

# Survey on biosafety procedures in National Reference Laboratories for TSEs

September 2023

## Survey on biosafety procedures in NRLs for TSEs

### **Aims of the questionnaire:**

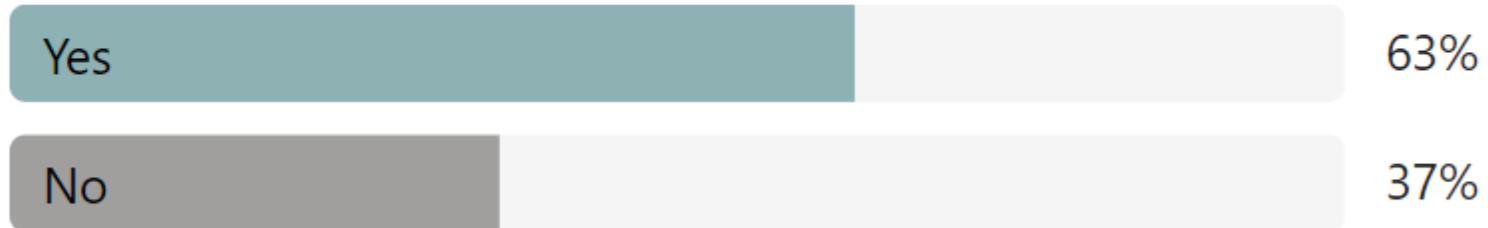
- Collect information regarding the biosafety measures currently implemented in the National Reference Laboratories for transmissible spongiform encephalopathies.
- Present and discuss at the 20th meeting EURL TSE (Rome, 2-3 October 2023) the aggregated and anonymised results.

### **Respondents:**

- 35 countries contacted.
- 30 respondents.

## Survey on biosafety procedures in NRLs for TSEs

### 3. Are there any specific national guidelines for safely working with TSE agents?



## Survey on biosafety procedures in NRLs for TSEs

**4. If not, do you refer to specific international guidelines?**



## 5. Please indicate the specific international guidelines currently in use.

- BSE and scrapie guidelines on safe working procedures in histopathology laboratories and post-mortem rooms (VLA, JUN1998)
- OMS (2020) Laboratory biosafety manual, 4th edition (<https://www.who.int/publications/i/item/9789240011311>)
- Amaya Leunda, Bernadette Van Vaerenbergh, Aline Baldo, Stefan Roels and Philippe Herman (2013) Laboratory activities involving transmissible spongiform encephalopathy causing agents Risk assessment and biosafety recommendations in Belgium. Prion 7:5, 420–433; September/October 2013; © 2013 Landes Bioscience
- Appendix I: Prion Research/Creutzfeldt-Jacob Disease (CJD) Guidelines | Research Support (<https://www.bu.edu/research/ethics-compliance/safety/biological-safety/ibc/resources/biosafety-manual/appendix-h-prion-research-cjd-guidelines/>)
- Portuguese BSL-3 Facilities: Rules and Guidelines (Lab-PTBioNet)
- WHO Laboratory Biosafety Manual (LBM4)
- OIE - Manual of Diagnostic Tests and Vaccines for Terrestrial Animals-Biosafety and Biosecurity (chapter 1.1.4)
- OIE guidelines
- Valid EU regulations REGULATION (EC) No 999/2001
- Prion 7:5, 420–433; September/October 2013; 420 Prion Volume 7 Issue 5, Laboratory activities involving transmissible spongiform encephalopathy causing agents Risk assessment and biosafety recommendations in Belgium. Amaya Leunda, Bernadette Van Vaerenbergh, Aline Baldo, Stefan Roels, Philippe Herman
- Biosafety in Microbiological and Biomedical Laboratories. 5th Edition
- U.S. Department of Health and Human Services, Public Health Service
- Centers for Disease Control and Prevention, National Institutes of Health
- HHS Publication No. (CDC) 21-1112 Revised December 2009
- Overview of the BSE risk assessments of the European Commission's Scientific Steering Committee (SSC) and its TSE/BSE ad hoc Group Adopted between September 1997 and April 2003
- Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

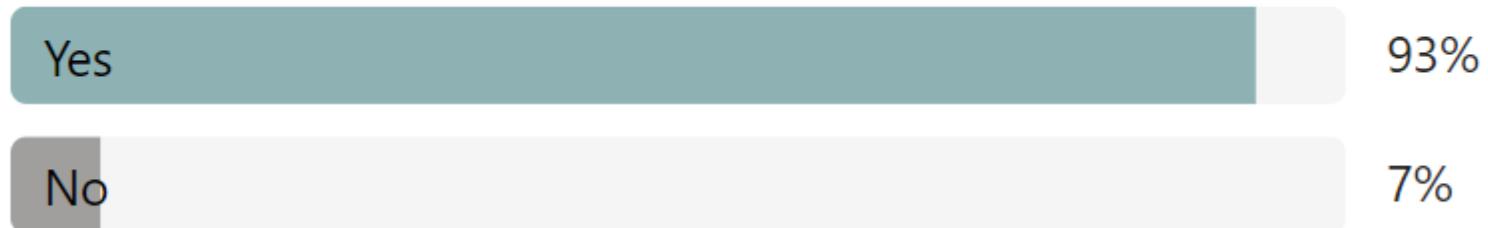
## Survey on biosafety procedures in NRLs for TSEs

**6. Have you carried out a risk assessment in the laboratory/laboratories that deal with TSE agents?**



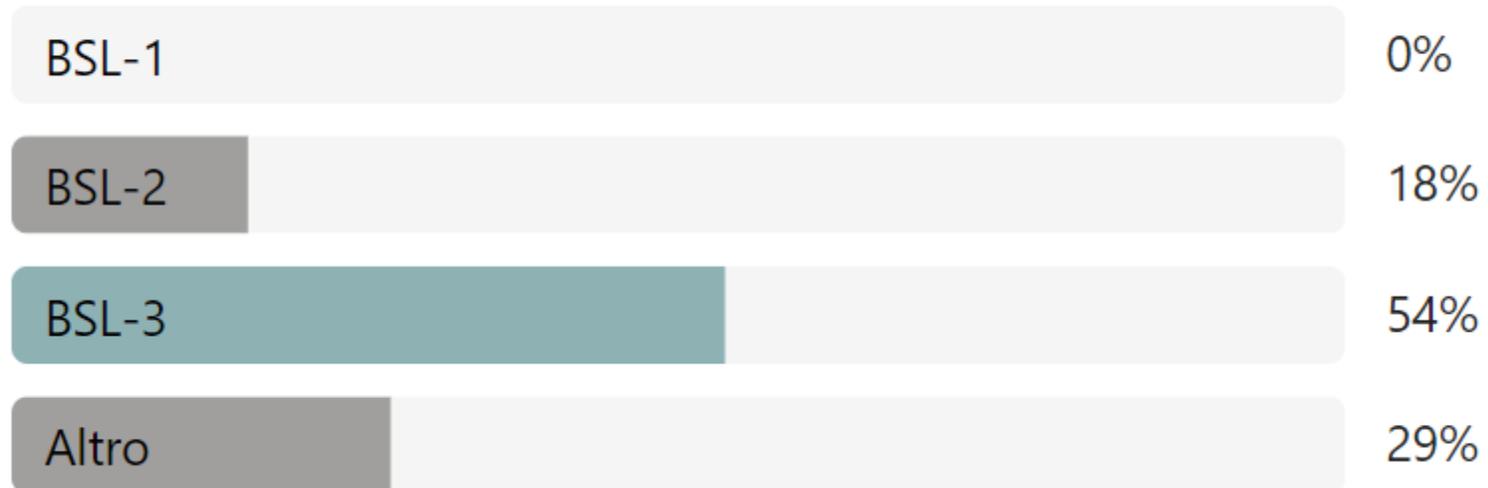
## Survey on biosafety procedures in NRLs for TSEs

**7. Have you determined the level of biocontainment of the laboratory/laboratories that deal with TSE agents (BSL-2, BSL-3, or any other classification system)?**



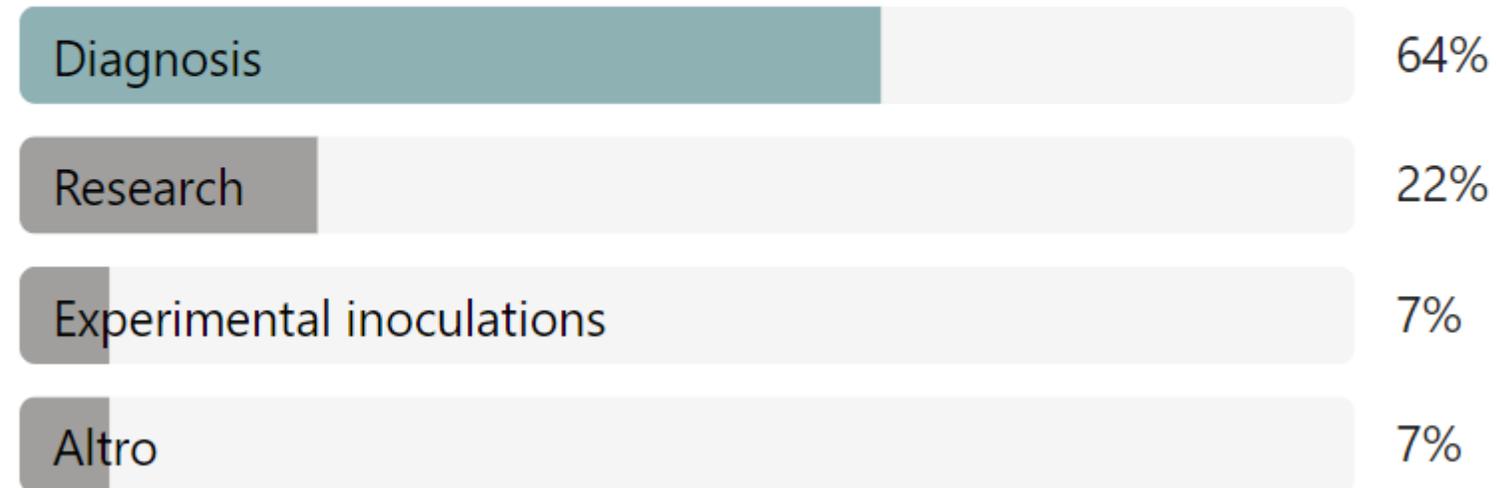
## Survey on biosafety procedures in NRLs for TSEs

### 8. If yes, which is the level assigned to the laboratory/laboratories?



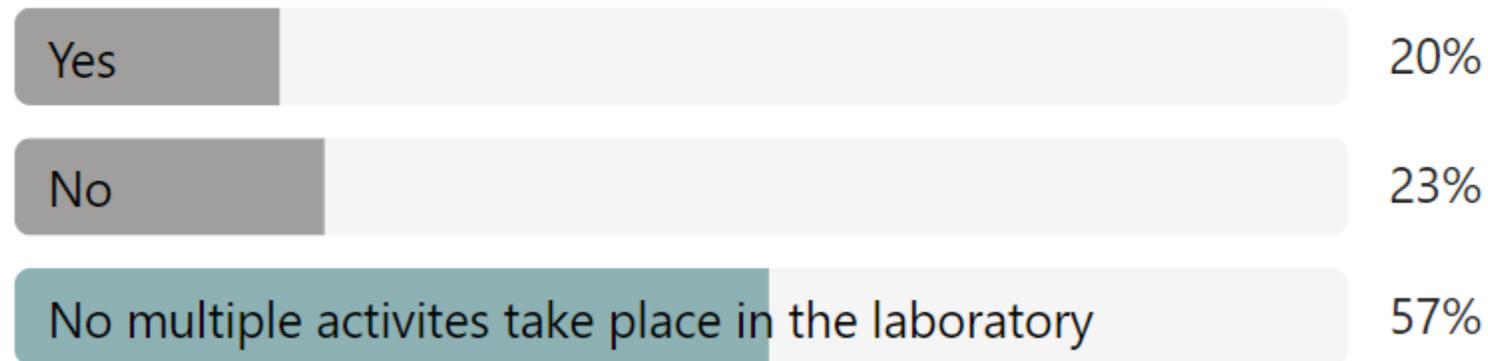
## Survey on biosafety procedures in NRLs for TSEs

### 9. Which activities are performed in the laboratory/laboratories that deal with TSA agents?



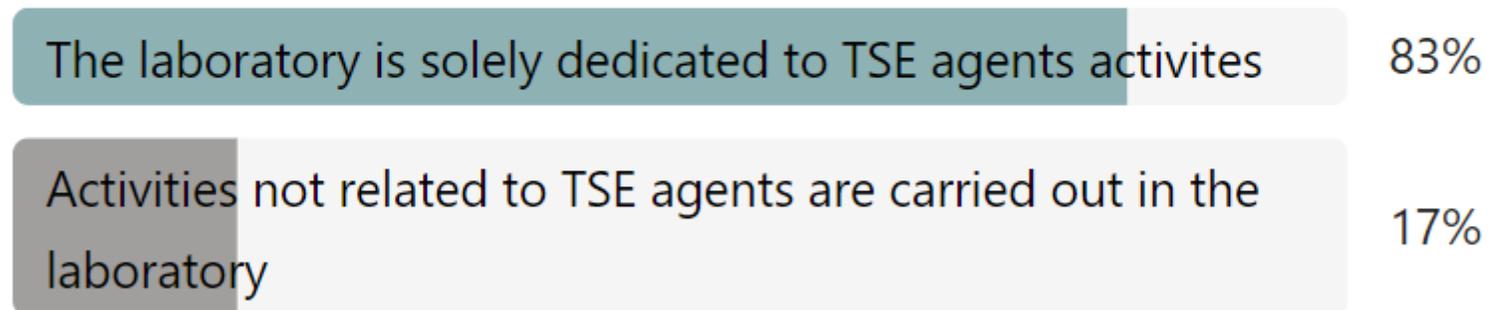
## Survey on biosafety procedures in NRLs for TSEs

**10. If multiple activities (diagnosis, research, etc.) are carried out in the laboratory/laboratories, are the different activities conducted in separate areas according to their level of risk?**



## Survey on biosafety procedures in NRLs for TSEs

**11. Is the laboratory/laboratories solely dedicated to TSE agents activities, or are there additional unrelated activities being carried out within the same laboratory?**



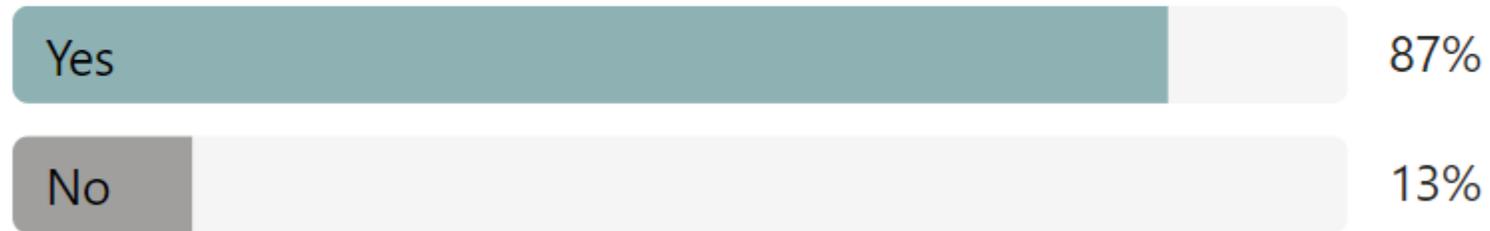
## Survey on biosafety procedures in NRLs for TSEs

**12. Please describe the activities not related to TSE agents that are carried out in the laboratory/laboratories.**

**lab tests animal disease**

## Survey on biosafety procedures in NRLs for TSEs

### 13. Have you implemented biosafety training protocols for staff dealing with TSEs?



## Survey on biosafety procedures in NRLs for TSEs

**14. Do you impose controlled or restricted access (only authorised personnel) to the TSE laboratory/laboratories?**

Yes

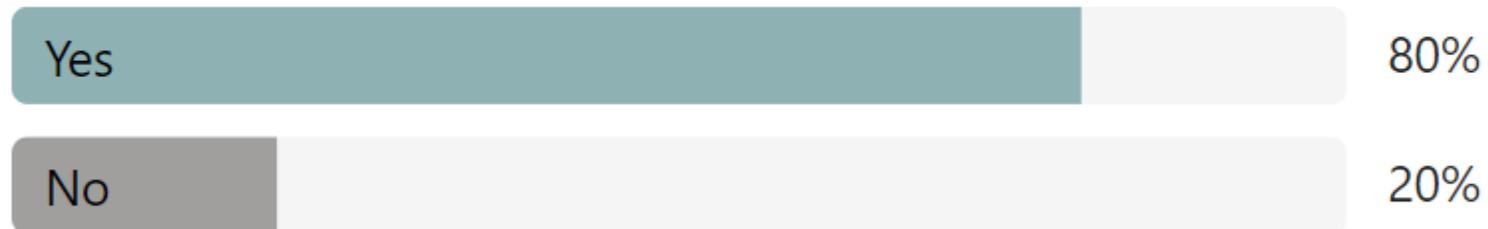
100%

No

0%

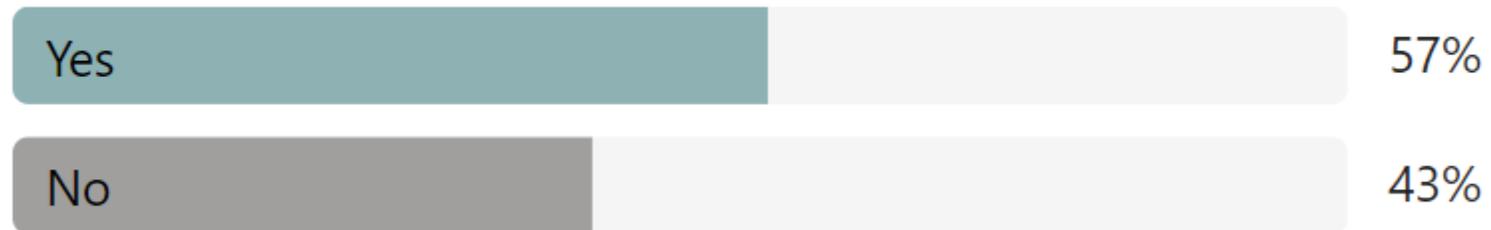
## Survey on biosafety procedures in NRLs for TSEs

**15. Do you have specific biosafety procedures available for ELISA/WB?**



## Survey on biosafety procedures in NRLs for TSEs

**16. Do you have specific biosafety procedures available for pathology/IHC?**



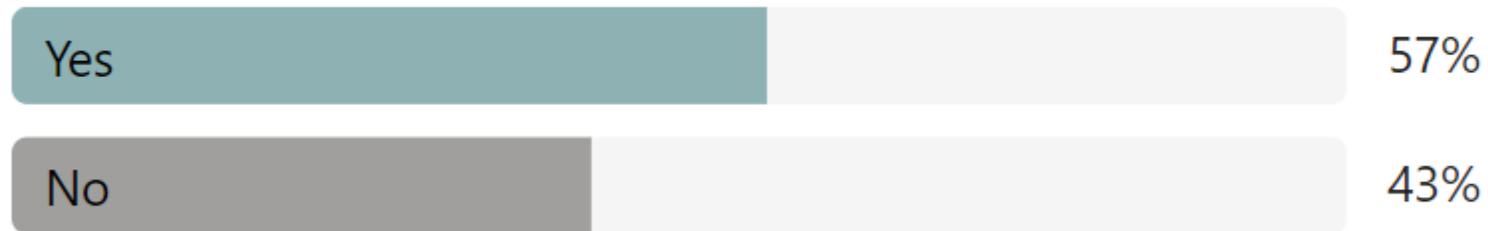
## Survey on biosafety procedures in NRLs for TSEs

**17. Do you have specific biosafety procedures available for experimental inoculations?**



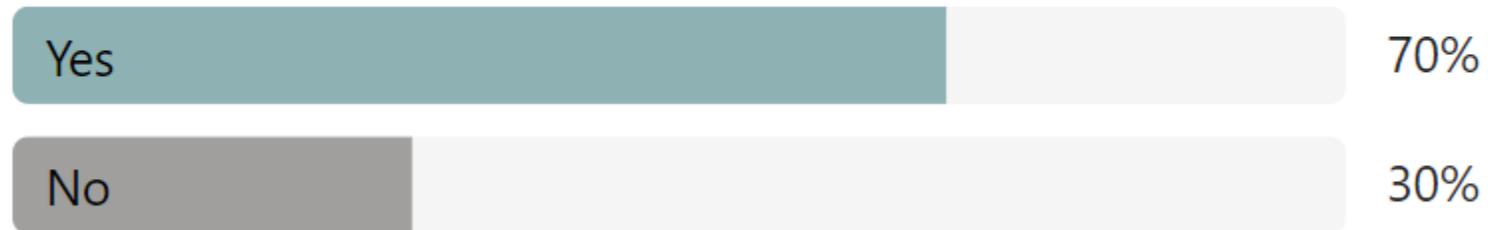
## Survey on biosafety procedures in NRLs for TSEs

**18. Do you have any specific procedures in place to prevent the use of sharp or pointed tools?**



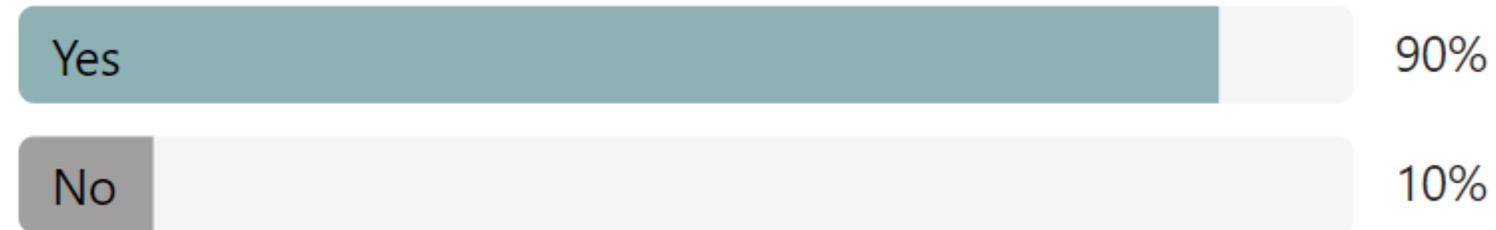
## Survey on biosafety procedures in NRLs for TSEs

**19. Do you have established procedures in place to prevent damage caused by the use of sharp or pointed tools?**



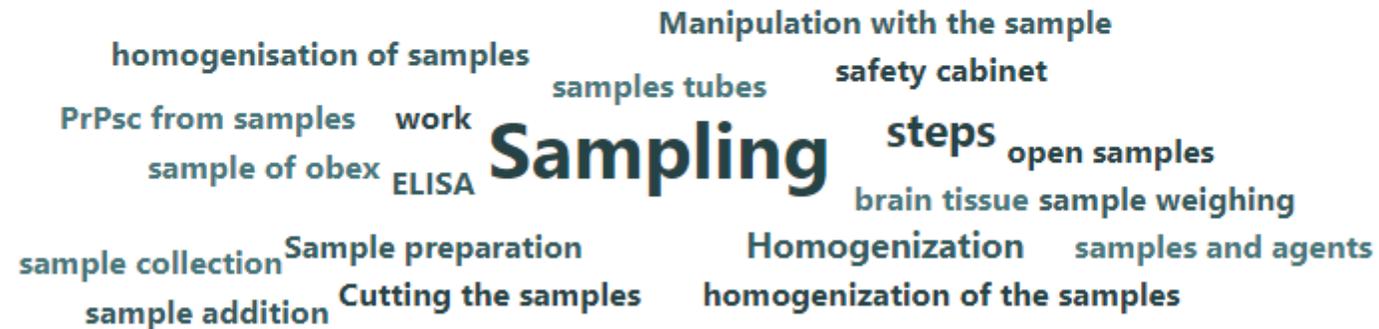
## Survey on biosafety procedures in NRLs for TSEs

### 20. Do you employ biosafety cabinets?



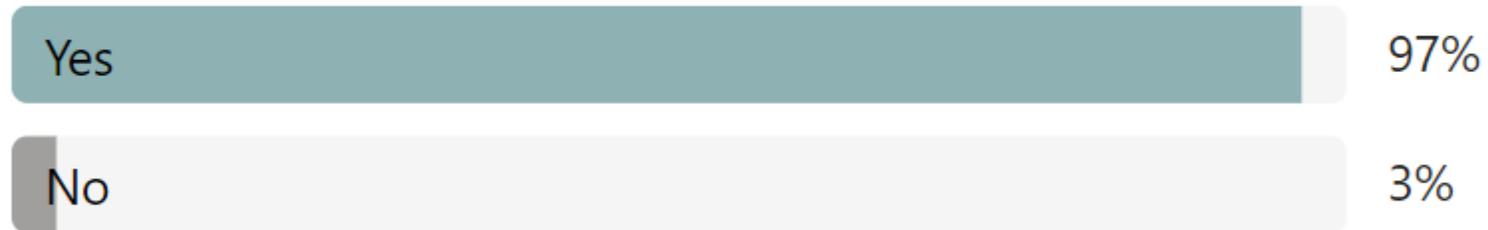
# Survey on biosafety procedures in NRLs for TSEs

21. If yes, which procedures are to be confined in the cabinet?



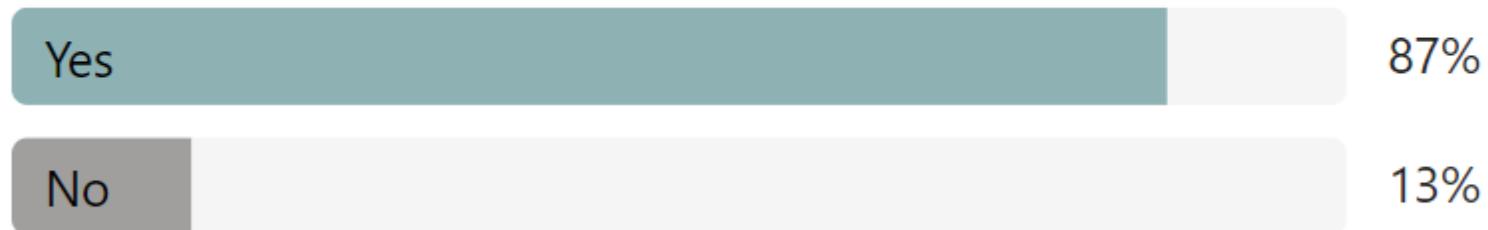
## Survey on biosafety procedures in NRLs for TSEs

**22. Are measures implemented to decontaminate the laboratory environment, including surfaces, during cleaning procedures?**



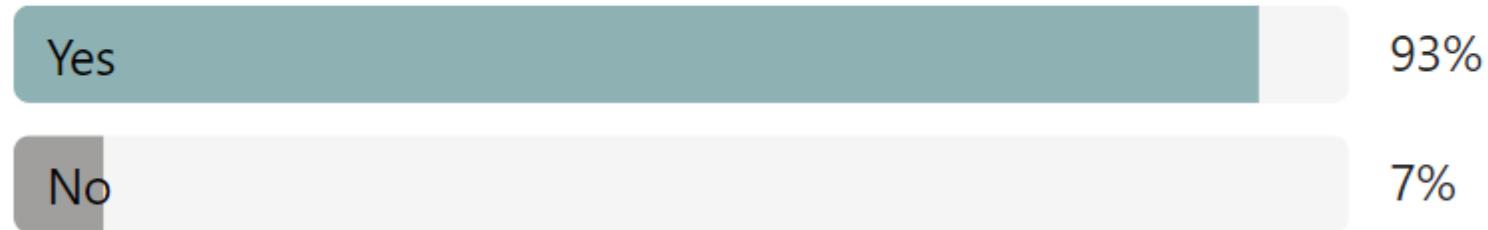
## Survey on biosafety procedures in NRLs for TSEs

**23. Are there procedures in place to decontaminate the laboratory equipment in case it needs maintenance?**



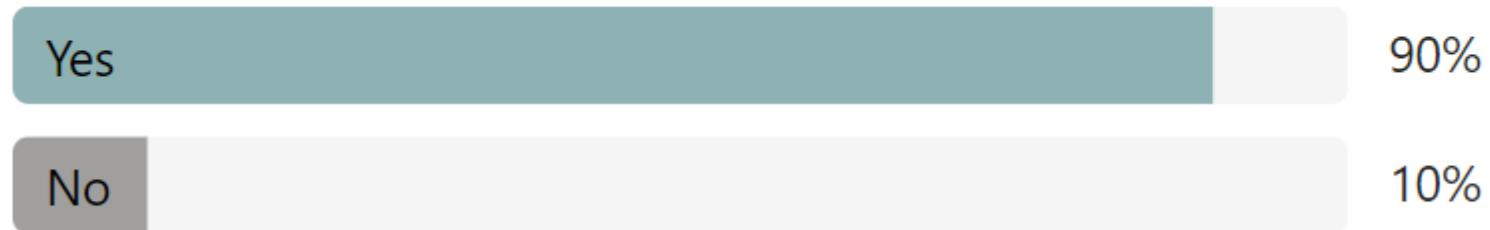
## Survey on biosafety procedures in NRLs for TSEs

**24. Are there procedures in place to decontaminate the laboratory equipment in the event of its disposal?**



## Survey on biosafety procedures in NRLs for TSEs

**25. Are there procedures in place to decontaminate the laboratory equipment in case of accidental contamination?**



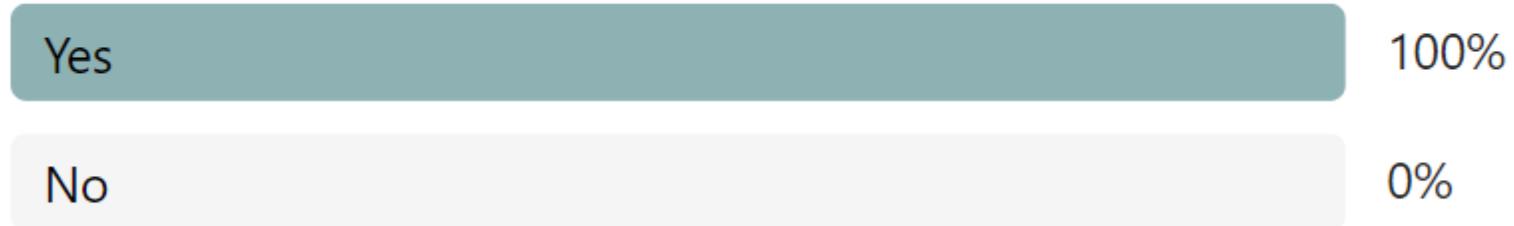
## Survey on biosafety procedures in NRLs for TSEs

**26. Are there specific procedures to mitigate the risk in the event of personnel exposure?**



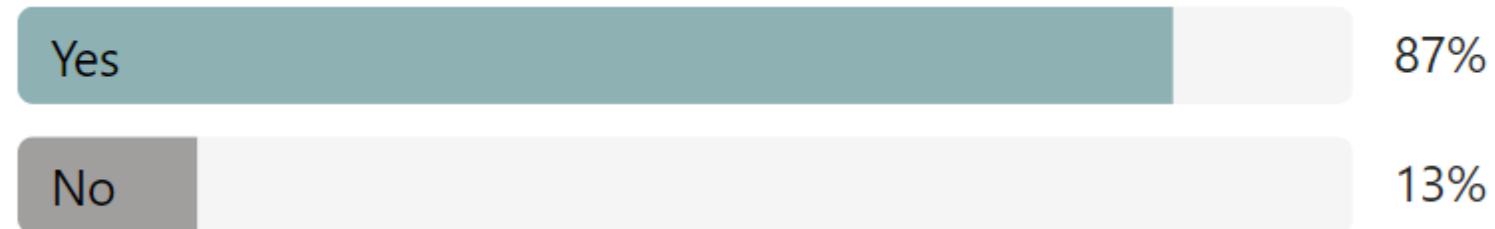
## Survey on biosafety procedures in NRLs for TSEs

**27. Are there specific procedures for safe waste management?**



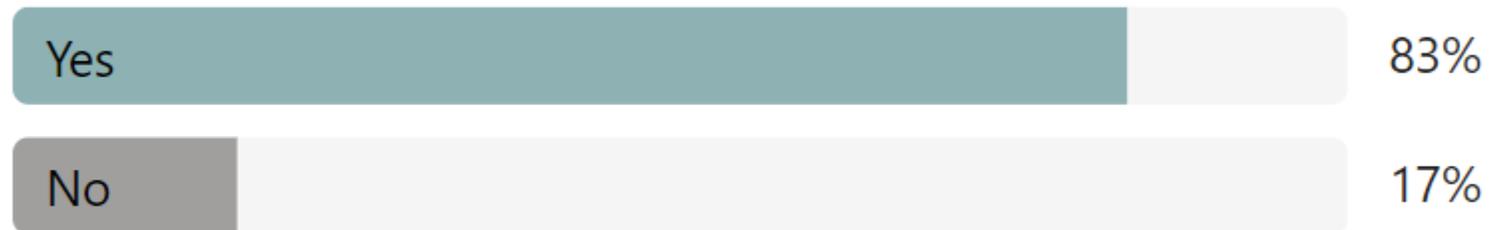
## Survey on biosafety procedures in NRLs for TSEs

**28. Are there specific procedures for the safe transportation of TSE agents?**



## Survey on biosafety procedures in NRLs for TSEs

### 29. Is there a register of personnel accidents?



## Survey on biosafety procedures in NRLs for TSEs

30. Please provide any other comments you deem useful.

**lab** **working** **TSE**  
**safety measures** **procedures**