkers
- Study designs and analytic tools
- Ecologic studies
- Cross-sectional, case-control, cohort, and case-crossover designs
- Poisson regression (for modelling counts or rates of events)
- Spatial mapping, such as geographic information systems (GIS)
- Special considerations for confounding and clustering
- Time-series analyses
- Distributed lag modelling (linear / non-linear)

Health systems

- Appropriate investigation and management of serious adverse events and complaints about health services, programs, and practitioners
- Geographic, demographic, economic, and environmental challenges of providing health services in rural and remote areas

Health technology assessment

- Key decision making and planning mechanisms
- Major components of the health and disability sectors
- Models of optimal development and operation of:
 - » secondary and tertiary health services
 - » primary care sector
- Quality improvement frameworks to develop and change health services
- Regulation of:
 - » medicines
 - » vaccines
 - » medical devices
- Workforce planning for health services, including in rural and remote areas

Infectious disease epidemiology

- Timelines of infection
- Infectious period
- Latent period
- Timeline of disease
- Constructing an epidemic curve
- Incubation period
- Symptomatic period
- Pathogenicity
- Transmission probability
- Secondary attack rate
- Transmission probability ratio
- Basic and effective reproductive numbers
- Use of whole genome sequencing
- Case fatality ratio

Screening

- Measures of test performance
- Area under the curve
- Likelihood ratios
- Negative predictive value
- Positive predictive value
- Receiver operating characteristic curve
- Reliability
- Sensitivity
- Specificity

Social epidemiology

- Disparities in health related to:
 - » gender
 - » income inequality
 - » intersectionalities
 - » labour markets and employment policies
 - » neighbourhood and urban characteristics
 - » racism and other forms of discrimination, such as sexism, misogyny, transphobia, ableism, and homophobia
 - » socioeconomic status
 - » working conditions
 - » ameliorating factors
 - » experiences, culture, and connection to country of Aboriginal and Torres Strait Islander peoples and Māori (tangata whenua)
 - » social networks
 - » social capital, social cohesion, and health
 - » biological pathways underpinning social disparities in health

Surveillance

- Descriptive epidemiology of health problems
- Uses:
 - » detection of infectious disease outbreaks
 - » detection of patterns of chronic disease, such as geographic
 - » future projections
 - » health advocacy
 - » links to services, such as notifiable diseases
 - » monitoring and evaluation of interventions / public health programs
 - » research, such as generating research questions
 - » detection and management of adverse events relating to:
 - medicines
 - vaccines
 - medical devices
- Elements of a surveillance system:
 - » case definition
 - » confidentiality
 - » cycle of surveillance
 - » incentives to participation, such as for clinicians
 - » population under surveillance
- Approaches to surveillance:
 - » active versus passive
 - » community-based surveillance
 - » information systems
 - » laboratory-based surveillance
 - » notifiable disease reporting
 - » record linkage
 - » registries
 - » sentinel events
 - » surveys
 - » syndromic
- Analysis of surveillance data:
 - » descriptive statistics
 - » advanced techniques to adjust for sampling designs
- Attributes of surveillance systems:
 - » fit-for-purpose
 - » simplicity
 - » sensitivity
 - » flexibility
 - » data quality
 - » acceptability
 - » accuracy and completeness of descriptive information
 - » predictive value

-
- » representativeness
 - » timeliness
 - » stability

Health needs assessment

- Definitions, types, scope, purpose, and feasibility
- Resources – team, time, finances, data acquisition
- Governance and stakeholders
- Background and context:
 - » sociopolitical context and determinants of health
 - » previous reports, literature, and current best practice
- Issue identification and conceptualisation of health needs:
 - » populations, settings, risk factors, burden of disease, and existing service provision
 - » different types of 'need':
 - felt needs
 - expressed needs
 - comparative needs
 - normative needs
 - perceived needs
 - » health versus healthcare
- Data collection and analysis:
 - » types of data – primary / secondary; quantitative / qualitative / mixed methods
 - » ethics, including need for HREC approval
 - » biases, incomplete data, and limitations of public health information, including disease registries and national statistics
- Priorities and recommendations
- Evidence-based strategies prioritised by:
 - » effectiveness
 - » easy wins
 - » acceptability
 - » equity
 - » feasibility
 - » sustainability
 - » cost
 - » budget allocations
- Consultation, including community interpretation of data analysis and priorities
- Implementation, monitoring and evaluation:
 - » integration for impact, such as health services and strategic planning, budget allocations, and advocacy
 - » indicators to monitor responses to needs assessment, including future surveillance, disease trajectories, and quality improvement
- Communication of outcomes clearly articulated to relevant audiences using a variety of methods

The AFPHM is committed to co-designing this learning goal with Aboriginal, Torres Strait Islander and Māori (tangata whenua) leaders and experts.

KEY INFECTIONS

Advanced Trainees will have a comprehensive depth of knowledge of the epidemiology, microbiology, natural history, transmission routes, disease manifestations, methods of diagnosis, and public health prevention and control pathways, including legislation, for key infectious agents.

Infections and conditions

- Blood-borne viruses
- Emerging infections
- Enteric infections, including foodborne and waterborne pathogens
- Environmental pathogens
- Invasive diseases
- Respiratory infections
- Sexually transmissible infections
- Vaccine preventable diseases
- Vector-borne diseases
- Zoonotic diseases

Prevention

- Immunisation:
 - » current immunisation schedules
 - » design, evaluation, and management of immunisation programs
 - » approaches to improving vaccine coverage
- Infection control organisation and activities
- Development, commissioning, and evaluation of services required for protecting health:
 - » screening for other infections
 - » sexual health services
 - » tuberculosis screening
 - » travel health services
- Priority populations:
 - » Aboriginal and Torres Strait Islander peoples
 - » Māori (tangata whenua)
 - » Pacific peoples
 - » LGBTQIA+ people
 - » older persons
 - » pregnant people
 - » people of refugee and/or asylum seeker background
 - » others, such as:
 - disabled
 - immunosuppressed
- High risk settings:
 - » aged care facilities

For each infectious agent and condition, Advanced Trainees will **know how to**:

Synthesise

- » assemble relevant information, particularly microbiology data
- » consider the impact of the situation on individuals, workplaces, family, and the wider community when developing a management plan
- » declare an outbreak
- » demonstrate their understanding of the public health regulatory system with regards to food and water safety
- » develop a case definition
- » develop an epidemic curve
- » identify relevant epidemiology, microbiology, disease manifestations and sequelae, and public health prevention and control pathways
- » undertake a comprehensive case interview
- » undertake an outbreak investigation

Manage

- » assemble and involve multidisciplinary teams
- » communicate public health messages to relevant audiences
- » implement evidence-based public health management
- » recognise potential complications of disease at the population level and initiate preventative strategies

- » early childhood education and care facilities
- » health care settings
- » mass gatherings
- » other residential settings, such as boarding schools and disability accommodation
- » people in custodial settings
- » schools

Consider other factors

- » identify individual, social, and cultural factors, and legal responsibilities in the management of the situation

OUTBREAK INVESTIGATION

Advanced Trainees will know the scientific foundation of outbreak investigation. They will be able to interpret results from multiple lines of investigation (laboratory, genetic, environmental health report, epidemiological study) and synthesise these to develop action plans.

They will know how to communicate the investigation to individuals affected, relevant settings (e.g. workplace, schools), families, community, and media, and to report to the relevant parties.

Procedures

- Establish the situation to date
- Identify a potential outbreak according to:
 - » disease
 - » setting
- Identify and consult relevant documentation:
 - » disease-specific, such as national guidelines and local outbreak investigation protocol
- Understand team functions, and establish an outbreak management team
- Verify diagnoses, confirm an outbreak, and decide whether to investigate further
- Conduct a case interview
- Develop an appropriate outbreak case definition
- Ensure effective identification and management of cases (including case finding strategies), contacts, and the environment, including any vectors or contaminated food or water
- Ensure appropriate control measures of other sources of infection are in place
- Implement appropriate infection control in relevant institutional settings, such as hospitals, residential care, and childcare facilities
- Develop and test an outbreak hypothesis
- Communicate public health messages to relevant audiences
- Determine appropriate use of vaccines and immunoglobulin for post-exposure prophylaxis and broader outbreak control
- Establish an appropriate timeframe for closure of the outbreak
- Document as required

EPIDEMIOLOGY

Advanced Trainees will know how to analyse surveillance data to support the management of chronic disease, mental illness, and injury, and their risk factors, and to detect trends and events requiring an immediate response.

Advanced Trainees will know how to assess the public health impact of risk factors and interventions aimed at reducing the impact of communicable disease.

Infectious disease epidemiology

- Timeline of infection:
 - » latent period
 - » incubation period
 - » infectious period
- Timeline of disease:
 - » constructing an epidemic curve
 - » incubation period
 - » symptomatic period
- Pathogenicity:
 - » transmission probability
 - » secondary attack rate
 - » transmission probability ratio
- Basic and effective reproductive numbers
- Use of whole genome sequencing
- Case fatality ratio
- Analytical epidemiology for outbreak investigations, including case control and cohort studies

Surveillance

- Descriptive epidemiology of health problems
- Uses:

-
- » detection of infectious disease outbreaks research, such as generating research questions
 - » future projections
 - » health advocacy
 - » links to services, such as notifiable diseases
 - » monitoring and evaluation of interventions / public health programs
 - » monitoring trends and patterns of behaviour and disease
 - Elements of a surveillance system:
 - » case definition
 - » cycle of surveillance
 - » data security and confidentiality
 - » incentives to participation, such as for clinicians
 - » legislative and governance requirements
 - » population under surveillance
 - » type of surveillance
 - Approaches to surveillance:
 - » active versus passive
 - » syndromic, sentinel, and rumour
 - Data sources:
 - » information systems
 - » laboratory-based surveillance
 - » notifiable disease reporting
 - » record linkage
 - » registries
 - » sentinel events
 - » surveys
 - Analysis of surveillance data:
 - » advanced techniques to adjust for sampling designs
 - » descriptive statistics
 - Attributes of surveillance systems:
 - » fit-for-purpose
 - » simplicity
 - » sensitivity
 - » flexibility
 - » data quality
 - » acceptability
 - » accuracy and completeness of descriptive information
 - » predictive value
 - » representativeness
 - » timeliness
 - » stability
-

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important public health issues and the impact of these on the control of communicable diseases.

- Activities of international health and development agencies, such as World Health Organization and Centres for Disease Control
 - Anti-microbial resistance:
 - » causes
 - » interventions:
 - primary, secondary, tertiary
 - » public health implications
 - » significant organisms
 - Human biosecurity measures:
 - » national and international
 - » relevant legislation
 - » known, new, and emerging infectious diseases
 - One Health approaches:
 - » global interconnectivity
 - » interconnectedness of animal, human, and environmental health
 - » key regulatory bodies and stakeholders
 - State, national, and international public health legislation and its application
 - Sources of critical public health information, such as:
-

-
- » Australian Technical Advisory Group on Immunisation (ATAGI)
 - » Communicable Diseases Network Australia (CDNA)
 - » Australian Immunisation Handbook
 - » Aotearoa New Zealand: Immunisation Handbook
 - » Institute of Environmental Science and Research (ESR) Infectious Disease Intelligence & Surveillance
 - » Te Whatu Ora / Health New Zealand Communicable Disease Control Manual
-

KEY CONDITIONS

Advanced Trainees will have a comprehensive depth of knowledge of the epidemiology of non-communicable diseases and their risk factors, disease burden in populations, and prevention and control pathways.

Conditions

- Cancers
- Cardiovascular disease
- Chronic kidney disease
- Chronic liver disease
- Chronic lung disease, such as:
 - » chronic obstructive pulmonary disease
 - » lung fibrosis
- Chronic pain
- Injury, such as:
 - » intentional
 - » unintentional
- Mental illness
- Metabolic diseases, such as:
 - » type 2 diabetes
 - » obesity
- Neurodegenerative diseases, such as dementia
- Adverse reproductive outcomes, such as:
 - » fertility variations
 - » preterm or small for gestational age
 - » developmental issues (environmental injury)
 - » perinatal mortality and key infant outcomes, such as birthweight and infant mortality rates
 - » maternal morbidity / mortality
- Relevant other non-communicable diseases, including those with inequitable distribution

Risk factors

- Absence of social and emotional wellbeing
- Alcohol
- Drug abuse
- Denial and abuse of human rights
- Deprivation
- Domestic violence
- Inactivity and sedentary behaviour
- Overweight / Obesity
- Poor nutrition
- Problematic gambling
- Tobacco smoke and e-cigarette exposure
- Other disease-specific risk factors

For each risk factor and condition, Advanced Trainees will **know how to**:

Synthesise

- » consider the impact of the situation on individuals, workplaces, family, and the wider community
- » identify relevant epidemiology, disease sequelae, and public health prevention and control pathways

Manage

- » advise on evidence-based public health management
- » consider and advocate for intersectoral and multisectoral approaches to management
- » recognise potential complications of disease and their management, and initiate preventative strategies

Consider other factors

- » identify individual, social, cultural, environmental, and other health determinants, and legal responsibilities, in public health management of risk factors and conditions

Prevention

- Health promotion programs addressing risk factors, focusing on:
 - » building healthy public policy and legislation
 - » creating environments supporting health
 - » healthcare services and systems
 - » individuals and health literacy
 - » strengthening community action
- Primordial, primary, secondary, and tertiary prevention
- Relevant legislative frameworks
- Relevant governmental / non-governmental organisations
- Harm minimisation of tobacco, vaping and e-cigarettes, drugs, and alcohol, including:
 - » demand reduction
 - » harm reduction
 - » supply reduction
- Priority populations:
 - » Aboriginal and Torres Strait Islander peoples
 - » Māori (tangata whenua)
 - » Pacific peoples
 - » homeless
 - » LGBTQIA+ people
 - » lower socioeconomic status
 - » people in custodial settings
 - » people experiencing unstable housing
 - » people who inject drugs
 - » people of refugee and/or asylum seeker background
 - » rural and remote
 - » youth

Public health management

- Harm minimisation
- Health promotion program development, implementation, operation, and evaluation
- Mapping and collaboration with relevant stakeholders
- Policy, advocacy, legislation, and regulatory change
- Population health surveillance and screening
- Transition to sustainable future

CLUSTER INVESTIGATION

Advanced Trainees will know the scientific foundation of disease cluster investigation. They will be able to interpret results from multiple

Procedures

- Establish known details to date
- Decide whether to investigate further
- Consult relevant documentation:
 - » cluster investigation protocol
- Understand team functions
- Engage with relevant stakeholders
- Ensure effective management of cases is underway

lines of investigation (surveillance and routinely reported health data, environmental monitoring, and epidemiological study) and synthesise these to develop action plans.

Advanced Trainees will know how to communicate the investigation to individuals affected, relevant settings (e.g. workplaces, schools), families, community, the media, and to report to the relevant parties.

- Investigations, such as epidemiological investigation and exposure assessment:
 - » recognise limitations of study power, and the role of chance
 - » use appropriate analyses, such as Poisson and small area analyses
- Recognise when to escalate or expand investigation
- Ensure control of sources of risk, such as environmental pollution
- Communicate to gather relevant public health information and disseminate findings and recommendations to a variety of audiences, including stakeholders, public, and the media, including effective oral and written communication

EPIDEMIOLOGY

Advanced Trainees will know how to analyse surveillance data to support the management of chronic disease, mental illness and injury and their risk factors and to detect trends and events requiring an immediate response.

Advanced Trainees will know how to assess the public health impact of risk factors and interventions aimed at reducing the impact of non-communicable disease.

Monitor access and use of health technologies and interventions

- Diagnostic services
- Ethical, regulatory, and resource implications
- Health care systems – private / public
- Health insurance-based systems / Out-of-pocket costs
- Pharmaceuticals
- Public health implications of genetic factors and technologies, including their roles in:
 - » determining causality
 - » epidemiological research
 - » health care
 - » screening
- Treatment services

Screening

- Screening as a secondary prevention strategy
- Features of organised population screening programs
- Potential benefits and harms of population screening programs
- Current and forthcoming programs in Australia / Aotearoa New Zealand
- Criteria for introducing a new program in Australia / Aotearoa New Zealand
- Implementation and delivery of programs
- Evaluation, quality assurance, and improvement of programs:
 - » potential sources of bias in evaluation – volunteer, lead-time, length
 - » design of studies to evaluate programs

Surveillance

- Descriptive epidemiology of health problems
- Uses:
 - » detection of patterns of chronic disease, such as geographic and time trends
 - » future projections
 - » health advocacy
 - » identifying at-risk populations
 - » links to services, such as notifiable diseases
 - » monitoring and evaluation of interventions / public health programs
 - » research, such as generating research questions
 - » resource allocations
 - » health technologies and health care usage

-
- Elements of a surveillance system:
 - » case definition
 - » confidentiality
 - » cycle of surveillance
 - » incentives to participation, such as for clinicians
 - » population under surveillance
 - Approaches to surveillance:
 - » active versus passive
 - » information systems
 - » laboratory-based surveillance
 - » notifiable disease reporting
 - » record linkage
 - » registries
 - » sentinel events
 - » surveys
 - Analysis of surveillance data:
 - » advanced techniques to adjust for sampling designs
 - » descriptive statistics
 - Attributes of surveillance systems:
 - » fit-for-purpose
 - » simplicity
 - » flexibility
 - » data quality
 - » acceptability
 - » sensitivity
 - » predictive value
 - » accuracy and completeness of descriptive information
 - » representativeness
 - » timeliness
 - » stability
-

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important public health issues and the impact of these on the public health management of non-communicable diseases

- Awareness and analysis of systems particularly as they relate to inequities:
 - » quality and safety, such as high morbidity and mortality around women's health in regional, rural, or remote hospitals
- Using an equity lens to understand and analyse public health issues and systems so everyone can attain their full potential for health and wellbeing

KEY ISSUES

Advanced Trainees will have a comprehensive depth of knowledge of risks to health due to exposures in the physical environment, their potential disease sequelae, and public health management through prevention and control pathways.

Advanced Trainees will know about legislation in environmental control, environmental monitoring, and international aspects of hazard control.

Advanced Trainees will recognise that the management of environmental risks to health are multisectoral and may not be led by health.

Risk factors

- Hazard types:
 - » biological
 - » chemical
 - » nuclear
 - » physical
 - » radiological
- Occupational and setting-specific exposures
- Pollution / Contamination of:
 - » air
 - » food
 - » land
 - » water
- Climate change:
 - » heat
 - » extreme weather events
 - » vector-borne diseases
 - » forced migration / relocation
 - » poor food security and quality

Conditions

- Allergy
- Burns, including inhalation
- Cancers
- Cardiovascular disease
- Developmental disorders
- Drowning
- Hearing loss
- Heat-related illnesses
- Injury
- Mental illness
- Metabolic
- Motor vehicle accidents
- Neurological disease
- Renal disease
- Reproductive outcomes
- Respiratory disease
- Vector-borne diseases
- Others

Prevention

- Application of health promotion programs addressing risk factors linked to the physical environment, focusing on:
 - » environments that support health
 - » families and communities
 - » healthcare services
 - » individuals and health literacy
 - » policy and legislation

For each risk exposure, Advanced Trainees will **know how to:**

Synthesise

- » consider the impact of the situation on individuals, workplaces, communities, the public and other relevant stakeholders when developing a management plan
- » identify and analyse relevant epidemiology, disease sequelae, and public health prevention and control pathways

Manage

- » advise on evidence-based public health management
- » communicate environmental health risk information effectively
- » conduct environmental health risk assessments
- » involve multidisciplinary teams
- » recognise potential environmental health risks and their management, and initiate preventative strategies
- » use regulatory measures to protect health

Consider other factors

- » identify the relative importance of different exposures for specific populations and cultural groups and legal responsibilities in management

- Prevention approaches to complex public health challenges that manifest in environmental public health practice, including:
 - » climate change mitigation and adaptation
- Understanding of populations or settings at increased risk:
 - » Aboriginal and Torres Strait Islander peoples
 - » Māori (tangata whenua)
 - » Pacific peoples
 - » immigrant and non-English speaking populations
 - » lower socioeconomic status
 - » people of refugee or asylum seeker background
 - » residents in low-lying regions
 - » rural and remote communities
- Understanding of primordial, primary, secondary, and tertiary prevention of disease states linked to the physical environment
- Use of legislative frameworks and regulatory tools

Public health management

- Identify risk management objectives
- Assess risk management options and their benefits and costs
- Work with communities to identify acceptable risk
- Work with other sectors to implement risk management strategies
- Evaluate outcomes of risk management
- Use regional and local planning processes to protect and promote health:
 - » contribution of local environmental factors
 - » methods for review and audit of local government plans
 - » role of other agencies

ENVIRONMENTAL HEALTH ASSESSMENT AND MANAGEMENT

Advanced Trainees will know appropriate national and state / territory guidelines and how to undertake the listed environmental health assessments.

Environmental health risk assessment

- Hazard identification:
 - » chemicals of potential concern
- Dose response assessment:
 - » relevant toxicity data
- Exposure assessment
 - » identify exposed populations and exposure pathways and estimate exposure concentration
- Hazard assessment:
 - » risk characterisation
 - » evaluate uncertainty

They will be able to interpret results from multiple lines of investigation (surveillance and routinely reported health data, environmental monitoring, and epidemiological study) and synthesise these to develop action plans.

Advanced Trainees will know how to communicate the investigation to individuals affected, relevant settings (e.g. workplace, schools), families, community, and the media, and to report to the relevant parties.

- Risk management:
 - » define options and evaluate health
 - » economic, social, and political aspects
 - » take action to implement decisions
 - » communicate risks to audiences using appropriate media
 - » write a report with appropriate circulation

Chemical incident management

- Recognition of the need for an urgent and intersectoral response
- Identify actions required in appropriate time frames
 - » first few hours
 - » first 24 hours
 - » remainder of the management period
 - » post-incident, including post-incident reporting

Emergency and disaster management

- Recognition of the need for an urgent and intersectoral response
- Application of national whole-of-government incident systems
- Preparedness
- Prevention
- Recovery
- Response
- Post-incident report, with appropriate circulation

Health impact assessment

- Establish an appropriate team, and identify relevant stakeholders and impacted communities
- Follow a stepwise process of screening, scoping, profiling, assessment, management, decision making, monitoring, and evaluation
- Consider benefits and hazards
- Use suitable qualitative and quantitative methods
- Collect and analyse results
- Communicate findings, including a written report with appropriate circulation

EPIDEMIOLOGY

Advanced Trainees will know how to analyse surveillance data to support the management of environmental health risks and to detect trends and events requiring an immediate response. They will know how to assess the public health impact of environmental hazards and build an evidence base to support interventions to reduce that impact.

Environmental epidemiology

- Exposure assessment:
 - » exposure versus dose
 - » group-level versus individual level
 - » objective
 - » subjective
- Study designs and analytic tools:
 - » ecologic studies
 - » cross-sectional, case-control, and cohort
 - » spatial mapping, such as geographic information systems (GIS)
 - » Poisson regression (for modelling counts or rates of events)
 - » time-series analyses
 - » standardised incidence ratio (SIR)
 - » special considerations for confounding and clustering

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important public health issues relating to the health risks from the physical environment.

- Climate change and its impact on human and planetary health:
 - » the environmental impact of health systems and sustainability within the healthcare system, including ethical, regulatory, and resource implications
 - » effects of climate change on communicable disease prevention and control risks
 - » impact of climate change on non-communicable disease
 - Air quality and the impact of poor air quality on health
 - National and international public health legislation and its application, including human rights legislation, treaties, charters, and the principles of effective public health regulation
 - The application of One Health principles to environmental public health
 - The application of environmental public health issues to specific important settings, including:
 - » early childhood education and care facilities
 - » homes
 - » hospitals (acknowledging iatrogenic harms in hospital-based service provision)
 - » meeting places for diverse cultural groups
 - » prisons and other institutions
 - » remote communities
 - » residential care facilities
 - » schools
 - » workplaces
 - The development of environmental health guidelines
 - Exposure to solar ultraviolet radiation and its health impacts
-

KEY DRIVERS

Advanced Trainees will have a comprehensive depth of knowledge of the determinants of health, and the effects of the social, cultural, and political environments on the health of populations and diverse population sub-groups, including public health initiatives to reduce inequities.

Understanding the broader determinants of health

- Social and economic environment influences on health, including:
 - » discrimination
 - » educational attainment
 - » income
 - » migration
 - » social injustice
 - » colonisation
 - » social support networks
 - » social status
- Digital determinants of health, including:
 - » direct and indirect ways by which digital transformation influences equity in health and wellbeing
- Commercial determinants of health, including:
 - » private commercial activities and their effect on health and health equity – directly and indirectly, positively and negatively, including across the industries of tobacco, food, fossil fuel, and alcohol
- Physical environment, including impact of health from:
 - » clean air
 - » employment
 - » healthy workplaces
 - » safe communities
 - » safer housing
 - » safe water
- Access and use of quality health care and health services for prevention and treatment, inclusive of all levels and types of care
- Individual characteristics and behaviours, including:
 - » gender
 - » genetics
 - » identity
 - » personal behaviours, including:
 - nutrition
 - physical activity
 - outdoor activity / exposure to green space
 - » ameliorating factors, including spirituality and/or religion

For each of the determinants listed, Advanced Trainees **will know how to:**

Synthesise

- » relevant evidence, including from listening to communities, applying epidemiology, and reviewing literature from other populations where health inequities have been successfully reduced
- » the differential impact of public health interventions on individuals, family, communities, and the wider population when developing implementation plans

Manage

- » advise on public health management to mitigate inequitable social determinants
- » involve multidisciplinary teams and effectively engage, communicate, and collaborate with relevant stakeholders
- » recognise the necessity of communities advising on and leading initiatives to improve their health

Consider other factors

- » identify the relative importance of different determinants for specific population and cultural groups
- » identify legal and treaty responsibilities in management

Achieving equity

- The imperative for reducing health inequities, including:
 - » addressing poverty as a key driver of child mortality and morbidity, including relative deprivation, across all determinants of health
 - » translating public health knowledge into effective action, including political action
- Understand the concept of intersectionality and the interactions between different aspects that can amplify inequity of a group, such as:
 - » attitudes
 - » gender
 - » identity
 - » organisations
 - » race
 - » systems
 - » structure
- Understand syndemic theory, including:
 - » the concept of polycrisis
 - » adverse interactions between diseases and social conditions (social gradient)
 - » clustering of adversity by person, place, or time
 - » mitigating and aggravating factors, such as misinformation and disinformation
- Consideration of resource allocation in health care, with reference to ethical principles

Priority populations

- Aboriginal and Torres Strait Islander peoples
- Māori (tangata whenua)
- Pacific peoples
- Elderly, women, and children
- LGBTQIA+ people
- People of refugee and/or asylum seeker background
- Immigrants and people who do not speak and/or understand English
- People currently and recently incarcerated
- People living in unstable housing / with insecure shelter
- People living with a disability
- Relative socioeconomic disadvantage
- Rural and remote
- Underemployed and unemployed

Public health management

- Advocate for and implement community-led interventions and culturally responsive engagement with communities

	<ul style="list-style-type: none"> • Advocate for health equity • Build a public health workforce that is diverse and inclusive • Model anti-racist and culturally responsive behaviours 	
EPIDEMIOLOGY Advanced Trainees will know the epidemiology of health disparities across population groups defined along social, economic, or cultural lines.	<ul style="list-style-type: none"> • Drivers of health inequity across diverse population sub-groups • Identification of population sub-groups, according to: <ul style="list-style-type: none"> » ethnicity, race, and culture » disability » gender and gender identity » geography, such as rurality » sexual preference » socioeconomic status • Indigenous data sovereignty and shared access to data and information at a regional level • Key demographic, social, and economic indicators by region and trends • Key health statistics by region, population group, and trends • Measures of deprivation and socioeconomic status, such as the Socio-Economic Index for Areas (SEIFA) and Aotearoa New Zealand Deprivation Index (NZDep) • Sources of health information and their quality, including for specific population sub-groups 	
HEALTH INEQUITY ASSESSMENT AND MANAGEMENT Advanced Trainees will know how to explore, analyse and report on health inequalities	Health equity impact assessment <ul style="list-style-type: none"> • Needs assessment for priority populations • Problems and objectives • Research, analysis, and consultation • Recommend options • Implementation and operation • Review and reassess, monitoring, and evaluation • Structured approach for considering the potential impact of policies, programs, or other initiatives on health equity (can be applied prospectively or retrospectively) Systems thinking <ul style="list-style-type: none"> • Analyse and interrogate issues and situations using key concepts and tools of systems thinking, such as causality, influence, and interconnectedness • Apply pattern recognition and systems mapping as tools to improve population and public health policy and practice • Compare and select strategies based on risk, benefit, harms, and unintended consequences • Select and change appropriate structures and systems for health improvement • Solve public health issues using adept systems thinking 	
IMPORTANT SPECIFIC ISSUES Advanced Trainees will identify important public health issues relating to health inequities.	<ul style="list-style-type: none"> • Activities of international health and development agencies, such as World Health Organization • Concept of proportionate universalism • Health inequities (both emerging and exacerbation of existing) due to climate change and other global impacts • Ethical tensions arising in the promotion of population health and reducing health inequities • National and international public health policy and legislation and the direct and indirect impacts on health inequities 	