Noel Jackson 08/09/10

Introduction to Microbiology: Risk Assessment

Activity	Hazard	Precaution	Risk
Aseptic technique	• Burns from Bunsen flames (lit on bench for duration of workshop)	• All long hair to be tied back • No loose clothing – labcoats must be worn throughout • Bunsens set to safety flame unless another flame is specifically needed	Low
Pouring agar plates	• Burns from molten agar	• Students shown how to pour plates safely • Students to use rubber hand protectors to hold hot flask	Low
Microscopy	• Cuts from sharp edges on glass slides or broken slides	• Students instructed to handle slides carefully • Any breakages swept up immediately by demonstrator	Low
Preparing heat-fixed smear	• Burns from Bunsen flame	• Students given clear demonstration of technique before starting • Students instructed to hold slides with forceps	Low
Gram's stain	• Crystal Violet: Harmful	• Students to wear gloves and eye protection throughout staining procedure • Students instructed to handle stain with care	Low
	• Safranin (in 50% IMS): Flammable, Harmful	• Used over sink, a safe distance from Bunsen flame on bench • Students instructed to handle stain with care	Low
	• Propanone: Flammable	• Used over sink, a safe distance from Bunsen flame on bench	Low
Bacterial plates	• Bacterial cultures: Biohazard	• Only non-pathogenic bacteria provided for culturing • Cultured plates photographed and images sent to students – plates remain in Lifelab and are disposed of safely	Very low

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