

SAFETY RISK ASSESSMENT

Risk assessments should be used to guide policy development, Standard Operating Procedures, testing processes, and Personal Protective Equipment (PPE) requirements. When utilized correctly, risk assessments should identify and minimize laboratory risks and aid with mitigation.

When considering laboratory processes for collecting, handling, processing, testing, and disposing of samples, clinical laboratories should focus on the following areas:

- Specimen collection and transport, to include the pathway from the collection site to the testing areas
- Equipment hazards, i.e., is there a potential for aerosols or splashes
- Engineering controls and other safety equipment
- Decontamination and infectious waste management
- Laboratory design, including ventilation and filtration
- PPE selection and use
- Employee medical surveillance, fit-testing, and exposure-response
- Safe sharps handling
- Safety training and competency assessment for personnel

The attached Safety Risk Assessment template can be used to guide laboratory personnel through the process of assessing risks. It is important that all phases of testing be included in the assessment process. Evaluate activities with hazards that present risks and prioritize based on which are more likely to occur and/or have the most severe consequences. When determining the risk level, be sure to consider the current mitigation controls.

For more information on performing Safety Risk Assessments, please visit:

<https://www.tn.gov/health/health-program-areas/lab/laboratory-safety.html>

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The following risk matrix can be used to guide determination of risk level:

		Consequence				
		Minimal Hazard or near miss requiring reporting and follow up action	Minor Potential First Aid Injury	Moderate Potential Medical Treatment injury or illness	Major Potential Lost Time injury, non-permanent disability	Severe Potential Fatality or injury or illness with permanent disability
Likelihood	Rare May happen only in exceptional circumstances	LOW	LOW	LOW	LOW	MEDIUM
	Unlikely Could happen at sometime	LOW	LOW	MEDIUM	MEDIUM	HIGH
	Possible Might occur occasionally	LOW	MEDIUM	HIGH	HIGH	HIGH
	Likely Will probably occur in most circumstances	LOW	MEDIUM	HIGH	HIGH	EXTREME
	Almost Certain Expected to occur in most circumstances	MEDIUM	HIGH	HIGH	EXTREME	EXTREME

LOW	Risk is tolerable; manage by well-established, routine processes/procedure
MEDIUM	Control Plan must be developed; existing controls need to be reviewed. Target resolution should be within 1 month.
HIGH	High risk may also require immediate assessment by senior staff; Control Plan must be developed; regular monitoring and reports to the safety officer. Target resolution should be within 2 weeks.
EXTREME	Extreme risk requires immediate assessment and senior staff consideration is required. A detailed Control Plan must be developed; the activity should be stopped immediately unless risk can be reduced to a level of high or less. Regular monitoring and reports to the safety officer.

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Procedure or Process:				
Section:				
Date performed:				
Who collaborated on this assessment? Name and job classification. <i>Be sure to include those who perform the testing in the risk assessment process.</i>				
List each specific task/activity	List each specific hazard identified	What are your current mitigation controls?	What is the determined risk level?	Does the risk level require additional mitigation controls?

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Control Plan*

**If indicated based on assessed risk level (moderate or above)*

Task/Activity	Current Mitigation Controls	Recommended additional mitigation controls	Due Date for Implementing new mitigation controls