



Australasian Faculty of Occupational and Environmental Health Medicine (AFOEM) 2022 Stage B Written Examination

The 2022 AFOEM Stage B Written Examination Paper 1 was held on Saturday 10 September and Paper 2 on Sunday 11 September 2022.

The exam is a summative assessment that tests trainees' knowledge through several short answer questions. Each paper has 5 equally weighted questions. Each question is a scenario and includes a variable number of sub-questions. Scenarios are sampled from the [Occupational and Environmental Medicine Training Curriculum](#).

Paper 1 | Domains 10, 30, 40 and 80 (but may refer to other domains)
Paper 2 | Domains 10, 20, 50, 60, 70, 80 and 90

This document provides feedback for candidates, outlining the characteristics of responses that achieved high marks and the areas for improvement where lower marks were achieved.

Candidates who performed well on the examination provided responses that demonstrated they had read the question and ensured that their responses were targeted to what was being asked in the stem. Overall, candidates had good theoretical knowledge; however, the application of knowledge was insufficient. Demonstrating high-level thinking will improve candidates' outcomes. Candidates who performed poorly gave incorrect or inadequate answers.

Candidates are reminded that only the first responses are marked, and there is nothing to be gained by providing more responses than requested. Poor handwriting should be avoided because marks cannot be rewarded for illegible answers.

In 2022, the overall pass mark was determined to be 60.7%. The pass mark is initially set using the Modified Angoff method, followed by post-examination analysis for the removal of questions that were misinterpreted or had wording problems. In 2022, 17 candidates sat the examination, with 70.6% of candidates passing.

Paper 1 Question 1

Candidates performed well in the following areas:

- Basic epidemiology definitions and equations.
- It is extremely important for trainees to know basic definitions. These are always easy marks to obtain.

Candidates performed poorly in the following areas:

- The wider application of epidemiology terminology, meaning and statistics to the relevant scenario.
- Not reading questions properly or understanding what the question is asking; for example, providing answers that refer to 'implementation' rather than 'implications'.

Other comments

- Candidates should ensure they know basic epidemiology information, such as definitions and equations, that can score them easy marks.

Paper 1 Question 2

Candidates performed well in the following areas:

- Clinical aspects and management of occupational dermatitis and lateral epicondylitis.

Candidates performed poorly in the following areas:

- Occupational aspects and management of occupational dermatitis and lateral epicondylitis.
- Definition and explanation of independent medical examinations/assessments and the principles of privacy/consent.

Other comments

- Candidates should focus on the key occupational medicine issues in the management of occupational dermatitis and lateral epicondylitis.

Paper 1 Question 3

Candidates performed well in the following areas:

- Clinical questions on symptoms and describing the spirometry.

Candidates performed poorly in the following areas:

- Unable to justify reasons for referring to a respiratory physician.
- How to manage complex workplace issues; for example, a request for health monitoring without clarity on how to do it.

Other comments

- Candidates need to refer to the stem of the question and answer specifically rather than generically.
- It is not acceptable to return someone to work with isocyanates if occupational asthma is suspected.
- Isocyanates are a possible (2B) carcinogen.

Paper 1 Question 4

Candidates performed well in the following areas:

- Components of a wellness program were generally answered well. Specific components of a wellness program relating to mining and the scenario presented were reasonably well understood.

Candidates performed poorly in the following areas:

- Knowledge related to program and policy development, implementation and evaluation was limited.
- General basic vaccine knowledge was poor. Many candidates did not appear to consider the specifics of the workplace. There was no mention of government vaccine mandates or Australian/NZ Immunisation Handbook/Guidelines.
- Some candidates confused health surveillance with wellness programs.

Paper 1 Question 5

Candidates performed well in the following areas:

- The candidates generally performed very well on the question around the components of a return-to-work plan. Many of the candidates were able to demonstrate that this is an area with which they have had experience. Candidates demonstrated their understanding of the need for engagement with all stakeholders, clarifying capacity and identifying suitable duties.
- Many of the candidates showed that they had read the question. Parts A and B were about barriers and clinical issues. The candidates that did well focused on what was asked and related their answers to the detail given in the scenario.

Candidates performed poorly in the following areas:

- Some candidates fell into the trap of providing generic answers without relating their answer to the scenario.

Other comments

- Structure or headings in answers make it clear to the examiner that the candidate understands the issue that has been outlined in the scenario.
- Avoid generic answers. Always relate answers to the scenario.

Paper 2 Question 1

Candidates performed well in the following areas:

- Data sources were identified well.
- Advantages and cross-sectional study.
- Ethical issues were identified well.
- Worker participation maximisation.
- Interpretation and data reservations.

Candidates performed poorly in the following areas:

- Using a data source (more questionnaires are suggested to determine the problem).
- Using the term prevalence to describe a cross-sectional study.
- Why a cohort/care control study is not appropriate in this scenario.
- Addressing each ethical issue.

Other comments

- This question was generally answered well by most candidates.

Paper 2 Question 2

Candidates performed well in the following areas:

- Part A
 - Identified causes of sickness absence relevant to the case.
 - Covered health benefits of good work.
- Part B
 - Identified health effects of T2DM.
 - Applied medical criteria relevant to driving including fitness to drive.

Candidates performed poorly in the following areas:

- The answers in terms of interventions to reduce sickness absence were generally not comprehensive.
- Candidates who performed less well often had general answers or non-specific answers rather than being specific to the case or the condition. For example, if problems with balance may be a concern, the answer should specify that the examination would look for problems with balance (and/or mention the relevant test), rather than there would be an examination of the neurological system.

Other comments

- For questions that explicitly referenced particular documents or criteria, there was a clear difference in the answers between candidates who appeared to know the relevant documents/criteria well and reproduced the relevant wording or paraphrased it effectively, compared with candidates who used broad generalisations.

Paper 2 Question 3

Candidates performed well in the following areas:

- Identifying potential sources of arsenic contamination for residents living nearby, and transmission paths.
- Identifying the malignant and non-malignant health effects of chronic arsenic exposure and knowing what confirmatory tests to ask for.

Candidates performed poorly in the following areas:

- Few candidates explored the relevant medical and/or family history in any depth although the request for this information was clear, which probably exposed a knowledge weakness.
- Varying responses and different approaches were taken to identifying the elements of effective risk communication and formulating ways of implementing them.

Other comments

- Some answers are short and simple; others require a level of description. Candidates need to anticipate where short or long answers are suitable.

Paper 2 Question 4**Candidates performed well in the following areas:**

- Overall, most candidates gave clear, legible, organised answers that were relevant to the specific question.
- Most candidates did well on the physics of radiation, and displayed good understanding of the hierarchy of controls in both the radiation and tropical disease scenarios. The questions on the differential diagnosis of febrile illness and leptospirosis testing were generally answered correctly.

Candidates performed poorly in the following areas:

- Scenario 1 was about non-ionising radiation. The three workers were exposed to radiofrequency, infra-red, and ELF. Some candidates stated the workers were in 'sunshine' or UV radiation, which was incorrect.
- Many candidates did not know the medical conditions (health effects) associated with various types of non-ionising radiation.
- Candidates who knew 'specific' controls for non-ionising radiation (rather than just listing the 'control hierarchy') did better, including that RF meters are part of workplace monitoring.
- Scenario 2 was leptospirosis on a banana farm. Most candidates listed appropriate differential diagnoses like Q fever, rickettsia, hepatitis, EBV, measles, meningitis, malaria, influenza, Ross/dengue, etc, and knew that 'serology' such as PCR was diagnostic (lepto can also be 'cultured'). The complications of leptospirosis were not so well known.

Other comments

- None.

Paper 2 Question 5**Candidates performed well in the following areas:**

- Identifying the relevant legislation.
- Identifying issues of consent/disclosure of appropriate information in assessing fitness for work in the context of a drug and alcohol test.
- Identifying the role of unions.

Candidates performed poorly in the following areas:

- Identifying specific ethical and privacy principles. Descriptions of some areas were very brief and required more elaboration.
- Approaching the refusal to disclose the breath alcohol testing results (taken while on sick leave).
- Duty of care obligations.

Other comments

- None.