

Curriculum standards

Advanced Training in Public Health Medicine

DRAFT

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About this document

This document outlines the draft 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 learning, teaching, and assessment programs.

For more information or to provide feedback contact curriculum@racp.edu.au.

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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.



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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.

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 socio-political 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, Māori (tangata whenua), and Pacific 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 deeply cognisant of strengths-based strategies and proven enablers for positive health improvement. Public health physicians develop and contribute to strategies to prevent disease including primordial prevention, action on social and environments and individual prevention such as national immunisation schedules and screening program; lead case, contact and outbreak management; attempt to identify unjust health disparities, and communicate effectively with stakeholders and the community for social impact.

Public health physicians have knowledge and expertise in:

- **Health research, epidemiology and surveillance**
 - Gathering and assessing scientific evidence to translate findings to real-world policy and practice.
 - Describing, monitoring and modelling disease occurrence and specific health needs within populations and determining the drivers of ill health.
 - Building the evidence base through quantitative and qualitative approaches, research ethics, and emerging tools such as network analysis, big data and data linkage, whole genome sequencing, and artificial intelligence.

- **Systems thinking**
 - 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:**
 - social, cultural, economic, political, historical and commercial determinants
 - relativity of these determinants as factors influencing population and public health

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 and evaluating projects, programs, and systems levels interventions for**
 - Promotion of health and well-being
 - 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 synthesizing population health information to drive public health action**
- **Analysing, developing, and planning health policy and legislation**
 - Provide technical expertise for policy decisions including legislation and mobilise statutory regulatory actions.

- **Intersectoral and health service planning and management**

- Intersectoral systems and public health approaches.
- Healthcare service redesign including effective strategies to eliminate institutional racism through codesign.
- Across all branches of government.
- High-value healthcare, 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples, public health physicians exhibit cultural humility and, in acknowledging disciplinary limitations, foster effective multidisciplinary and participatory and culturally appropriate 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.
- 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**

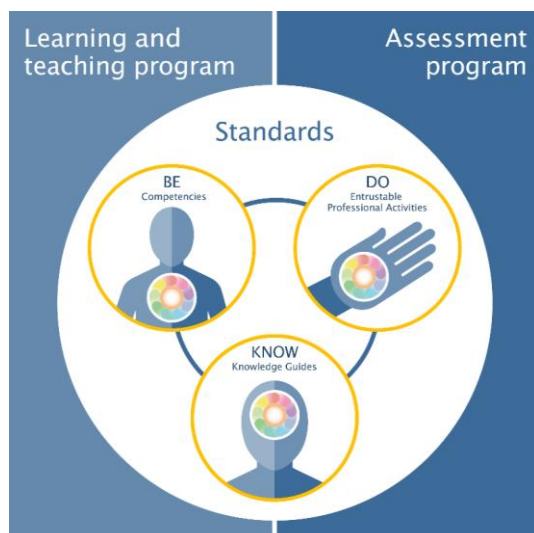
- Appreciating that population health and the uptake of public health strategies reflects social, cultural, political and intergenerational factors, and practise accordingly.
- Tailoring and adapting roles to unmet needs in context and amplify public health action as required for the context of the public health problem.
- Acting as cross-cultural partners.
- Contextualise and share disciplinary knowledge.
- Seeking and incorporating Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples' knowledge and ways of being, knowing and doing.
- 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 to increase capacity for more effective interventions, strategies, policy and practise.

- Surveying and analysing disease trends and early lead indicators for health and wellbeing.
- 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 and 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 and through all career developments.
 - Ensuring personal and professional capabilities to practise in culturally responsive ways.
 - Seeking feedback on cultural safety as a human right for Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.
- **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 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.
- **Equity**
 - Contributing to positive health for all and elimination of inequities in health outcomes in collaboration with priority populations.
 - Recognising the institutionalisation of epistemic injustice and acknowledging the importance of Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples' leadership 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 ten domains of practice for all physicians.



Learning, teaching, and assessment structure

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



- 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 patients and populations.

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

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

Diagnosis and management: Develop diagnostic and management plans in partnership with patients, families (whānau), carers and communities, and in collaboration with health care 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 socio-political context, that integrate an understanding of individual patient circumstances, including psychosocial factors and specific vulnerabilities, epidemiology, and population health factors in partnership with patients, families, whānau, or carers², and in collaboration with the health care team.

Effective first aid: provide effective first aid in emergency situations, including cardiopulmonary resuscitation

²References 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 and technologies, including active listening.

Communication with patients, families (whānau), ~~and~~ carers and communities: Use collaborative, effective, respective and empathetic communication with patients, families, ~~and~~ 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/or stakeholders and other agencies.

Written communication: Codesign, document and share information in an appropriate format about patients to optimise the health patient care and safety of patients and communities.

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

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

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

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

Patient ~~e~~Engagement: Enable patients, families (whānau) and communities to contribute to the safety of their care.



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, including in relation to supporting culturally responsive public health practice.

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

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

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

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



Research

Professional standard: Physicians support creation, dissemination and translation of knowledge and practices applicable to health³. 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 clinical guidelines and policy (with awareness of continuing colonisation of thought leadership, ideas and solutions), and apply these in daily practice.

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

Indigenist enquiry: Support Indigenist enquiry and respect Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific People's ways of being, knowing and doing as necessary epistemologies to improve health and wellbeing in partnership with Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples; and, their respective community-controlled organisations and Elders. Adopt standards to ensure Data Sovereignty for Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.

³Adapted 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 health care 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.⁴

This is a placeholder for the competencies in the cultural safety domain.

This content is in development and will be added at a later date.

⁴ The RACP has adopted the Medical Council of New Zealand's definition of cultural safety (below): Cultural safety can be defined as:

- 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 health professionals and health care 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.

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 and their families 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.

Equity-focussed: Practice to promote health and wellbeing through strengths-based approaches and reduce measured disparities in health and health care

Beliefs and attitudes: Reflect critically on personal beliefs and attitudes, including prejudice, bias and intolerance, to understand how these may impact the on-patient care of individuals and populations.

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

Community and population benefit: Prioritise community benefit above individual self-interest; recognise and aid Indigenous self-determination and strengths-based partnership with co-design.

Patient welfare: Prioritise patients' welfare and community benefit above self-interest.

Accountability: Be personally and socially accountable.

Personal limits: Practise 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 professionals.

Respect and sensitivity: Respect others, including patients, families (whānau) and communities. ~~M~~Maintain appropriate relationships, and behave with a pro-equity approach, equitably.

Privacy and confidentiality: Protect and uphold patients' rights to privacy of patients, colleagues and communities. Maintain and confidentiality of information provided during professional practice.

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

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

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.

Diagnostic reasoning: Apply sound evidence-based diagnostic reasoning to clinical problems-public health issues to make logical and safe clinical-planning and management decisions.

Resource allocation: Apply judicious and cost-effective use of health resources to their-practicepublic health medical practice, simultaneously recognising structural barriers to access, equity, and resources for communities with poor health outcomes.-

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

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

Shared decision-making: Contribute effectively to shared team-based decision-making processes including with stakeholders, partner organisations, and communities.-



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. ~~individual patients and their social support networks.~~

Equity and access: Work with ~~patients, communities, partners and stakeholders and social support networks~~ to address determinants and support equitable of health that affect them and their access to ~~needed~~ health services and/or resources. Recognise continuing colonisation and other socio-cultural determinants of health that contribute to population health outcomes.

Stakeholder engagement: ~~Involve~~ Work with communities and ~~patient stakeholders~~ groups in decisions that affect them to identify strength 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, with particular attention to inequities experienced by Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.

Resource allocation: Understand the factors influencing resource allocation, promote efficiencies, and advocate effectively 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	<u>Leadership and accountability</u>	Lead public health responses, programs, projects, and organisations adapting the leadership style to the situation
2	<u>Supervision and teaching</u>	Provide high quality teaching and supervision for professional colleagues
3	<u>Quality improvement</u>	Identify and address opportunities to improve own practice and the health care system
4	<u>Incident response</u>	Assess and respond to urgent and/or evolving public health issues
5	<u>Populations and public health interventions</u>	Design, develop, implement and evaluate projects, programs, and systems-level interventions to improve health and well-being
6	<u>Population health information</u>	Gather, critically appraise, analyse and synthesise information to drive public health actions
7	<u>Communication and engagement for population health gain</u>	Engage with communities and communicate complex health information for population health gain
8	<u>Multi-cultural population and public health</u>	Identify and practice within multi-level, complex, trust-dependent and culturally-bounded social systems
9	<u>Policy analysis, development and planning</u>	Develop and influence policy to improve public health and purposefully address aspects of health inequities
10	<u>Organisational unit management</u>	Lead and manage organisational units effectively
11	Title TBA	<i>The AFPHM is committed to co-designing this learning goal with Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples' leaders and experts</i>

EPA 1: Leadership and accountability

Theme	Leadership and accountability	AT-EPA-01
Title	Lead public health responses, programs, projects, 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, 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, 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 (state, territory, district health board, public health unit) on any committees or groups you sit on in your leadership role, e.g. Communicable Disease Network of Australia, technical reference groups.	
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: <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 practise to meet the needs of populations adapting to cultural context and promoting self-determination• change viewpoints rapidly and responsibly between macro and micro, and work on either details or big picture, as required• identify salient potential issues across a broad range of situations.	The trainee may: <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• recognise how the policy and practises of other sectors and organisations influence the health of the population
Medical expertise		

	<p>including from issue analysis, policy development, implementation, response, and public or stakeholder communications</p> <ul style="list-style-type: none"> • translate public health perspectives and required outputs between people with different expertise e.g. clinical, research, government 	<ul style="list-style-type: none"> • 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 patients, families, 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, e.g. level of outrage.
Quality and safety	<ul style="list-style-type: none"> • use frameworks to guide intersectoral action, e.g. 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 	<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 ethical use of

	<ul style="list-style-type: none"> • 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 practise • demonstrate the ability to prioritise professional duties effectively and appropriately when faced with multiple issues and problems • build and apply leadership techniques in daily practise through ongoing learning. 	<ul style="list-style-type: none"> • electronic medical record technology where available • develop and share reflective practise using available tools • encourage others to practise continuous quality improvement • advocate for system improvements in response to audit findings • lead by example in quality improvement activities.
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, and engage in self-directed learning • maintain up-to-date knowledge of new technologies, health priorities, and changing health needs • learn and use methods including anti-racist reflection to be culturally competent • teach competently by imparting professional knowledge • manage and monitor learner progress, providing regular assessment and feedback • evaluate the impact of educational material • advise on educational programs to improve practise • initiate and conduct skills training for junior staff • mentor junior colleagues and act as a role model • prioritise offers to Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples colleagues to mentor, support and learn with. 	<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.
Research	<ul style="list-style-type: none"> • establish interdisciplinary collaborations • engage with Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples, their political structures and respect self-determination • apply for and secure funding 	<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

	<ul style="list-style-type: none"> review research proposals advocate for policy- and practice-relevant research undertake and use systematic reviews to produce and implement best practise 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"> 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 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples co-design with and support self-determination of Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples. 	<ul style="list-style-type: none"> demonstrate awareness of cultural diversity, unconscious bias, prejudice and racism in all its forms (including pervasive, systemic, sinuous and overt racism) 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples including their political governance structures and community-controlled health sector services acknowledge personal conflicts of interest, racism, prejudice and unconscious bias 	<ul style="list-style-type: none"> support ethical principles in decision making maintain standards of medical practice by recognising the health interests of patients or 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.

	<ul style="list-style-type: none"> act collaboratively to resolve behavioural incidents and conflicts such as harassment, bullying, racism 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. 	
Judgement and decision making	<ul style="list-style-type: none"> use decision science approaches to formalise the 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	<ul style="list-style-type: none"> 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 get there. e.g. to enhance efficiency, improve access, minimise harm develop and lead effective multidisciplinary teams by: <ul style="list-style-type: none"> » 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) 	<ul style="list-style-type: none"> 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"> and others with expertise and wisdom <ul style="list-style-type: none"> » collaborating with and motivating team members » encouraging and adopting insights from team members » ensuring all team members are accountable for their individual practise » 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, contribute to good decision-making processes, information and knowledge sharing • demonstrate understanding of public health legislation and regulations, relevant legislation in other sectors including human rights and treaty obligations to Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples • 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 practises of other sectors/organisations to promote, protect and improve the health of the population • engage in appropriate consultation with stakeholders on the delivery of healthcare 	<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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples population health.

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- 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.
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DRAFT

EPA 2: Supervision and teaching

Theme	Supervision and teaching		AT-EPA-02
Title	Provide high quality 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 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	
	<p>The trainee will:</p> <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 the learner to consider the wider ramifications of advice to individuals and populations• encourage the learner 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.	<p>The trainee may:</p> <ul style="list-style-type: none">• teach learners using basic knowledge and skills• impart public health knowledge with some opportunities for their audience to interact, raise questions or feedback• teach general principles and practice of public health medicine to medical students and junior colleagues.	
Medical expertise			
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 colleague 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 whilst maintaining their own wellbeing apply lessons learned about safety (including cultural safety) for patients 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. 	<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 (e.g. small group tutorials, 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples may have different learning needs. tailor feedback and assessments to learners' goals seek feedback and reflect on own teaching by developing goals and strategies to improve 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 	<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.

	<ul style="list-style-type: none"> provide effective and timely reports of training (and CPD 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 method 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples 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 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 	<ul style="list-style-type: none"> provide general advice and support to learners use health data logically and effectively to manage public health issues recognise when a learner needs additional support.

	<ul style="list-style-type: none"> • escalate concerns about learners appropriately. 	
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 whereby the learner feels 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 role 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/identify opportunities to learn through involvement in policy writing and review 	<ul style="list-style-type: none"> • limited integration of public health principles into teaching and practice • demonstrate and teach basic application of systems thinking.

EPA 3: Quality improvement

Theme	Quality improvement	AT-EPA-03
Title	Identify and address opportunities to improve own practice and the health system	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">contribute to the development, implementation or evaluation of quality improvement initiatives designed to improve the health of patients⁵ and populationsconsider sustainability and climate change impacts during all quality improvement activitiesaudit the processes, impacts and outcomes (positive and negative) of clinical and public health programsmonitor own practice and developing individual improvement plans	
Behaviours		
Professional practice framework domain	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">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 healthcare and population health managementmonitor personal professional performance regularly.	<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">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.
Medical expertise	<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 healthcareapply 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 healthcommunicate systems and pathways for complaints and feedback.
Communication	<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	<ul style="list-style-type: none">demonstrate understanding of a systems approach to improving the quality and safety of healthcare
Quality and safety		

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

	<ul style="list-style-type: none"> analyses, and corrective action preventative action plans identification and reporting of 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 outcome, feedback and complaints, formal and informal program evaluation use statistical process control charts use systems thinking and lean thinking methodologies to plan quality improvement. 	<ul style="list-style-type: none"> demonstrate safety skills including infection control, adverse event reporting, and effective handover 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 practise. 	<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 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 demonstrate understanding of the role of discrimination and racism in access to and use of 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 	<ul style="list-style-type: none"> access information and advice from other sources (including other healthcare practitioners) to identify, evaluate, and improve

Leadership, management, and teamwork	<ul style="list-style-type: none"> analyse and evaluate current processes to improve healthcare 	management of the health of patients and communities
	<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 healthcare that improve quality and reduce the risks of harm to patients and communities actively involve experts in other areas to reduce error and optimise healthcare, e.g. 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-practise 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: defining the scope of medical practise 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 care of individuals and communities contribute to relevant organisational policies and procedures help shape an organisational culture that prioritises safety and quality through openness, honesty, learning, and quality improvement 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.

EPA 4: Incident response

Theme	Incident response	AT-EPA-04
Title	Assess and respond to urgent and/or evolving public health issues	
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 a public health situation appropriately in a timely manner• obtain relevant detail on the incident(s) and related public health risks• rapidly ascertain the importance and urgency of the situation• decide whether to investigate further; take action if required• request assistance when required• engage with relevant other intersectoral professionals, e.g. 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, e.g. for an outbreak investigation, cluster investigation, environmental risk assessment• rapidly locate and appraise suitable evidence and other relevant public health information including to characterise risk• synthesise findings to develop a public health management plan, including formulating clear and realistic recommendations• communicate the assessment and recommendations in a manner (oral, written or both) that is most suitable to the given circumstances and audience• manage media enquiries if relevant• determine incident closure criteria and enact incident closure and develop a plan for and conduct post-incident evaluation• write up the incident, present results to the community, other health professionals, policymakers, as relevant.	
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: <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• elicit an accurate, organised, and problem-focused context for the situation, including timelines, individuals and populations involved, immediate risks to health and steps taken so far• consider physical and psychosocial safety, and contextual factors	The trainee may: <ul style="list-style-type: none">• identify the health risk and the community involved, including specific at-risk groups• identify relevant team members and stakeholders• identify and access sources of relevant information• identify a relevant framework/guideline.
Medical expertise		

	<ul style="list-style-type: none"> • seek additional relevant information e.g. from literature, experts, 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. 	
Communication	<ul style="list-style-type: none"> • communicate openly, listen, and take community concerns seriously, giving adequate opportunity to ask questions • 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 non-verbal cues • demonstrate active listening skills • communicate clearly with other health professionals, communities, and others involved in the situation response • 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 • 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"> • perform hand hygiene, and take infection control precautions at appropriate moments • document the progress of the situation, and synthesise with clarity and completeness • ensure handovers are complete and work to mitigate risks if the handover was 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 the situation to teach and guide 	<ul style="list-style-type: none"> • set positive and attainable goals for self-learning

	<p>trainees and other health professionals, taking account of their skill and confidence levels</p> <ul style="list-style-type: none"> 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"> self-reflect as a responsible adult 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 the situation 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 practise.
Cultural safety	<ul style="list-style-type: none"> identify populations at increased risk, 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 communication and care for Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples, and members of other ethnic groups 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 relevant 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 and 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 well-being • 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 (delegating, participating, selling, telling) appropriate to the situation • identify reporting lines and resources (including personnel, time, funds) available • 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 the public health physician within the situation response • identify causes of inequity in any specific situational response.

EPA 5: Population and public health interventions

Theme	Populations and public health interventions		AT-EPA-05
Title	Design, develop, implement and evaluate projects, programs, and systems-level interventions to improve health and well-being		
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 a population of interest define the problem to be addressed and match problem type (e.g., technical or systemic) to an appropriate level of intervention map the nature and extent of resources available (time, financial, people) formulate clear goals for the intervention and an implementation plan for the chosen intervention (including a consideration of benefits, costs, and risks). consider mechanisms to evaluate the project, program or intervention report and make recommendations on program implementation and evaluation. 		
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 health care service needs of a population 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 define the remediable determinants of disease in the population, including social, environmental and commercial determinants, smoking, inactivity, poor nutrition and others design and evaluate disease and hazard surveillance systems design and evaluate screening programs use recognised criteria and critical evaluation of evidence to guide decisions about implementation and continuation of programs such 	<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 needs and healthcare needs assessments access guidelines on the development of health promotion programs interpret findings from surveillance data. 	

	<ul style="list-style-type: none"> as disease screening and surveillance advise on optimal development and operation of the health care 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 community maintain excellent documentation of all meetings maintain excellent documentation of information and decisions, options and reasons for particular choices include effective communication in the evaluation plan consult relevant stakeholders (including public, consumers, service providers, non-government organisations, voluntary sector, collaborating organisations, cultural groups) around optimal healthcare services. 	<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 and 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 (e.g. online information repositories including libraries) and other information sources use reference management software include safety (physical, mental health, cultural) in the evaluation plan. 	<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 the evaluation plan.
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, 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 the population 	<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

	<ul style="list-style-type: none"> • 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, outcomes • use a program logic approach to evaluation. 	<ul style="list-style-type: none"> • 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 a program or intervention • 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 • demonstrate understanding of the role of discrimination and racism in access to and use of preventive services • titrate project planning, expectations and outcomes by incorporating trust, relationships (nature, duration) and power differentials. 	<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.
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, 	<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 the program/project

	<p>such as genetic information and blood-borne-virus status, and seek appropriate advice about disclosure of such information</p> <ul style="list-style-type: none"> • manage the collection of and access to required public health data • manage the resources to deliver the intervention in accordance with the implementation plan to achieve the intended outcomes. • explicitly consider the ethical and legal implications of the program being developed, during development, implementation, and evaluation. 	<ul style="list-style-type: none"> • apply ethical principles (respect, beneficence, non-maleficence, justice, 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 well-being • 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 (delegating, participating, selling, telling) • 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 	<ul style="list-style-type: none"> • participate in multi-disciplinary teams • share relevant information with members of the team • undertake assigned tasks efficiently and effectively • document progress in all stages of the program.

Health policy, systems, and advocacy

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- offer options that are well-analysed with potential consequences, make decisions and manage the consequences.
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| <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 the health program • demonstrate understanding of organisation and funding arrangements that support public health gain and reduction in inequity at all levels of health 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 patients 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. |
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EPA 6: Population health information

Theme	Population health information		AT-EPA-06
Title	Gather, critically appraise, analyse and synthesise information to drive public health actions		
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• 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 on the implications of international events for public health.		
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	
Medical expertise	The trainee will:	The trainee may:	
	<ul style="list-style-type: none">• clearly identify the public health question and scope• describe key demographic trends such as age, gender, ethnic status• advise on key health challenges for different population groups, e.g. according to age, gender, culture.	<ul style="list-style-type: none">• focus on individual clinical risks, rather than a population perspective• describe health challenges within the population.	
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 (financial, reputational, 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"> 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 format and style to be appropriate for the audience. 	
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 ensure information privacy and security.
Teaching and learning	<ul style="list-style-type: none"> demonstrate effective supervision skills and teaching methods which are adapted to the context of the training 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 coordinate teaching for and supervise junior colleagues participate in continued professional development actively seek feedback on personal practice.
Research	<ul style="list-style-type: none"> access and use appropriate information sources systematically search published and 'grey' literature document the search strategy select studies based on pre-defined criteria, with formal assessment of bias 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 	<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 demonstrate an understanding of the limitations of the evidence and the challenges of applying research in daily practice.

	<ul style="list-style-type: none"> consider issues of causality (chance, bias, confounding, 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. 	
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 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 (including through different types of media) of public health information to different groups.
Ethics and professional behaviour	<ul style="list-style-type: none"> consider ethical and adhere to legal requirements in 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 process. 	<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 develop and manage a budget including understanding accounting principles, financial reports, budget planning and ongoing review and reporting processes use financial and accounting software where needed act on financial information critically analyse financial statements and business cases. 	<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 demonstrate an awareness of business, financial and operational processes.

Health policy,
systems, and
advocacy

- 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.
- 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 health care system.

EPA 7: Communication and engagement for population health gain

Theme	Communication and engagement for population health gain AT-EPA-07	
Title	Engage with communities and communicate complex health information 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 communicate information at a literacy level appropriate for the target audience communicate information at an intensity and using a medium that is proportionate to risk verify audience understanding of information conveyed ensure communications/conversations are documented to support decision-making, actions and medicolegal accountabilities. 	
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	<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>The trainee may:</p> <ul style="list-style-type: none"> apply knowledge of the scientific basis of health and disease to population health practise demonstrate an understanding of the population health issues being discussed formulate future directions in partnership with communities.
Communication	<ul style="list-style-type: none"> use an appropriate communication strategy and modalities for communication, such as for individuals and small groups (emails, face-to-face, or phone calls) and ways modalities for mass effect (social media, websites, radio etc). elicit community member views, concerns, and preferences, promoting rapport 	<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 adapt communication style in response to community characteristics, including age, developmental level, and cognitive,

	<ul style="list-style-type: none"> 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. Communications are honest/transparent and evidence-based regarding uncertainties 	<ul style="list-style-type: none"> physical, cultural, socioeconomic, and situational factors collaborate with other health professionals as required.
Quality and safety	<ul style="list-style-type: none"> discuss the situation/issues with communities and the 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, for example 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 a proposed management plan 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 obtain informed consent or other valid authority before involving community members in teaching. 	<ul style="list-style-type: none"> respond appropriately to information sourced by community members, and to community knowledge regarding their condition.
Research	<ul style="list-style-type: none"> provide information to communities that is based on guidelines issued by the National Health and Medical 	<ul style="list-style-type: none"> refer to evidence-based guidelines demonstrate an understanding of the limitations of the evidence

	<p>Research Council and/or Health Research Council of NZ</p> <ul style="list-style-type: none"> 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. 	<p>and the challenges of applying research in daily practise.</p>
Cultural safety	<ul style="list-style-type: none"> demonstrate effective and culturally competent communication with Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua) and Pacific Peoples 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 healthcare, and to use this 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 well-being 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/preferences, beliefs, contribution to society, illness-related behaviours or the illness itself 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 	<ul style="list-style-type: none"> answer questions from team members

	<ul style="list-style-type: none"> • discuss public health implementation plans with communities and healthcare and other professionals, working collaboratively with all • discuss community health and health care needs with healthcare team members to align them with the appropriate resources • facilitate an environment where 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"> • 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 draft guidelines of a standard that could be submitted for approval.

EPA 8: Multi-cultural population and public health

Theme	Multi-cultural population and public health		AT-EPA-08
Title	Identify and practice within multi-level, complex, trust-dependent, and culturally bounded 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, 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 cultural 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 political or religious viewpoints identify contrasting perspectives, cultural barriers, and enablers on 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 (e.g. 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	<p>Ready to perform without supervision</p> <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"> advise on the public health issues affecting cultural groups, including the complex interplay of drivers of sub-optimal health outcomes describe measures to manage disability and support people with a disability. 	<p>Requires some supervision</p> <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"> recognise disparities in health across different cultural groups recognise disparities in risk exposures across different cultural groups identify the potential effects of public health interventions, programs, and/or responses on physical and mental health of different cultural and population groups describe the biological underpinnings of health disadvantage due to racism and discrimination 	
	Medical expertise		

		<ul style="list-style-type: none"> 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 to diverse cultural and population groups that are appropriate to the audience 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 health care services and other organisations ensure quality and safety activities, like audit, that impact cultural groups 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 cultural safety, and apply this understanding consistently demonstrate an understanding of institutional discrimination and its impact on health and well-being.
Teaching and learning	<ul style="list-style-type: none"> seek opportunities to build capacity across diverse cultural and/or non-dominant cultures to contribute to public health improve health and public health literacy within organisations, including amongst 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 continued 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 design effective research strategies, including taking a select culturally suitable research approach 	<ul style="list-style-type: none"> use methods that may not have been developed in partnership with the community of study focus on publication of findings rather than return of findings to the community of study frame an untestable research question

	<ul style="list-style-type: none"> • apply rigorous ethical processes and methodologies, acceptable to the population under study • collect ethnicity and cultural identity data according to best practise 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"> • present the findings of the research at scientific meetings or in publications without consultation 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 practises of dominant cultures influence the health of other groups • identify values and needs of non-dominant cultural groups in partnership with those groups • devise strategies collaboratively to increase the participation of Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua) and Pacific Peoples, colleagues and family (whānau) in diverse contexts. 	<ul style="list-style-type: none"> • undertake continued 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 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 and structures, and organisations, which can magnify inequity • recognise the impact of decolonisation 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 practise • 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 	<ul style="list-style-type: none"> • recognise and implement general ethical principles • work respectfully with colleagues • demonstrate professional values, including compassion, empathy, respect for diversity, integrity, honesty, and partnership across diverse groups within the landscape of practise.

	<ul style="list-style-type: none"> recognise and implement ethical principles for working with community and cultural groups promote and support Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples self-determination prioritise population impact and value, and sustainability and accountability. 	
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, telling) according to the situation manage culturally diverse teams effectively, including co-leadership manage stakeholder committees with diverse cultures, interests, agendas collaboratively design, implement, and evaluate interventions with stakeholders from diverse and non-dominant cultural 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 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 cultures advocate for choice in health services for Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples 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 health equity across diverse cultural and population groups. 	<ul style="list-style-type: none"> recognise the benefits and harms that 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.

EPA 9: Policy analysis, development and planning

Theme	Policy analysis, development, and planning		AT-EPA-09
Title	Develop and influence 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 policy 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 a well-written policy or guideline for submission or approval including a clear public health rationale, demonstrating the ability to make decisions in setting policy determine the best policy option, demonstrating accountability and ability to make decisions in policy development. 		
Behaviours			
Professional practise 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"> 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, e.g. 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 e.g. burden of disease, effectiveness, value for money, acceptability, ethics, 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 identify stakeholder concerns and expectations, and provide 	<ul style="list-style-type: none"> use available tools, under supervision, to communicate to diverse audiences seek feedback on communication skills in different settings. 	

	adequate explanations on the rationale for the chosen option	
	<ul style="list-style-type: none"> • use written or visual material or other aids that are accurate and up to date to support discussions with the team, stakeholders, 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 a performance monitoring framework • identify adverse outcomes that may result from a proposed policy option • analyse quality and safety outcomes for a range of cultural groups • analyse quality and safety outcomes for Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples self-determination • 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 the population or community that is likely to be impacted by the policy • gather and synthesise relevant information to utilise 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, Aboriginal and Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples, for policy development and evaluation • consult with communities and stakeholders to identify the preferred policy option 	<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"> consider obligations to Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples 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 (e.g., autonomy, beneficence, non-maleficence, justice, utility, proportionality, transparency, negative externalities) promote and support Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples self-determination prioritise population impact and value, and sustainability and accountability), to 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 (e.g. cost minimisation analysis, cost effectiveness analysis, cost benefit analysis) of policy options consider important economic issues (efficiency, equality, opportunity cost, margin, discounting), value judgements and limitations consider the potential trade-offs between equity and efficiency recognise the contextual influences on policy development e.g. economic, political, sociocultural, technological, legal, historical, etc. 	<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 e.g. economic, political, sociocultural, etc.
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 utilisation and limitations in the context of policy development and planning identify strategies that enable successful implementation of policy identify factors that may lead to the failure of policy implementation and how these can be managed. 	<ul style="list-style-type: none"> recognise stages in policy development.

EPA 10: Organisational unit management

Theme	Organisational unit management	AT-EPA-10
Title	Lead and manage organisational units effectively	
Description	<p>This activity requires the ability to:</p> <ul style="list-style-type: none">• demonstrate understanding of the organisational context and structure• demonstrate understanding of the role of the organisation during emergency response and its chain of command• operate within a hierarchy of responsibility and seek advice when appropriate• access organisational information (policies, procedures, systems, processes, 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, accessible manner• follow allocated financial responsibilities, 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 Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.	
Behaviours		
<u>Professional practice framework domain</u>	Ready to perform without supervision <p>Expected behaviours of a trainee who can routinely perform this activity without needing supervision</p> <p>The trainee will:</p>	Requires some supervision <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">• provide relevant medical expertise to guide decision making, for example 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 efficacious consultation methods• conduct meetings effectively• ensure that all important discussions with colleagues, multidisciplinary team members, and relevant stakeholders are appropriately documented• review communications written by junior colleagues	<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 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 based on theory of change identify steps required to achieve organisational change and use appropriate processes 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 utilise a systems approach to improving the quality and safety of health care participate in organisational quality and safety activities, including critical incident reviews address racism in organisations affecting Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples.
Teaching and learning	<ul style="list-style-type: none"> evaluate their own professional practise 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 practise.
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 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, 	<ul style="list-style-type: none"> demonstrate growing understanding of organisational governance.

	<p>teaching, policy, and other organisations influencing public health)</p> <ul style="list-style-type: none"> • demonstrate understanding of optimal governance structures, election and appointment processes, 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. 	
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 • use processes for job enhancement, recognition, and dispute resolution • manage/mediate a conflict • 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. 	<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.
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 	<ul style="list-style-type: none"> • describe the value and role of different organisations within the health care system.

considered and the organisational
context.

DRAFT

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	Communicable disease prevention and control
3	Non-communicable disease and injury prevention and control
4	Health and the physical environment
5	Determinants of health
6	<i>The AFPHM is committed to co-designing this learning goal with Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples' leaders and experts</i>

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
 - » Bayesian methods
 - » causal 'criteria'
 - » sufficient and component causes
- 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
- Measures of effect and association
 - » absolute risk
 - » attributable risk, attributable difference, attributable proportion, attributable fraction
 - » hazard ratio
 - » number needed to treat, number needed to harm, number needed to screen
 - » odds ratio
 - » relative risk
- Quantitative data analysis
 - » analytic statistics
 - confidence intervals
 - multivariable analyses
 - sensitivity analyses
 - meta-analysis
 - » data types
 - categorical
 - continuous
 - discrete
 - ordinal
 - » descriptive statistics
 - frequency
 - mean and standard deviation
 - median, interquartile range, percentiles
 - standardisation
- 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)

- Study conduct
 - » ethical issues and ethics approval
 - » matching
 - » measurement of disease, exposure, confounders
 - » precision, validity and accuracy
 - chance
 - measurement bias
 - selection bias
 - confounding
 - effect modification
 - » sampling strategies and study power
- Study designs
 - » qualitative methods
 - focus groups
 - in-depth interviews
 - participant observation
 - survey
 - » quantitative methods
 - cross-sectional
 - case-control
 - cohort
 - data linkage/big data
 - ecological
 - modelling
 - randomised trials
 - spatial
 - » systematic review and meta-analysis

Research methods

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

IMPORTANT SPECIFIC ISSUES

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

Environmental epidemiology

- Exposure assessment
 - » exposure versus dose
 - » group-level versus individual level
 - » objective
 - » subjective
 - » modelling
 - » biomarkers
- Study designs and analytic tools
 - » ecologic studies
 - » cross-sectional, case-control, cohort, case-crossover designs
 - » poison regression (for modelling counts or rates of events)
 - » spatial mapping, e.g. geographic information systems (GIS)
 - » special considerations for confounding, 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
- 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
 - » the primary care sector
- Quality improvement frameworks to develop and change health services
- Workforce planning for health services, including in rural and remote areas

Infectious disease epidemiology

- Basic and effective reproductive numbers
- Case fatality ratio
- Pathogenicity
- Timeline of disease
 - » constructing an epicurve
 - » incubation period
 - » symptomatic period
- Timelines of infection
 - » infectious period
 - » latent period
- Transmission probability
 - » secondary attack rate
 - » transmission probability ratio
- Use of whole genome sequencing

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

- Ameliorating factors
 - » Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples' experiences, culture and connection to country
 - » social networks
 - » social capital, social cohesion, and health
- Biological pathways underpinning social disparities in health
- Disparities in health related to:
 - » gender
 - » income inequality
 - » intersectionalities
 - » labour markets and employment policies
 - » neighbourhood and urban characteristics
 - » racism and discrimination
 - » socioeconomic status
 - » working conditions

Surveillance

- Analysis of surveillance data
 - » advanced techniques to adjust for sampling designs
 - » descriptive statistics
- Approaches to surveillance
 - » active versus passive
 - » community-based surveillance
 - » information systems
 - » laboratory-based surveillance
 - » notifiable disease reporting
 - » record linkage
 - » registries
 - » sentinel events
 - » surveys
 - » syndromic
- Attributes of surveillance systems
 - » acceptability
 - » accuracy and completeness of descriptive information
 - » flexibility
 - » predictive value
 - » representativeness
 - » sensitivity
 - » simplicity
 - » timeliness
- Descriptive epidemiology of health problems
- Elements of a surveillance system
 - » case definition
 - » confidentiality
 - » cycle of surveillance
 - » incentives to participation, e.g. for clinicians
 - » population under surveillance
- Uses
 - » detection of infectious disease outbreaks
 - » detection of patterns of chronic disease, e.g. geographic

-
- » future projections
 - » health advocacy
 - » links to services, e.g. notifiable diseases
 - » monitoring and evaluation of interventions/public health programs
 - » research, e.g. generating research questions

DRAFT

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 food and waterborne pathogens)
- Environmental pathogens
- Human Diseases
- Invasive diseases
- Respiratory infections
- Sexually transmissible infections
- Vaccine preventable diseases
- Vector-borne diseases
- Zoonotic diseases

Infectious disease epidemiology

- Basic and effective reproductive numbers
- Case fatality ratio
- Pathogenicity
- Timeline of disease
 - » constructing an epidemic curve
 - » incubation period
 - » symptomatic period
- Timeline of infection
 - » latent period
 - » incubation period
 - » infectious period
- Transmission probability
 - » secondary attack rate
 - » transmission probability ratio
- Use of whole genome sequencing

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

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 an action plan. 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

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

EPIDEMIOLOGY

Prevention

- Development, commissioning, and evaluation of services required for protecting health
 - » screening for other infections
 - » sexual health services
 - » TB screening
 - » travel health services
- Priority populations
 - » Aboriginal and Torres Strait Islander Peoples
 - » LGBTIQ+
 - » Māori (tangata whenua), and Pacific Peoples
 - » older persons
 - » pregnant women
 - » refugees and asylum seekers
- High risk settings
 - » aged care
 - » childcare
 - » health care
 - » mass gatherings
 - » other residential settings (e.g., boarding schools/ disability accommodation)
 - » people in custodial settings
 - » school
- Immunisation
 - » approaches to improving vaccine coverage
 - » current immunisation schedules
 - » design, evaluation and management of immunisation programs
- Infection control organisation and activities

Surveillance

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

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, e.g. World Health Organization, Centres for Disease Control
- Anti-microbial resistance
 - » causes
 - » interventions
 - primary, secondary, tertiary
 - » public health implications
 - » significant organisms
- Human biosecurity measures
 - » listed human diseases
 - » national and international
 - » relevant legislation
- 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

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 e.g. chronic obstructive pulmonary disease, lung fibrosis
- Injury e.g., intentional and unintentional
- Mental illness
- Metabolic diseases e.g., type 2 diabetes, obesity
- Neurodegenerative diseases e.g. dementia
- Relevant other non-communicable diseases
- Reproductive health

Prevention

- Commercial determinants of health
- Harm minimisation of tobacco, vaping and e-cigarettes, drugs, alcohol
 - » demand reduction
 - » harm reduction
 - » supply reduction
- 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
- Priority populations
 - » Aboriginal and Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples
 - » homeless
 - » LGBTIQ+
 - » lower socioeconomic status
 - » people in custodial settings
 - » people experiencing unstable housing

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

- » people who inject drugs
- » refugees
- » rural and remote
- » youth
- » other
- Primordial, primary, secondary, tertiary prevention
- Relevant legislative frameworks
- Relevant governmental/non-governmental organisations

Public health management

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

Risk factors

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

CLUSTER INVESTIGATION

Advanced Trainees will know the scientific foundation of disease cluster investigation. They will be able to interpret results from multiple lines of investigation (surveillance and routinely reported health data, environmental monitoring, epidemiological study) and synthesise these to develop an action plan.

Procedures

- Communicate: To gather relevant public health information and disseminate findings and recommendations to a variety of audiences including stakeholders, public and the media
- Conduct an investigation e.g. epidemiological investigation, exposure assessment
 - » recognise limitations of study power, and the role of chance
 - » use appropriate analyses, e.g., Poisson, small area analyses
- Consult relevant documentation
 - » cluster investigation protocol
- Decide whether to investigate further
- Engage with relevant stakeholders
- Ensure control of sources of risk, e.g., environmental pollution
- Ensure effective management of cases is underway
- Recognise when to escalate or expand investigation
- Understand team functions

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

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
- Medicare / 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

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
 - » acceptability
 - » accuracy and completeness of descriptive information
 - » health Technologies and health care usage
 - » flexibility
 - » predictive value
 - » representativeness
 - » sensitivity
 - » simplicity
 - » timeliness
- Descriptive epidemiology of health problems
- Elements of a surveillance system
 - » case definition
 - » confidentiality
 - » cycle of surveillance
 - » incentives to participation, e.g. for clinicians
 - » population under surveillance

- Uses
 - » detection of patterns of chronic disease, e.g. geographic, time trends
 - » future projections
 - » health advocacy
 - » identifying at risk populations
 - » links to services, e.g. notifiable diseases
 - » monitoring and evaluation of interventions/public health programs
 - » research, e.g. generating research questions
 - » resource allocations

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 (e.g. 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 well-being.

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 multi-sectoral and may not be led by health

Conditions

- Allergy
- Burns, including inhalation
- Cancers
- Cardiovascular disease
- Developmental
- Drowning
- Hearing loss
- Heat exhaustion, heat stroke
- 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
- 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
 - » Australian Aboriginal, Torres Strait Islander, Māori (tangata whenua) and Pacific People
 - » immigrant populations
 - » lower socioeconomic status
 - » Refugees/Asylum seekers
 - » 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

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

- Assess risk management options and their benefits and costs
- Evaluate outcomes of risk management
- Identify risk management objectives
- 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
- Work with communities to identify acceptable risk
- Work with other sectors to implement risk management strategies

Risk factors

- Hazard types:
 - » biological
 - » chemical
 - » nuclear
 - » physical
 - » radiological
- Occupational and setting-specific exposures
- Pollution/contamination of:
 - » air
 - » food
 - » land
 - » water

ENVIRONMENTAL HEALTH ASSESSMENT AND MANAGEMENT

Advanced Trainees will know appropriate national, state/territory guidelines and how to undertake the listed environmental health assessments. They will be able to interpret results from multiple lines of investigation (surveillance and routinely reported health data, environmental monitoring, epidemiological study) and synthesise these to develop an action plan.

Advanced Trainees will know how to communicate the investigation to individuals affected, relevant settings (e.g. workplace, schools),

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

Emergency and disaster management

- Application of the national whole of government incident systems
- Preparedness
- Prevention
- Recognition of the need for an urgent and intersectoral response
- Recovery
- Response

Environmental health risk assessment

- Dose response assessment
 - » relevant toxicity data
- Exposure Assessment
 - » identify exposed populations and exposure pathways and estimate exposure concentration
- Hazard assessment
- Hazard Identification
- Issue identification
 - » chemicals of potential concern
- Risk characterisation:
 - » evaluate uncertainty
- Risk management:
 - » define options and evaluate health

families, community, and media and to report to the relevant parties

- » economic, social and political aspects
- » take action to implement decisions

Health impact assessment

- Collect and analyse results
- Communicate findings
- Consider benefits and hazards
- 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.
- Use suitable qualitative and quantitative methods

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
 - » (cross-sectional, case-control, cohort)
 - » ecologic studies
 - » poison regression (for modelling counts or rates of events)
 - » spatial mapping, e.g. geographic information systems (GIS)
 - » special considerations for confounding, clustering
 - » standardised incidence ratio (SIR)
 - » time-series analyses

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
- UV exposure 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 determinants of health

- Social and economic environment's influence on health, including:
 - » educational attainment
 - » income
 - » migration
 - » social injustice
 - » social support networks
 - » social status
- Commercial determinants of health, including:
 - » private commercial activities 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 healthcare 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

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

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

- » organisations
- » race
- » systems
- » structure
- Understand syndemic theory, including:
 - » adverse interactions between diseases and social conditions (social gradient)
 - » clustering of adversity by person, place or time
- Consideration of resource allocation in healthcare with reference to ethical principles

Priority populations

- Aboriginal and Torres Strait Islander, Māori (tangata whenua), and Pacific Peoples
- Elderly, women and children
- LGBTQIA+ people
- People currently and recently incarcerated
- People living in unstable housing and with insecure shelter
- People living with a disability
- Relative socioeconomic disadvantage
- Rural and remote
- Under and unemployed

Public health management

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

- Drivers of health inequity across diverse population sub-groups
- Identification of population sub-groups, according to:
 - » ethnicity, race, culture
 - » disability
 - » gender and gender identity
 - » geography (e.g. 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 e.g. the Socio-Economic Index for Areas (SEIFA), Aotearoa New Zealand Deprivation Index
- Sources of health information and their quality, including for specific population sub-groups

HEALTH INEQUITY ASSESSMENT AND MANAGEMENT

Health Equity Impact Assessment

- Implementation
- Needs assessment for priority populations
- Problems and objectives
- Research, analysis, consultation
- Recommend options
- 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

- 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
- Compares and selects strategies based on risk, benefit, harms and unintended consequences
- Select and change appropriate structures and systems for health improvement
- Solves public health issues using adept systems thinking

IMPORTANT SPECIFIC ISSUES

Advanced Trainees will identify important public health issues relating to health inequities

- Activities of international health and development agencies, e.g. World Health Organization
- Concept of proportionate universalism
- Emerging and exacerbation of existing health inequities due to climate change and other global impacts
- Ethical tensions arising in the promoting population health and reducing health inequities
- National and international public health policy and legislation and the direct and indirect impacts on health inequities