

Containment principles of *Staphylococcus aureus* isolated from mastitic bovine

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Working in the laboratory with biological agents has two main components: safety and security.

Our study based mainly on how to control the risk arising in laboratory depending on different items including: risk identification, risk assessment, risk management and risk communication.

Milk samples collected from different private and governmental farms for the isolation of *staphylococcus aureus* as a causative agent of mastitis in dairy farms. *S. aureus* was characterized according to material safety data sheet as risk group no. 2 which needs containment biosafety level 2.

Laboratory practices were one of the most important items implemented in the laboratory including: authorized access, biosafety posted signs, working in the biosafety cabinet class 2, wearing the appropriate personal protective equipment (PPE) which including: gloves, over shoes and laboratory coats with no need to goggles as well as masks.

After bacteriological examination, proper disinfectant should be used (vercon s) and decontamination of the samples takes place using autoclave according to standard operating procedures (SOPs).

It is worthy to mention that all the activities for biosafety implementations were carried out according to training programmes held the institute focused on using biosafety lab practices, biosafety cabinet, donning and doffing, using proper disinfection and waste disposal.