Medical Laboratory Scientist interview questions

careertips.com.au: common questions and what they're really testing

What to expect

Interviews for medical laboratory scientist roles usually combine a discussion of your bench technique and quality processes with questions on judgement under pressure, since results feed directly into patient treatment decisions. Panels often include a laboratory manager or pathologist, and may probe your familiarity with NATA and NPAAC requirements alongside your registration or certification status.

- **Process/technical:** Questions asking you to walk through how you'd handle a specimen or run a test, checking you know the correct sequence and controls.
- **Scenario/judgement:** Hypothetical situations, such as an unexpected critical result or a suspect specimen, testing how you weigh risk and decide when to escalate.
- **Quality and compliance:** Questions on calibration, quality control and how you meet accreditation standards day to day.
- **Behavioural (STAR):** Questions about past situations, particularly around communicating results or handling pressure, looking for evidence rather than opinion.
- **Safety:** Questions on biosafety and infection control practice when handling potentially infectious specimens.

Expect an initial conversation about your qualifications, AIMS certification status and prior laboratory experience, followed by scenario and process questions that dig into your technical judgement. Some employers include a short practical or bench-based assessment, or ask you to talk through a results printout. The interview usually closes with questions about your availability for shift work and any queries you have about the laboratory's systems or accreditation status.

1. Walk me through how you'd process a blood sample from the moment it arrives in the lab to reporting the result.

Why they ask

Checks that you follow correct specimen handling, analyser operation and reporting steps without skipping quality checks.

How to structure your answer

Step-by-step process walkthrough: receipt and identification, preparation, analysis, quality check, interpretation, reporting.

Example answer

“When a sample arrives I first check the specimen against the request form for correct patient details and container type, and reject anything mislabelled or haemolysed before it goes near an analyser. Once accepted, I log it in the LIS, prepare it according to the test requested, and run it through the relevant analyser, whether that's a haematology or biochemistry platform. I check the result against the quality control run for that day before accepting it, then compare it to the clinical reference range. If it's within range I release it through the LIS; if it's outside range or flagged as critical, I hold it back for a second check and follow the lab's escalation procedure before anything is reported to the clinical team.”

2. A haematology analyser flags a critically low platelet count, but you suspect the sample might have clotted before it reached the machine. What do you do?

Why they ask

Tests your ability to weigh a genuine critical result against a possible pre-analytical error, since acting on the wrong one has real clinical consequences.

How to structure your answer

Judgement under pressure: immediate check, risk assessment, decision, escalation, follow-up.

Example answer

“I wouldn't report the result straight away. I'd pull the sample and check it visually and under the microscope for clots or platelet clumping, since that's a common cause of a falsely low count. If I confirm a clot, I'd reject the sample and request a fresh one, noting the reason on the LIS so the clinical team understands the delay. If the sample looks fine and the low count is genuine, I'd treat it as a true critical result and escalate it to the pathologist and the requesting clinician immediately, following our critical results notification procedure and documenting who I spoke to and when.”

3. How do you approach daily quality control and calibration checks on your analysers?

Why they ask

Confirms you understand the routine quality processes that keep results defensible under NATA and NPAAC accreditation.

How to structure your answer

Process and compliance walkthrough: routine, standards, what triggers corrective action.

Example answer

“I run quality control material through each analyser at the start of shift and check the results against the expected range before any patient samples go through. If a QC result falls outside the acceptable range, I stop patient testing on that analyser, recalibrate, and rerun the control before releasing any results. I log every QC run and any corrective action in the LIS, since that record is what an auditor checks during accreditation review. I also keep an eye on trend data over time, because a result that's technically within range but drifting can be an early sign of a problem.”

4. Tell me about a time you had to communicate an abnormal or critical result under pressure.

Why they ask

Looks for evidence that you can handle the clinical urgency and communication side of the role, not just the bench work.

How to structure your answer

STAR: situation, task, action, result.

Example answer

“During a busy afternoon shift, a biochemistry result came back showing a critically high potassium level on a patient already flagged for cardiac monitoring. My task was to get that result to the treating team fast and make sure it wasn't a haemolysis artefact. I checked the sample for haemolysis, confirmed the result was valid, and phoned the ward directly rather than waiting for the LIS alert to be picked up, following our critical value callback procedure and documenting the call. The clinical team adjusted the patient's treatment within minutes of the call, and the incident reinforced for me why I always confirm a result before treating it as final, especially under time pressure.”

5. What biosafety and infection control steps do you follow when handling potentially infectious specimens?

Why they ask

Checks your working knowledge of laboratory safety practice, which matters for both personal protection and specimen integrity.

How to structure your answer

Checklist-style process answer covering PPE, handling, containment and disposal.

Example answer

“I treat every specimen as potentially infectious unless told otherwise. That means gloves and appropriate PPE at all times, handling samples within a biosafety cabinet where required, and never opening tubes outside of a controlled area. I follow the lab's spill and exposure procedures exactly, and dispose of sharps and biological waste in the correct labelled containers rather than general waste. I also make sure any specimen flagged as high-risk, such as suspected TB or a bloodborne pathogen, is processed according to the specific protocol for that risk category, and I flag it clearly for anyone handling it after me.”

6. Laboratory automation and new analyser technology are changing a lot of routine testing. How do you keep your skills current as new systems come in?

Why they ask

With this role rated moderate risk for automation, employers want to know you'll adapt to new instruments and workflows rather than resist them.

How to structure your answer

Reflective answer: past example of learning a new system plus ongoing approach to development.

Example answer

“I treat new analysers and LIS updates as part of the job rather than a disruption. When my previous lab moved to a new biochemistry platform, I worked through the vendor training and cross-checked its results against the old system during the transition period, so I understood exactly where its quirks were before relying on it for patient results. I keep up with changes through AIMS continuing education requirements and by reading updates from RCPA, and I'd rather spend time upfront learning a new system properly than fall behind and slow down turnaround times later.”