

Laboratory Injuries and Illness at NCI-Frederick Substantial Reductions Seen in 2000

How many accidents occurred in your lab in 2000? If you suspect the answer is “none”, you might be correct, as there was a substantial reduction in the frequency of occupational injuries to the staff working in NCI-Frederick laboratories.

At the NCI-Frederick in 2000 the number of **OSHA recordable** injury and illness cases for lab workers was 52, which accounts for 35% of all 149 such cases at NCI-Frederick.

Over CY2000 the **incidence rate** for recordable injuries and illnesses in lab staff was 5.0, a commendable 16% decrease from 1999; this was the lowest lab worker injury rate since 1994. This rate for lab workers is also the lowest injury rate for any NCI-Frederick job classification.*

Reviewing the distribution of OSHA recordable accidents broken down by type of worker (research technicians, students, scientists/postdoc fellows – refer to the graph on the reverse side) shows some interesting patterns. As expected our largest work group, that of research technicians, experienced the highest number of cases in 2000, with a total of 31. Scientists had the second highest number of accidents, with a total of 20, while student employees experienced just one recordable case.

OSHA Recordable cases include:

- Medical treatment beyond first aid
- Restriction of work or motion
- Loss of consciousness
- Transfer to another job

Incidence Rate is calculated by $(N/EH) \cdot 200,000$, where:
N = number of new injuries and illnesses per year, and
EH = hours worked in a year

Lost worktime: The number of workdays (consecutive or not) on which the employee would have worked but could not because of occupational injury or illness.

We are very pleased to report that the 16% reduction in recordable case rate is associated with a decrease in each of the seven accident cause categories. The most prevalent forms of injury were those associated with overexertion (n=18, down 14% from 1999). Repetitive hand/arm motions (such as pipetting or keyboarding) caused most overexertion cases in the laboratory. Similar injury to the upper body can occur by chronically assuming an awkward posture during lab tasks such as microscopy.

An even greater decrease was seen in the second most prevalent causality, injuries from sharp objects (n=12, down 45% from 1999). Also, substantial reductions occurred for injury to the eye (n=2, down 60%).

These incidents underscore the value of wearing appropriate eye protection whenever working with potential eye hazards.

A moderate decrease in dermatitis cases was also seen (n=5, down 17%). In lab workers these cases comprise chemical “burns” and latex-related allergies. Allergies to latex can effect major impacts on one’s health, and we encourage you to substitute nitrile gloves for latex gloves.

While the frequency of slips and falls was reduced (n=4, down 43%), these incidents remain an all too common source of injury among our lab staff. Falls resulted in sprains, bruises and abrasions, but in past years they

*The other three job classifications include administrative, animal facility, and FME.

have resulted in more serious injuries and have been associated with substantial lost worktime.

Significant reductions were seen in terms of **lost worktime** or **restriction of work duties**. Cumulative lost worktime for NCI-Frederick lab workers in 2000 totaled just 2 days, a remarkable 88% reduction from 1999.

An additional 21 days entailed restricted duties for laboratory employees – this was a 61% reduction from 1999. For lab workers, the majority of restricted duty days occurred for persons with duties in pathogen labs whose injuries involved skin trauma, thereby restricting their normal duties until wound healing. Note that these relatively slight injuries would not be OSHA recordable cases if they had occurred in non-pathogen labs.

Taking heed of cases that have occurred at NCI-Frederick can be the basis for

preventing injuries and illnesses. Learn from the misfortune of others by implementing suitable preventive measures to make your lab an even safer work environment.

In particular, if you believe duties in your lab have the potential for causing repetitive motion injuries, or you would like more

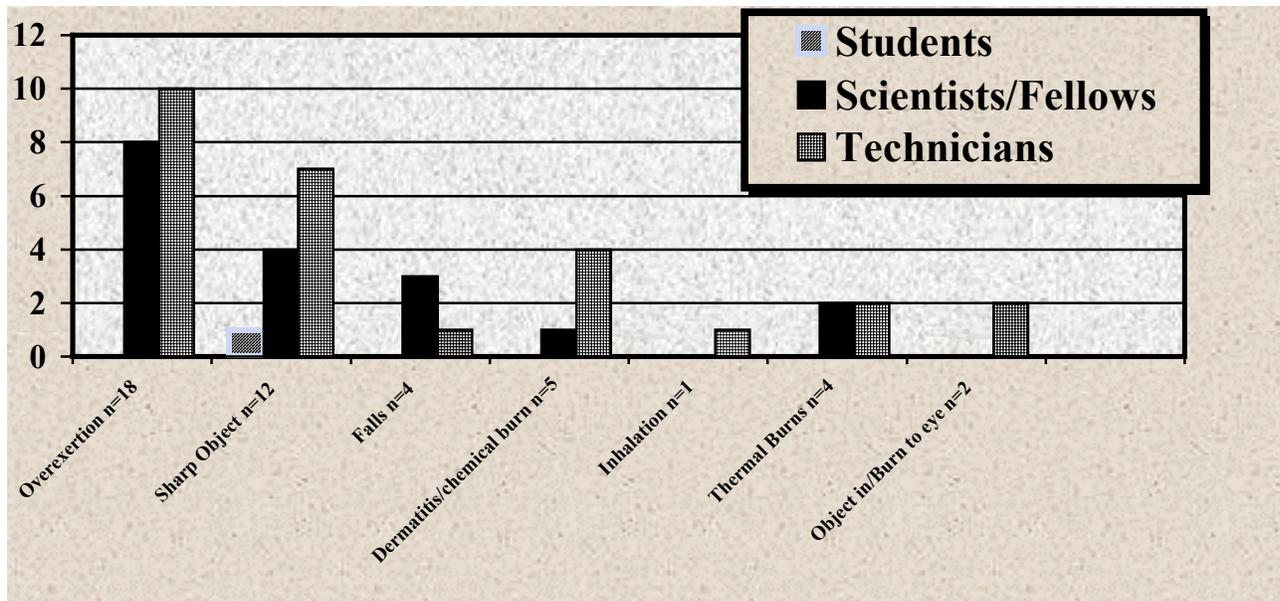
information on prevention of occupational injury and illness in the laboratory, please give SEPP (X1451) a call. Additionally, if you need information on personal protective equipment, such as eyewear or gloves, or safe laboratory practice, SEPP can assess the risk and propose control mechanisms for implementation in your laboratory.

Restricted work: *The number of workdays where:*

- (1) The employee was assigned to another job on a temporary basis; or*
- (2) The employee worked at a permanent job less than full time; or*
- (3) The employee worked at a permanently assigned job but could not perform all duties normally connected with it.*

In conclusion, SEPP congratulates the research staff of NCI-Frederick for the efforts you have exercised to result in these improved accident statistics during 2000.

Number of occupational accidents in all NCI-Frederick lab workers in 2000



Nearly All Accidents Are Preventable