



NIH Baltimore Goes Greener!

NIH Baltimore Environmental Management System



NIH Labs Go Greener

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National Institute
on Aging ■ ◆ ★ ✨



What can I do to make my lab greener?

Here are some tips on what you can do to minimize your impact on the environment.

Minimizing/Substituting Chemicals

- ✓ Purchase chemicals in smallest quantities needed – disposal costs for excess chemicals often exceed the original purchase price
- ✓ Order chemicals in reusable/returnable containers
- ✓ Use less toxic alternative chemicals, such as less toxic lab stains or solvent substitutes
- ✓ Reduce use and disposal of radioactive materials by using non-radioactive alternatives, materials with lower activities, or short-lived radionuclides
- ✓ Replace your mercury-containing equipment with non-mercury substitutes
(<http://nomercury.nih.gov>)
- ✓ Design your experiments to use the minimum amount of chemicals possible
- ✓ When researching a new or alternative procedure, consider the amount of waste produced as a factor
- ✓ Share your techniques for minimizing wastes with colleagues

Pollution Prevention and Water Conservation

- ✓ Store chemicals properly and use secondary containment to contain leaks or spills
- ✓ Ensure wastes types are disposed of in separate, proper containers
- ✓ Keep containers of chemicals closed at all times
- ✓ Do not dispose of chemicals down the drain
- ✓ Keep containers labeled to avoid costly analysis required to identify wastes for disposal
- ✓ Recirculate water in cooling water systems
- ✓ Identify and have leaking faucets fixed by Maintenance
- ✓ Use backflow prevention devices to protect potable water from contamination

Energy Savings

- ✓ Turn off lights when not in use and use natural lighting when possible
- ✓ Turn off computers and office equipment at the end of every workday
- ✓ Unplug equipment (e.g., vacuum pumps, heating and cooling equipment) when not in use
- ✓ Purchase Energy Star[®] equipment and enable energy savings features where possible

More Information

- ✓ Labs21[®] - Laboratories for the 21st Century
(<http://www.epa.gov/lab21.gov/>)
- ✓ Less is Better – A Guide to Minimizing Waste in the Laboratory
(http://membership.acs.org/c/ccs/pubs/less_is_better.pdf)
- ✓ American Chemical Society's Green Chemistry Institute
(<http://www.chemistry.org/portal/a/c/s/1/acsdisplay.html?DOC=greenchemistryinstitute%5Cindex.html>)
- ✓ Massachusetts Institute of Technology's List of Green Chemical Alternatives
(<http://web.mit.edu/environment/academic/alternatives.html>)
- ✓ Carnegie Mellon Institute for Green Oxidation Chemistry
(<http://www.chem.cmu.edu/groups/Collins/resource/index.html>)

