

NDMRB-RA-071

Risk Assessment: Working with open flames and Bunsen burners

Scope

Bunsen burners present fire hazards. They produce an open flame and burn at a high temperature, and as a result, there is potential for an accident to occur.

For the safety and convenience of everyone working in a laboratory, it is important that the following guidelines be observed. In case of a fire, activate the nearest fire alarm station and evacuate the building.

Flames are used during any bacterial work that is carried out in the laboratory. Only nominated members in the NDMRB may work with open flames and Bunsen burners, to become a nominated you must undergo relevant training and supervision. Use of open flames and Bunsen burners must never happen out of hours or while lone working.

Storage of the unused canisters must be stored in flammable storage cabinets

Disposal of spent canisters must be disposed of via the lab manager.

This replaces TDI-RA-008

Name of assessor:	Andrea Keepence-Keyte	Date of Assessment:	January 2015	Review Date:	Every three years
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Risk Matrix:

Risk Matrix		Likelihood			
		High	Medium	Low	Negligible
Consequence	Severe	High	High	Medium	Effectively Zero
	Moderate	High	Medium	Medium/low	Effectively Zero
	Insignificant	Medium/Low	Low	Low	Effectively Zero
	Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

Risk Assessment:

Hazard (Cause and consequence)	Affected Groups	Existing controls	Risk	Further Action
Burns from flame	All users	Never reach over an exposed flame. Use the Bunsen in a clear and nominated area. Ensure that all PPE is worn at all times. Allow Bunsen to cool before handling after use	Medium	None
Fire risk – potential to cause significant fire. This could incur injury to staff, students and visitors and damage to building and equipment	All staff and visitors	Locate the Bunsen in an uncluttered area away from all chemicals and shelving. Seat the Bunsen on a fire proof mat. Never leave unattended. Always shut down completely once work is finished.	Medium	None
Significant spread of fire from contact with flammable sources	All staff and visitors	Ensure that the area for Bunsen work is well away from any flammable liquids and chemicals. Whether in use or being stored.	Medium	None
Explosion – injury from debris from canister	All users and staff	Ensure that the gas canister is in good repair before use. Storage of canisters while not in use must be stored in flammable cabinets Any damaged canisters should be isolated and disposed of through the proper channels.	Medium	None

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: