Laboratory Safety Stats and Facts

FACTS

The dangers of working in a laboratory setting include:

1. **Chemical hazards:** Handling toxic substances can cause irritation and carcinogenicity.
2. **Biological hazards:** Biological hazards include hazards from working with small animals, working with bloodborne pathogens and working with biological agents, such as viruses and bacteria.
3. **Physical hazards:** Physical hazards include exposure to noise, poor posture and the explosibility and flammability of substances.
4. **Safety hazards:** Safety hazards include unbalanced centrifuges, danger when handling hot sterilized items and electrical hazards, such as shock, explosions, blasts and electrocutions.
5. **Allergy hazards:** A common allergy hazard in the laboratory setting is a latex allergy, as many of the materials used in a laboratory setting are latex.
6. **Dangers** in the laboratory setting can also come from unsafe practices, including:

- Working alone in the laboratory
- Neglecting to wear a lab coat
- Lack of safety training

STATS

- 25-38% of lab personnel surveyed have been involved in an accident or injury in the lab that was not reported to the supervisor or principal investigator.
- 27% of researchers stated that they never conducted any kind

of risk assessment before performing laboratory work.

- Only 40% of researchers surveyed reported wearing PPE at all times when working.
- 25% of researchers had not been trained in the specific hazard with which they worked.
- In one profile of safety incidents at research labs, virtually identical incidents occurred at the same institutions within 10–15 years, resulting in the destruction or temporary closure of the buildings.
- A new study of 120 clinical pathology labs, where blood, urine and other fluid tests are done, estimates that each year in the United States, more than 2.9 million of these errors occur, and more than 160,000 patients are harmed in some way as a result.