



IN CASE YOU HAVEN'T “HERD”



Volume III, Issue I
March 2011

Safe, Healthful Offices, Classrooms and Meeting Rooms at Tufts

By Stephen R. Larson, Director

A university is sometimes described as a think factory, a place where faculty, staff, students and visitors create, learn and exchange old and new ideas and information. The office, classroom and meeting room is the workplace for many faculty and staff at Tufts. Individuals are most productive when these workplaces are safe and healthful.

Between 1980 and 1990, there was a “perfect storm” of new building designs, new building materials and new office technologies that led to many “white collar” workers in offices, classrooms, libraries and meeting rooms to have concerns about their health and safety.

Since the 1990s, the staff of Tufts Environmental Health and Safety (EHS) has provided guidance to the Tufts community on two of the subjects of greatest concern: indoor air quality and ergonomics.

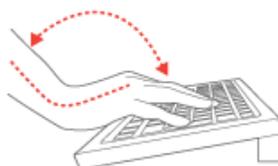
In 1973, building codes were changed reducing ventilation rates in new buildings. The objective was to conserve energy. However, office workers in these new buildings, many with unopenable windows, experienced stale “dead” air conditions and little no perception of air movement. Between 1980 and 1990, the National Institute of Occupational Safety and Health conducted over 500 indoor air quality investigations and concluded that in 51% of the cases, all of the health effects

experienced by workers were related to lack of adequate ventilation: too little outdoor air, disagreeable odors and too little air movement. The beginning of Sick Building Syndrome.

After 21 years of health research, in 2011, the Massachusetts Building Code for new buildings references the International Mechanical Code (ANSI/ASHRAE 62.1-2004) and requires ventilation that provides comfort and protects the health of all building occupants. Tufts Facilities Services makes every effort to operate buildings that meet the most current standards and works closely with Tufts EHS staff on each campus to respond to any health concern associated with the air quality in any office, classroom or meeting room.

At the same time as the new building standards and new building materials were being introduced, new information processing tools originally called word processors, printers and copy machines were replacing the typewriter as the primary office machines. Workers began to report repetitive strain injuries such as back pain, carpal tunnel disorder, tennis elbow and shoulder pain apparently associated with introduction of this new office technology.

Again, extensive scientific investigations of these workplaces demonstrated that many of these health effects could be eliminated by proper workstation design: adjustable chairs, tables and keyboard trays.



Did you know

61%

of workers have repetitive hand or arm movements

<http://www.hermanmiller.com/Thrive-Portfolio>

In some cases, trackballs seemed better than mice for reducing hand, arm and shoulder discomfort.

This idea of designing a workplace that permits the worker to adjust chairs and other elements of the work area to reduce discomfort is called ergonomics. Tufts EHS staff has provided training and advice to many faculty, staff and students on the actions that can be taken to reduce discomfort and reduce the potential for repetitive strain injuries.

Current information about office ergonomics is available at the Ergonomics section of the Tufts EHS webpage.
<http://publicsafety.tufts.edu/ehs>

Inside this issue:

<i>Laboratory Contamination and Infection of Laboratory Worker in Illinois With Cowpox Virus</i>	2
<i>Reducing Mercury Use and Disposal at Tufts</i>	2
<i>I Just Spilled Some Chemicals. Now What?</i>	3
<i>Disposing of Regulated Infectious Medical Waste at Tufts</i>	4
<i>Fire Prevention in Academic Offices</i>	5
<i>Laboratory Fire Safety</i>	5
<i>Chemical Safety Plans and Registration Forms</i>	6
<i>Dry Ice Shipping</i>	7
<i>Safety's Roll in Construction Projects at Tufts University</i>	7
<i>Upcoming Trainings</i>	8
<i>TEHS Directory and Online Features</i>	9