

UNIT CODE	NAT11429001
UNIT TITLE	Conduct a literature search in environmental health
APPLICATION	<p>This unit describes the performance outcomes, skills and knowledge required to undertake a literature search in environmental health.</p> <p>It requires the ability to critically evaluate sources, conduct advanced searches using Medical Subject Headings (MeSH), apply filters, and synthesize credible findings to guide workplace decision making. It requires knowledge of types of studies, referencing styles, scientific databases, and reviews.</p> <p>This unit applies to building biologists, health practitioners and indoor environmental professionals who, as part of their occupation or work role, research, evaluate and critique information on environmental health to guide decision making in professional contexts.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
COMPETENCY FIELD	050999 Environmental Studies, nec
ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes of the unit	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Source and review authoritative environmental health information	<p>1.1 Source environmental health information from recognised organisations and scientific databases relevant to the research purpose</p> <p>1.2 Interpret the hierarchy of evidence used in evidence-based medicine to inform environmental health decision-making</p> <p>1.3 Evaluate key study types by analysing and comparing their distinguishing features to assess their relevance and contribution to the environmental health research question</p> <p>1.4 Review meta-analyses and systematic reviews to determine how their scope, methodology and findings inform environmental health policy and practice</p>
2. Conduct an environmental health literature search	<p>2.1 Develop search strategies using relevant key words and MeSH terms that align with the environmental health research question</p> <p>2.2 Apply Boolean operators and database filters to refine search results and ensure relevance, currency and quality of environmental health evidence</p> <p>2.3 Retrieve, organise and refine search results from scientific databases specific to environmental health hazards</p> <p>2.4 Critically analyse scientific papers addressing hazards in the built environment to assess their quality, relevance and contribution to workplace decision making</p>

3. Evaluate and assess the quality of scientific studies	<p>3.1 Examine study aims, characteristics and methodology to determine alignment with the environmental health research question</p> <p>3.2 Document the Population, Exposure, Comparator and Outcome (PECO) elements to accurately interpret environmental health study findings</p> <p>3.3 Evaluate study limitations, including potential sources of bias, confounding factors and conflicts of interest, to qualify the strength of environmental health evidence</p> <p>3.4 Establish evidence-based conclusions about the relevance, timeliness, validity and credibility of study findings to support environmental health decision making</p>
4. Produce documentation with accurate referencing	<p>4.1 Collate and record information relevant to the environmental health research question in a format suitable for workplace reporting and decision making</p> <p>4.2 Prepare written documentation that synthesises research outcomes using structured, concise and professional language consistent with industry standards</p> <p>4.3 Apply the Harvard referencing system accurately and consistently to acknowledge all sources and to support the credibility and traceability of environmental health findings</p>

FOUNDATION SKILLS

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

UNIT MAPPING INFORMATION	Code and Title Current Version	Code and Title Previous Version	Comments
	NAT11429001 Conduct a literature search in environmental health	NAT10913008 Conduct a literature search to identify and critique sources of information	Equivalent unit Minor amendments to terminology

TITLE	Assessment requirements for NAT11429001 Conduct a literature search in environmental health
PERFORMANCE EVIDENCE	<p>The learner must show evidence of the ability to complete tasks outlined in the elements and performance criteria of this unit, manage tasks and contingencies in the context of the job role. There must be evidence that the learner has completed the following tasks on more than one occasion, and used at least two distinct environmental health topics:</p> <ul style="list-style-type: none"> • Access scientific databases relevant to environmental health on at least two occasions, constructing effective searches using a combination of keywords and Medical Subject Headings (MeSH). • Apply a minimum of three different filters (e.g., publication date, article type, or population group) to systematically refine search results for each topic. • Correctly classify at least three types of study designs per topic, detailing their main features and limitations. • Utilise the PECO framework (Population, Exposure, Comparator, Outcome) to analyse and document details from at least two studies per topic. • Identify and report limitations for each study, including bias, confounding factors, and conflicts of interest, supported by examples from two or more studies. • Critically appraise research for relevance, currency, validity, and credibility, providing a written summary of findings for each topic. • Synthesise findings and draw evidence-based conclusions from the literature reviewed, including recommendations or implications for workplace decision making. • Produce a written research essay (up to 750 words), using professional language and the Harvard referencing system, with citations for all sources of information.
KNOWLEDGE EVIDENCE	<p>The learner must be able to demonstrate essential knowledge required to effectively do the tasks outlined in the elements and performance criteria of this unit and manage the tasks and contingencies in the context of the work role. This includes knowledge of:</p> <ul style="list-style-type: none"> • Authoritative sources in environmental health (scientific databases, government, non-government and industry bodies) • Hierarchy of evidence as used in evidence-based medicine • Features, strengths, and limitations of different types of studies in environmental health (e.g., cohort, case-control, cross-sectional, experimental, systematic reviews and meta-analyses) • MeSH terms, filters, and Boolean operators in scientific database searches • PECO framework for study analysis • Harvard referencing system for academic integrity

	<ul style="list-style-type: none"> Referencing tools (e.g., Endnote)
ASSESSMENT CONDITIONS	<p>Assessment must replicate workplace conditions relevant to building biology or environmental health practice with access to:</p> <ul style="list-style-type: none"> A computer with internet connectivity for conducting literature searches Access to scientific databases and referencing tools <p>Assessor Requirements</p> <p>Assessors must satisfy the requirements outlined in the Standards for Registered Training Organisations (RTOs) 2025 or successor standards. No specialist vocational competency requirements for Assessors apply to this unit.</p>