Teacher's Guide to Mercury Educational Videos

Video #1: Former EPA Region 7 Administrator – faculty, staff, and students, 1 minute

- John B. Askew gives a brief introduction to the toolkit.

Video #2: Keep Your Paws Off Mercury – elementary, middle, and high school, 4 minutes

- This video, featuring Clancy the mercury-sniffing dog, explains what to do in the event of a mercury spill. It also describes how people can be exposed to elemental mercury and what health effects might occur from exposure.
- A laboratory thermometer containing mercury breaks at the beginning of this video. An increasing number of school labs use non-mercury thermometers, which look nearly identical to mercury thermometers but instead contain alcohol or other liquid.

Video #3: Mercury: It's Deadly – middle school, 2 minutes

- The video mentions never using a vacuum to clean up mercury spills but then shows a person using a vacuum to clean up mercury. The vacuum being used by this person is a specialized vacuum (very expensive).
- The video also shows mercury being swept with a broom. This should only be done by trained mercury spill responders and not school staff. Any type of disturbance of mercury will break up the mercury into smaller beads and allow them to migrate into cracks and crevices.
- A list of additional common items that contain mercury can be found in the Background for Educators, contained on this disk.

Video #4: Mission Mercury, long version – high school, 20 minutes

- This is an animated video with well-developed, likable characters who learn about mercury during their adventure with a space traveler. All of the material can be grasped by a general audience, although the short version of Mission Mercury (below) might be more appropriate for younger audiences with a shorter attention span.
- The video shows children being decontaminated with a laser device. This is a fictitious device, whereas actual decontamination is a much more intense and time consuming process.
- The video shows a broken fluorescent bulb and a computer monitor with large quantities of mercury coming out. In reality, these devices have only very small amounts of mercury vapor in them. The graphics are exaggerated for visual demonstration purposes only and are not truly representative of how mercury looks when released into the environment. Other videos on this disk show actual mercury for a true visual representation.
- Check with your state's Fish and Wildlife department for current fish advisories related to mercury contamination. Further information about mercury in fish and fish consumption can be found on EPA's Web site.
- The video shows mercury spills being cleaned up using different methods. The actual cleanup process is very difficult and time consuming. Other videos on this disk address the proper techniques for cleaning up small mercury spills.

Video #5: Mission Mercury, short version – elementary, middle, and high school, 13 minutes

- This version of Mission Mercury differs from the full version by omitting certain scenes focused on character development and mercury's fate in the environment. The short version might be more appropriate for younger audiences with a shorter attention span, although all of the material in the full version can be grasped by a general audience.
- See the other notes above for the full version of Mission Mercury.

Video #6: The Magic Metal by Ohio EPA, 8 minute version – high school

- This video is meant to explain the seriousness of a mercury spill and how difficult it is to conduct a proper cleanup. It is not intended as a training video so that school staff can conduct their own cleanups.
- Although this video was specific to the state of Ohio, mercury collection programs are available in Kansas, Iowa, Missouri, and Nebraska. Information regarding collection programs can also be found on this disk in the document titled "Disposal Assistance".
- The density experiment in the video showing a steel padlock floating in a jar of mercury was conducted in a controlled atmosphere by trained professionals. EPA strongly recommends not conducting any experiments similar to this that might result in unnecessary mercury exposure to students and staff.
- The mercury vapor demonstration was conducted using specific ultraviolet lighting conditions, so that a shadow of the invisible vapors can be seen.
- Much of the information on this video pertains to the negative health effects on developing children. However, it should be noted that prolonged exposure to mercury can have negative health effects on people of all ages (as well as animals). Additionally, students should be informed that just because they might not be as susceptible to mercury poisoning, they can be held liable for the consequences if they are the cause of a release of mercury that endangers others, including children.

Video #7: The Magic Metal by Ohio EPA, 60 second version – middle and high school

- The video refers to contacting the State of Ohio for additional information for cleaning up mercury spills or disposing of mercury. Information on whom to contact for your state is included on this disk in the "How to Take Action" section (do not contact Ohio unless the mercury spill occurs in Ohio).
- The density experiment in the video showing a steel padlock floating in a jar of mercury was conducted in a controlled atmosphere by trained professionals. EPA strongly recommends not conducting any experiments similar to this that might result in unnecessary mercury exposure to students and staff.
- The mercury vapor demonstration was conducted using specific ultraviolet lighting conditions, so that a shadow of the invisible vapors can be seen.
- Much of the information on this video pertains to the negative health effects on developing children. However, it should be noted that prolonged exposure to mercury can have negative health effects on people of all ages (as well as animals). Additionally, students should be informed that just because they might not be as susceptible to mercury poisoning, they can be held liable for the consequences if they are the cause of a release of mercury that endangers others, including children.