Laboratory Errors: Finding the Root Cause

2016 Regional Meeting Lab Breakout
The Goals of Performing a Root Cause Analysis

• To determine:
  – What happened
  – Why it happened
  – What to do to prevent it from happening again

• Must be impartial, methodical, information driven

• Include all personnel involved in the error for the analysis rather than speculate

• Clearly state the purpose is not to assign blame
Ask “Why” 5 Times

• Write down the specific problem
• Ask why the problem happened
• Write down the answer
• If the answer doesn’t identify the root cause of the problem, ask why again until there is agreement from the team that the root cause has been identified
• Ask what proof is there that the cause exists and is there proof it contributed to the problem
Ask “Why” 5 Times

Where do bears live?

In the forest

That's where their food is

That's where their food lives

Because

Why?

Why?

Why?

Why?
“Why” Technique: Lab Example

Event: The turn-around time for a test was too long

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<td><strong>(1) Why</strong> was the TOT too long?</td>
<td>The controls were expired and testing had to be delayed.</td>
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<td><strong>(2) Why</strong> were there no non-expired controls?</td>
<td>The order didn’t get shipped in time.</td>
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<td><strong>(3) Why</strong> didn’t it get shipped in time?</td>
<td>The order wasn’t place on time.</td>
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<td><strong>(4) Why</strong> wasn’t the order placed on time?</td>
<td>The person who normally does the ordering was out sick and there was no one designated as the backup.</td>
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Root cause achieved with 4 WHY’S

Categories to Investigate

• Pre-analytical
  – Specimen collection, request forms, processing

• Analytical
  – procedure, reagents, equipment, environment

• Post-analytical
  – Results, interpretation, transcription, reports

• Testing personnel
  – Training, competency, observe performing task
Corrective Action Plan

- The appropriate corrective action should prevent or minimize the event from recurring.
- Monitor future events