

NDMRB-RA-027

Risk Assessment: Autoclave in CL3

Scope

The Category III lab in the NDMRB has its own autoclave facility. There are two autoclaves in the Cat III lab, one in the lobby and one in the small suite and all Cat II waste must be autoclaved and bagged before leaving the suite.

Because of this Cat III users will need to be trained in the use of these autoclaves. They run at high temperature and high pressure and only trained users are approved to operate these systems. Operating instructions for the autoclaves is outside of the scope of this document.

It is the users responsibility to ensure what controls are needed to ensure that the health of themselves and others around them. It is imperative that you **DO NOT** start any work until you are absolutely sure of the appropriate precautions that need to be employed. If you are unsure seek advice from your line/laboratory manager or your departmental safety officer (DSO).

Name of assessor:	Tiphaine Bouriez-Jones/Andrea Keepence-Keyte	Date of Assessment:	April 2015	Review Date:	Every 3 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
Work in CL3 – potential exposure to pathogen leading to the user illness.	Staff/students	<p>Users will undergo a safety induction with the CL3 Safety Officer. They will be given on the job training and will have to demonstrate their experience before being given access to the CL3 suites.</p> <p>All work in the CL3 is subject to the CL3 Code of Practice.</p>	Medium	<p>All training must be completed to gain access to Cat 3</p> <p>All SOP, RA and guidance must be read and included on training forms</p> <p>Health surveillance may be required, please speak to your supervisor before commencing work in Cat 3</p>
Infectious from exposure to pathogens (blood, HIV supernatant)	Staff/students	<p>All material in contact with infectious material is treated with 1% Virkon for a minimum of 30min before being strained out and placed in the autoclave waste bag.</p> <p>Each user must have read and understood the specific risk assessment of the pathogen involved in their technique.</p> <p>Only trained, competent and authorized personnel will be processing CL3 waste to the autoclaves.</p> <p>Users must wear all appropriate PPE, including safety glasses, gloves, and closed foot ware.</p>	Medium	None
Burn from hot temperature material or hot steam	Staff/students	<p>The autoclave has a thermal lock built-in which can only be overridden using a key which is kept out of CL3. Only authorised Facility users have access to this key.</p> <p>In case of build-up of pressure, hot steam may be release from the safety valve at the back of the unit (away from traffic), the autoclave</p>	Low	None

		safety features will automatically abort the cycle. Users are to report the issue to Facilities.		
Crushing of extremities whilst loading the autoclave	Staff/students	The autoclave lid has a safety feature which prevents the lid from falling down. If the lid stays fails, users are to report it immediately to Facilities so that an engineer visit can be arranged as soon as possible.	Low	None

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: