

# Mercury and Your Health

## Teaching Outline

### ***Introduction***

Mercury is a naturally occurring metal that can have a negative impact upon our health. For many years, mercury has been used in a number of beneficial products. However, exposure to mercury vapors or methylmercury in fish can be problematic. This lesson introduces the potential health impacts from mercury exposure, and provides tips for reducing your chance of coming in contact with the dangerous forms of mercury.

### ***Lesson Objectives***

**Objectives:** After completing this lesson, participants should:

1. Understand the potential health impacts from mercury exposure.
2. Be able to identify mercury-containing devices in homes and develop strategies for limiting risk of exposure.
3. Know the tips and strategies to safely clean up a small mercury spill.
4. Be knowledgeable about the potential for mercury exposure in schools and understand actions to take to limit risk.
5. Recognize that fish may be contaminated with mercury.
6. Have the knowledge needed to safely select fish to include in a healthy diet.

### ***Lesson Materials*** (Available online at [www.ca.uky.edu/enri/mercury](http://www.ca.uky.edu/enri/mercury))

#### **Fact Sheets**

- *Mercury and Health* (ENRI-500)
- *Mercury in Homes* (ENRI-501)
- *Mercury in Schools* (ENRI-502)
- *Mercury in Fish* (ENRI-503)

#### **Booklet**

*Mercury and Your Health: Safety Tips for Families* (KAS-4) {Available after 4/15/05}

#### **Additional Items**

- *Mercury: Your Health, Your Home, Your Community* – slides/transparencies
- *Test Your Mercury IQ* – quiz and answer key
- *Mercury in Fish: Advice for Consumers* (ENRI-220) – Detailed fact sheet providing background about how fish become contaminated with mercury along with safety tips for selecting and including fish in a health diet.

## ***Lesson Materials (cont'd.)***

### **Related Materials**

- *Mercury in Schools and the Community: A National Issue* – This curriculum, developed through the University of Wisconsin-Extension, is targeted to high school students. However, many of the items contained in the curriculum could be used with various audiences. The “School Mercury Audit” and “Hunt for Mercury at Home” are both excellent resources. The curriculum is available online at [www.mercuryinschools.uwex.edu](http://www.mercuryinschools.uwex.edu).
- *U.S. Environmental Protection Agency Mercury Web Portal* – This Web site provides access to a broad range of information related to mercury issues. The site includes information targeted to consumers, parents, schools, health care providers, and business & industry. A Spanish-language site is also available. The URL is [www.epa.gov/mercury](http://www.epa.gov/mercury).

### ***Teaching Ideas and Activities***

- Distribute copies of the “Test Your Mercury IQ” quiz as participants arrive. Use this as a pre-test to determine basic knowledge about mercury issues. You may also want to distribute a second copy at the end to measure knowledge gain from the program.
- Review the *Mercury: Your Health, Your Home, Your Community* slides/transparencies to familiarize participants with the basic information covered in this lesson.
- Prior to the lesson, gather the items needed for cleaning up a small mercury spill. Demonstrate the steps to your audience using Jello as your mercury. {Note: When preparing the Jello, add a little extra water so that it does not gel as firm.}
- Have digital or non-mercury thermometers and thermostats on-hand to show when talking about mercury in homes.
- Distribute copies of the “Hunt for Mercury at Home” activity pages from the *Mercury in Schools and the Community* curriculum. Encourage each participant to follow-up by taking inventory at their home.
- Demonstrate the process of bioaccumulation in fish using the “Bioaccumulation Basics” activity adapted from the *Mercury in Schools and the Community* curriculum.

### ***Suggested Evaluation Techniques***

- Distribute the *Mercury Safety* checklist and ask each participant to complete and return before leaving.
- If you used the *Test Your Mercury IQ* quiz as a pre-test, distribute a second copy at the end of the lesson as a post-test. Compare the scores from pre- to post- to measure knowledge change.
- Provide each participant with an index card. Ask them to write their name, phone number and/or e-mail address on the card along with *one* thing they will do as a result of this lesson. Follow up with participant 4-6 weeks following the lesson to see if they have taken action.
- Provide each participant with an index card or small piece of paper. Ask them to list at least 3 things they learned by experiencing this activity.
- Use the *It's Your Turn* sheet provided with this guide as an end-of-session evaluation form. Tally the results to compile information about knowledge gain and planned behavior change. Follow-up 3-6 months later to see what changes have been made.

Prepared by Kim Henken, Extension Associate for Environmental Issues.

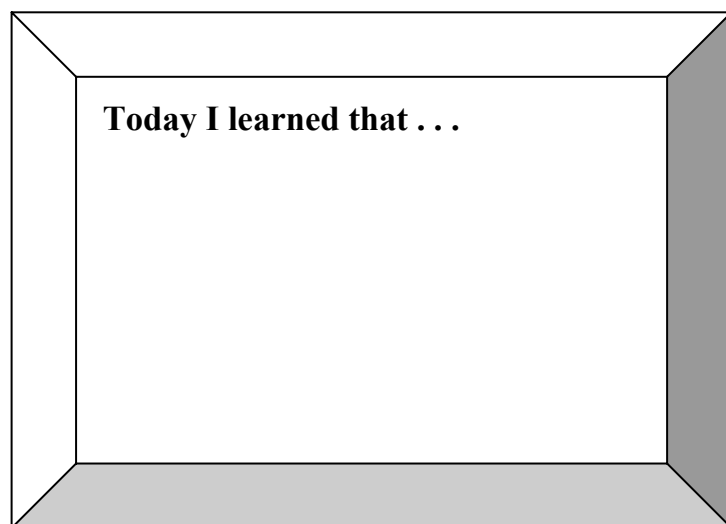
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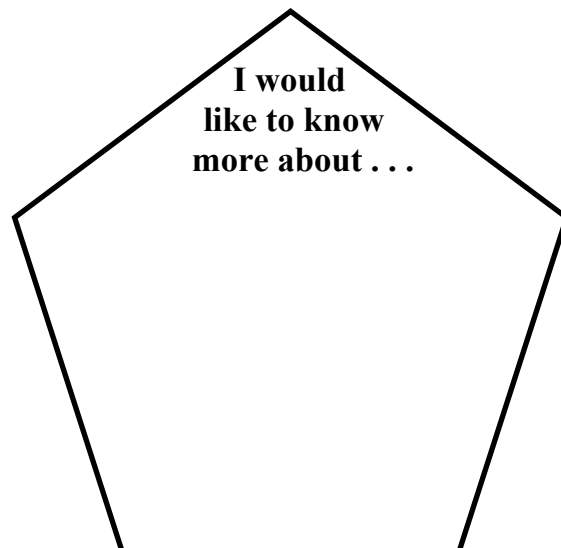
# Mercury and Your Health

## *It's Your Turn!*

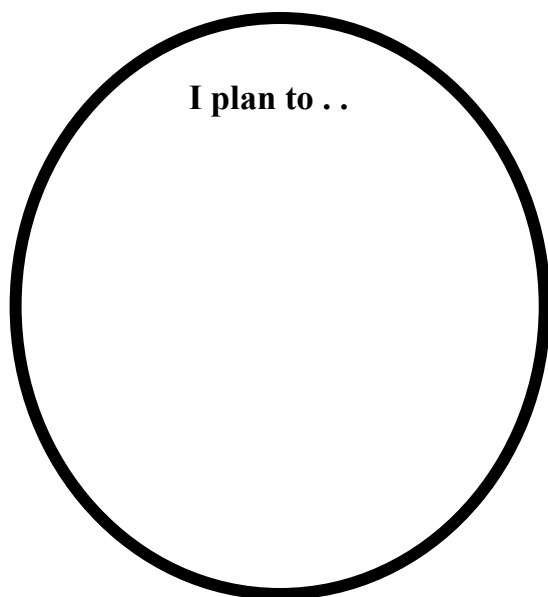
We'd like to have your feedback about this activity. Please take a few minutes to respond to the questions below.



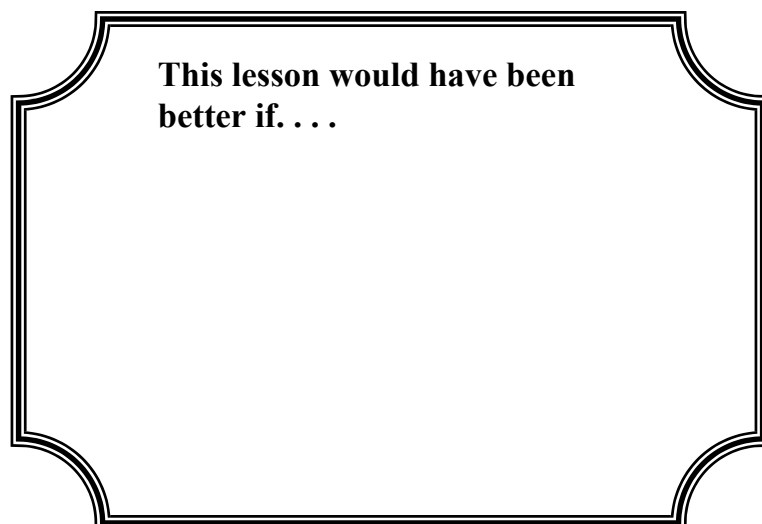
**Today I learned that ...**



**I would like to know more about ...**



**I plan to ..**



**This lesson would have been better if. . . .**

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