# WAP Health and Safety Guidance

# Weatherization Energy Auditor Single Family

Learning Objectives

By attending this session, participants will be able to:

* Locate DOE rules and guidance as they apply to addressing health and safety issues during weatherization.
* Describe how to implement WPN 11-6 in their programs.

Key Terminology

Energy conservation measure (ECM)

Indoor air quality (IAQ)

Incidental repair

Savings-to-investment ratio (SIR)

Supplemental Materials

Handouts & Resources

“12 Steps to Lead Safety.” *WxTV*. Montana Weatherization Training Center. <www.wxtvonline.org>.

Applicable Codes, or sections thereof.

Appropriate ASHRAE guideline.

Beers, Jonathan. “Dryer Venting.” Home Energy Nov./Dec. 2003: 14-16. <www.homeenergy.org>.

Benewicz, Martha, and Robert Parkhurst. “Ventilation Standards at Work.” Home Energy Nov./Dec. 2005: 12-16. <www.homeenergy.org>.

Cutchin, Kelly and Anthony Gill. “ASHRAE 62.2 Checklist.”

“Health and Safety Series: Getting Started.” *WxTV.* Montana Weatherization Training Center. <www.wxtvonline.org>.

“Health and Safety Series: Mold and Moisture.” *WxTV*. Montana Weatherization Training Center. <www.wxtvonline.org>.

“Health and Safety Series: Respirators and Personal Protective Equipment.” *WxTV*. Montana Weatherization Training Center. <www.wxtvonline.org>.

Keefe, David. “Air Sealing in Occupied Homes.” Home Energy Nov./Dec. 1995. <www.homeenergy.org>.

MacPhaul, David and Christy Etter. “Mold Remediation Guidelines.” National Institute of Building Sciences. <www.wbdg.org>.

Sample Deferral of Services Notification Letter.

Sample Weatherization Mold Inspection and Release Forms.

U.S. Department of Energy. Weatherization Assistance Program. “Best Practices.” 11 June 2011. <www.waptac.org/Health-and-Safety/Best-Practices.aspx>.

U.S. Department of Energy. Weatherization Assistance Program. “Health and Safety FAQ.”11 June 2001. <www.waptac.org/Health-and-Safety/Health-and-Safety-FAQs.aspx>.

U.S. Department of Energy. Weatherization Assistance Program. “WPN 02-6 Weatherization Activities and Federal Lead-Based Paint Regulations. Attachment B: Lead Paint Decision Chart.” 12 July 2002. <www.waptac.org>.

U.S. Department of Energy. Weatherization Assistance Program. “WPN 02-6 Weatherization Activities and Federal Lead-Based Paint Regulations.” 12 July 2002. <www.waptac.org>.

U.S. Department of Energy. Weatherization Assistance Program. “WPN 08-6: Lead Guidance Program Notice.” 22 Sept. 2008. <www.waptac.org>.

U.S. Department of Energy. Weatherization Assistance Program. “WPN 09-6 Lead Safe Weatherization (LSW) - Additional Materials and Information.” 22 Jan. 2009. <www.waptac.org>.

U.S. Department of Energy. Weatherization Assistance Program. “WPN 11-6 Health and Safety Guidance*.*”12 Jan. 2011. <www.waptac.org/data/files/website\_docs/government/guidance/2011/wpn%2011-6.pdf>.

U.S. Department of Labor. Occupational Safety and Health Administration. “Carbon Monoxide Poisoning” QuickCardTM. <www.osha.gov/OshDoc/data\_Hurricane\_Facts/carbon\_monoxide.pdf>.

U.S. Environmental Protection Agency. “EPA Recognized Lead Paint Test Kits Fact Sheet.”14 Dec. 2010. <www.epa.gov/lead/pubs/testkitfactsheet.pdf>.

U.S. Environmental Protection Agency. "Lead Publications." <www.epa.gov>.

U.S. Environmental Protection Agency. “Steps to Lead Safe Renovation, Repair & Painting.” March 2009. <www.weatherization.org/rrp\_pdfs/steps\_for\_rrp.pdf>.

WAP Health and Safety Guidelines Quiz.

WAP Health and Safety Guidelines Quiz Answer Key.

Useful Websites:

EPA-approved 608 Certification training providers: <http://www.epa.gov/ozone/title6/608/technicians/608certs.html>.

EPA approved lead test kits: <http://epa.gov/lead/pubs/testkit.htm>.

For information on ordering the DOE WAP Lead Safe Weatherization training curriculum: <http://www.weatherization.org/lswx.html>.

Free online SPF training: <http://www.spraypolyurethane.org>.

Suggested Client Education Resources

U.S. Environmental Protection Agency. “A Brief Guide to Mold, Moisture, and Your Home.” Sept. 2010. <www.epa.gov/iaq/molds/moldguide.html>.

U.S. Environmental Protection Agency. “Asbestos in Your Home.” 7 June 2010. <http://www.epa.gov/asbestos/pubs/ashome.html>.

U.S. Environmental Protection Agency. “Consumers’ Guide to Radon Reduction: How to Fix Your Home.” Sept. 2010. <http://www.epa.gov/radon/pubs/consguid.html>.

U.S. Environmental Protection Agency. “EPA Carbon Monoxide Fact Sheet.” Oct. 1996. <www.epa.gov/iaq/pubs/coftsht.html#CO%20Poisoning%20Symptoms>.

U.S. Environmental Protection Agency. “Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools.” April 2010. <http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf>.

U.S. Environmental Protection Agency. “Safe Disposal of Refrigerated Household Appliances FAQ.” 19 Aug. 2010. <http://www.epa.gov/ozone/title6/608/disposal/household.html>.

**Relevant Standard Work Specifications**

1.100.1 – Global Worker Safety

1.110.1 – Materials Selection, Labeling, and Materials Safety Data Sheets (MSDS)

1.201 – Combustion Safety Testing – General

1.202 – Unvented Space Heaters

1.301 – Combustion Safety Devices

1.402 – Drainage

1.403 – Vapor Barriers

1.501 – Radon, Air Sealing

1.601 – Knob and Tube Wiring

3.1501 – Garage Openings

3.1602.7 – Return and Supply Plenums in Basements & Crawlspaces

4.1001.2 – General Preparation, Knob and Tube Wiring

4.1001.3 – General Preparation, Fireplace Chimney and Combustion Flue Vents

4.9901.1 – Materials, General Information on Spray Polyurethane Foam (SPF)

6.6004 – Appliance Exhaust Vents

6.9901.1 – Codes and Standards Resources

**Class Overview**

* Use the presentation to introduce students to the updated health and safety guidance and the many issues it covers.
* Throughout the presentations, refer students to the DOE Health and Safety Plan Template. Using the numbered icons on the slides, go to the appropriate page and let students draft language for their health and safety plans. Leave time for discussion around some of the more complex issues, such as defining incidental repairs or determining how mold and moisture will be assessed and treated.
* As each issue is covered, also refer students to the suggested client education resources. Ask if they have other suggestions and create an updated list to distribute at the end of class.
* Before class is over, have students trade draft templates to review some different ideas. Lead a class discussion on a handful of issues determined by the students. Discuss language from the draft plans and perceived pros and cons of various ideas. Discuss budget management issues and the decision making process for auditors and crew leaders in the field. Emphasize how clear guidance in the health and safety plan can improve decision-making capabilities in the field.