

## Safety Management in a Clinical Laboratory

Time : 9 a.m. - 5:00 p.m.

### Day 1 (15 December 2014)

Time	Topic
a.m. session	Presentations by safety management supervisors and coordinators on laboratory safety organization and practices
p.m. session	Laboratory visits Setting up of training venue and materials

### Day 2 (16 December 2014)

Time	Topic
a.m. session	Overview of BSL-2 and BSL-3 laboratories, design, testing and maintenance Introduction to Australian Standards, specifically AS/NZS 2243.3 Case Study 1: Sabia virus incident [Infection following centrifuge accident.]
p.m. session	Case Study 1 continued... Training Session 1: <ul style="list-style-type: none"><li>• Safe use of centrifuges</li><li>• Aerosols &amp; Spills procedure</li><li>• Respiratory protection</li><li>• Reporting of incidents</li><li>• Management Issues</li></ul> Laboratory-acquired infections: Case Study 2: SARS Coronavirus incidents: Singapore and Taiwan [Infection from poor laboratory techniques.] Training Session 2: <ul style="list-style-type: none"><li>• Operation and use of Biological Safety Cabinets</li><li>• Disinfectants</li></ul>

### Day 3 (17 December 2014)

Time	Topic
a.m. session	Risk Assessment of Project (laboratory work) <i>Summary description and methodology:</i> Principles of risk assessment to identify hazards, assess risk of proposed work and ensure adequate controls are in place <b>prior</b> to starting work. Covers Inherent and Residual Risk, Likelihood and Consequence, Hierarchy of Controls.  Training Session 3 <ul style="list-style-type: none"><li>• Examples of risk assessments applied to large animal experimentation.</li></ul> Tuberculosis: Discussion of current issues relating to processing TB diagnostic samples

p.m. session	<p>Case Studies:</p> <p>Laboratory-acquired infections:</p> <ul style="list-style-type: none"> <li>• Tularaemia</li> <li>• Smallpox</li> <li>• <i>B. anthracis</i></li> <li>• SARS Coronavirus (Beijing)</li> <li>• <i>E. coli</i> 0157:H7</li> <li>• Brucellosis</li> </ul> <p><i>Summary description and methodology:</i></p> <p>Infection from handling diagnostic samples and working with agents (research). Cross-contamination of cultures; incomplete inactivation and inadequate innocuity testing.</p> <p>Training Session 4:</p> <ul style="list-style-type: none"> <li>• Risk Groups of microorganisms including mode of transmission, infectious dose</li> <li>• Signage</li> <li>• Lack/inadequacy/testing of inactivation of cultures, decontamination of room space.</li> </ul>
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#### Day 4 (18 December 2014)

Time	Topic
a.m. session	Practice session on audit of laboratories by trainees
p.m. session	Review of practice audits in class

#### Day 5 (19 December 2014)

Time	Topic
a.m. session	Practical training sessions 1. Use of PPE <ul style="list-style-type: none"> <li>• Gowns</li> <li>• Shoes</li> <li>• Safety glasses</li> <li>• Gloves</li> <li>• Washing hands</li> </ul>
	2. Use of Class II biological safety cabinets
p.m. session	3. Spills training
	4. Wrap up questions and answers