

# **EPA's Burn Wise Outreach Campaign and Tools Available**

## **Hearth, Patio & Barbecue Association**

## What is Burn Wise?

A voluntary partnership program of the EPA that emphasizes the importance of *burning the right wood, the right way, in the right appliance* to protect your home, health, and the air we breathe.

Goal: To promote upgrades to cleaner burning technologies, educate users on how to properly use their wood burning appliance and to ensure they understand the benefits (improved efficiency, safer home and family) of upgrading and proper operation.

## Why is Burn Wise Important?

- Wood burning appliance changeout projects have grown greatly over the last several years
  - Settlement Agreements: Since 2010, EPA has settled more than 15 environmental enforcement cases with \$17M going toward changeouts
  - Targeted Airshed Grants: In 2015, EPA awarded \$7.5M for wood burning appliance replacement projects and more grants funds authorized
- During changeouts, most consumers upgrade to an EPA-certified wood stove, but we still see many smoky chimneys

## Why is Burn Wise Important?

- Trend exists to reduce or eliminate incentives when going from old wood burning appliance to EPA-certified wood stoves
- Some areas providing funds for heat pumps and gas furnaces, but not EPA-certified wood stoves
- With poor wood stove operation, the likelihood of new burn bans and/or state and local regulations increases

# Who is Promoting the Burn Wise Message?

- EPA Regions
- HPBA
- Retailers
- Manufacturers
- Chimney Sweeps/CSIA
- Non-profit Organizations
- States, Tribes and Local Agencies

# Desired Action of the Hearth Industry

- To place more focus on educating wood burners on:
  - how to operate their new appliance (building a hot fire, maintaining temperature and burning only dry season wood)
  - the benefits (less fuel use, less smoke, safer home) to the homeowner of proper operation

## Potential Results

- This effort will:
  - increase the likelihood that EPA-certified stoves will significantly reduce emissions and be looked at by air agencies as a viable options for future change out projects
  - reduce the likelihood of new burn bans or state specific regulations being instituted

# How to Apply the Burn Wise Messages?

- Post Burn Wise logo and website link on HPBA website
- Share Burn Wise message on social media
  - Re-share Burn Wise Facebook and Twitter posts
- Make printed outreach material available at all HPBA regions and conferences



# How to Apply the Burn Wise Messages?

## Retailers

- Post Burn Wise logo and website link on website
- Hand out Burn Wise materials to your customers, e.g.,
  - Wet Wood is a Waste brochure and/or tear sheet
  - Learn Before You Burn tear sheet
  - Your Old Wood Stove's Dirty Little Secret brochure
  - Send the CSIA/Burn Wise inspection reminder post card to customers
- Share Burn Wise message on social media
  - Re-share Burn Wise Facebook and Twitter posts

# How to Apply the Burn Wise Messages?

## Manufacturers

- Post Burn Wise logo and website link posted on website
- Encourage your dealers/retailers to have Burn Wise materials in their stores
- Provide HBPA Burn Wise “How to Operate Your Wood Stove” video DVD in every appliance sold;  
<http://www.hpba.org/consumers/hearth/responsible-wood-burning>
- Provide wood moisture meter with every appliance sold
- Share Burn Wise message on social media
  - Re-share Burn Wise Facebook and Twitter posts

# How to Apply the Burn Wise Messages?

## Chimney Sweeps

- Post Burn Wise logo and website link on website
- Place Burn Wise materials in your store, e.g.,
  - Wet Wood is a Waste brochure and/or tear sheet
  - Your Old Wood Stove's Dirty Little Secret poster and brochure
  - Learn Before You Burn poster and/or tear sheet
- Share Burn Wise message on social media
  - Re-share Burn Wise Facebook and Twitter posts

## EPA's Timeline

- EPA will reach out to all HPBA Affiliate regions and provide Burn Wise materials by end of 2016
- By the end of 2016 EPA will have developed new tools that will be made available to HPBA:
  - “How To Build a Wood Shed” video
  - “Why and How to Use a Wood Moisture Meter” one pager
  - Burn Wise articles and ads
  - New “Manufacturers and Retailers” page on Burn Wise website

## Burn Wise Outreach Materials

### Clean and Efficient Heating Checklist

Burning dry firewood can save money and protect you and your family's health. It produces less soot and other wood-burning air pollutants than wet wood.

- Split a small fire with dry kindling that add a few pieces of wet.
- Give the fire plenty of air - fully open the air controls and the fire burning openings.
- Burn the fire to heat the chimney or flue before adding more wood.
- Keep open between the firewood as you add more to the fire.
- Check for local burn bans and avoid heating and wood stoves use while in effect.
- Avoid burning garbage, treated lumber, or softwood chaffers. Burning these items can damage your stove and cause serious health issues.
- Have your stove and chimney professionally inspected and cleaned yearly if possible.
- If possible, refer to your owner's manual for start-up guidelines.
- A smoldering fire "sits" glass doors, or smoke from the chimney on air logs that the fire needs more air or your stove has more.

### WET WOOD IS A WASTE

BURN DRY FIREWOOD TO SAVE MONEY AND HEALTH

#### Four Easy Steps to Dry Firewood

- SPLIT**
- STACK**
- COVER**
- STORE**

Burn Wise EPA

### LEARN Before You Burn

Burn the right wood, the right way, in the right appliance

- Keep your home safer. Have a certified technician install and annually service your appliance.
- Save money and time. Burn only dry, seasoned wood and maintain a hot fire.
- Make your home healthier. Upgrade to an efficient, EPA-approved wood-burning appliance.

EPA Burn Wise HPBA

### DOES YOUR WOOD STOVE HAVE A DIRTY LITTLE SECRET?

Old wood stoves are dusty, smoky and inefficient. Ask your retailer about energy-efficient, cleaner-burning options. Learn before you burn at [www.epa.gov/burnwise](http://www.epa.gov/burnwise)

EPA Burn Wise HPBA

### Burn the right wood, the right way, in the right appliance.

- Save money and time. Burn only dry, fully seasoned wood and maintain a hot fire.
- Keep your home safer. Have a certified technician install and annually inspect your appliance and chimney.
- Make your home healthier. Upgrade to an efficient, EPA-approved wood burning appliance and proper chimney.

Learn before you burn. Go to [www.epa.gov/burnwise](http://www.epa.gov/burnwise)

EPA Burn Wise HPBA

### Don't Let Your Investment Go up in Smoke

Burn Dry, Seasoned Firewood

Breathe easier and save money, energy and time with these four simple steps:

- Split wood for faster drying.
- Stack wood split side down and away from buildings.
- Cover top of the stack to protect it from rain or snow.
- Store and dry firewood for at least 6 months and hardwood for at least 12 months.

Learn before you burn. Go to [epa.gov/burnwise](http://epa.gov/burnwise)

EPA Burn Wise HPBA

### Burn Wise

Program of U.S. EPA

BURN THE RIGHT WOOD, THE RIGHT WAY, IN THE RIGHT WOOD-BURNING APPLIANCE

Do you know that by changing the way you burn wood you can save money, reduce air pollution and protect your health?

Here are a few simple tips to make your fire burn better, keep your heater safer and keep your local air cleaner and healthier:

- Season all firewood.** All firewood should be at least 16 months seasoned or dried, and aged for equal results. Seasoned wood burns better, with less contamination and reduces the amount of smoke your appliance produces.
- Choose the right firewood.** Hardwoods are the best. You can burn treated or wetwood which can harm your health and pollute.
- Split right.** Use only clean, non-toxic wood and dry kindling to split a fire. Use a positive, vented, chisel-pointed, or a pointed tool.
- Don't let the fire smolder.** Many people think they should let a fire smolder. But smoldering air traps soot, creosote, and increases air pollution.
- Clean before you burn.** A clean chimney is essential. Soot and creosote can catch fire and cause a chimney fire. Burn to dry up soot in a metal potting pan, not the house or any non-metallic material to reduce the risk of fire.
- Keep your chimney clean.** A clean chimney is essential. Soot and creosote can catch fire and cause a chimney fire. Burn to dry up soot in a metal potting pan, not the house or any non-metallic material to reduce the risk of fire.
- Be a good neighbor.** Follow best practices for burning wood. Please remember to comply with state and local codes and check, prohibit or notify neighbors.
- Follow instructions.** Operate your wood-burning appliance according to the manufacturer's instructions and follow all maintenance procedures.
- Use cautions.** Choose the right sized firewood for your stove. If you don't have a certified technician inspect annually by a certified chimney sweep.

EPA Burn Wise HPBA

### LEARN Before You Burn

- Burn the right wood** Burn only dry, well-seasoned wood that has been split properly.
- The right way** The right way is hot and bright.
- In the right appliance** The right appliance is an EPA-approved technician inspected annually by a certified chimney sweep.

Burn Wise EPA HPBA

### Burn Wise

Program of U.S. EPA

### look at This Wood Stove

- 1 **Burn the right wood** Use only dry, well-seasoned wood that has been split properly.
- 2 **The right way** The right way is hot and bright.
- 3 **In the right appliance** The right appliance is an EPA-approved technician inspected annually by a certified chimney sweep.

Burn Wise EPA HPBA

## What Burn Wise Tools are Available?

- Tip Sheet
- Posters
- Brochures
- Postcard
- Tear Pads
- Wood Shed Construction Plans
- Videos
- Social Media

\* Free hard copies are currently available for most tools



## Burn Wise Tools

# Target Audience & Distribution Channels

- Target audience: Current and future owners of wood burning appliances
- Industry Related Distribution Channels:
  - Hearth retail stores
  - Wood burning appliance manufacturers
  - Chimney sweeps

## Burn Wise Tip Sheet

### Overview

- Basic tips for starting a fire, seasoning wood, proper operation and maintenance of wood stove, and upgrade to a cleaner burning appliance
  - Available in both English and Spanish (Spanish version is only available online)
  - Size: 8 1/2" X 11"



**Burn Wise**  
Program of U.S. EPA

BURN THE RIGHT WOOD, THE RIGHT WAY, IN THE RIGHT WOOD-BURNING APPLIANCE

**D**id you know that by changing the way you burn wood you can save money, reduce air pollution and protect your health?

Here are a few simple tips to make your fire burn hotter, keep your wallet fatter and keep your local air cleaner and healthier.

- Season all firewood. All firewood should be split, securely covered or stored, and aged for at least six months. Seasoned wood burns hotter, cuts fuel consumption and reduces the amount of smoke your appliance produces.
- Choose the right firewood. Hardwoods are the best. Never burn trash or treated wood which can emit toxic air pollutants.
- Start it right. Use only clean newspaper or dry kindling to start a fire. Never use gasoline, kerosene, charcoal starter, or a propane torch.
- Don't let the fire smolder. Many people think they should let a fire smolder overnight. But reducing the air supply does little for heating and increases air pollution.
- Clean ashes from your wood-burning appliance. Excess ashes can clog the air intake vents reducing efficiency. Be sure to dispose of ashes in a metal container away from the house or any flammable material to reduce the risk of fire.
- Keep your chimney clean. A clean chimney provides good draft for your wood-burning appliance and reduces the risk of a chimney fire. Have a certified professional inspect your chimney once a year.
- Be a good neighbor. Follow best practices for burning wood. Always remember to comply with state and local codes and check your local air quality forecast.
- Follow instructions. Operate your wood-burning appliance according to the manufacturer's instructions and follow all maintenance procedures.
- Upgrade to cleaner equipment. EPA-certified wood stoves and fireplace inserts burn cleaner and burn wood more efficiently emitting less particle pollution than older models.
- Size matters. Choose the right-sized appliance for your needs. If your wood-burning appliance is too big for your room or house, the fuel will smolder and create more air pollution.

**EPA** For more information on how to burn wise, go to [www.epa.gov/burnwise](http://www.epa.gov/burnwise)

EPA-456/F-09-004

<https://www.epa.gov/burnwise/tip-sheets>



## Learn Before You Burn Poster

### Overview

- Poster encourages wood burners to “Burn the right wood, the right way, in the right appliance” and outlines 3 benefits and a call to action
  - Available in English
  - Size: 17” X 11”



<https://www.epa.gov/burnwise/burn-wise-posters>

## Burn The Right Wood Tear Sheet

### Overview

- Tear sheet has the same message as our “Learn Before You Burn” poster
- Provides quick tips to review with homeowners
  - Developed in partnership with the Chimney Safety Institute of America and National Fireplace Institute
  - Available in English
  - Size: 3 1/2” X 8 1/2”

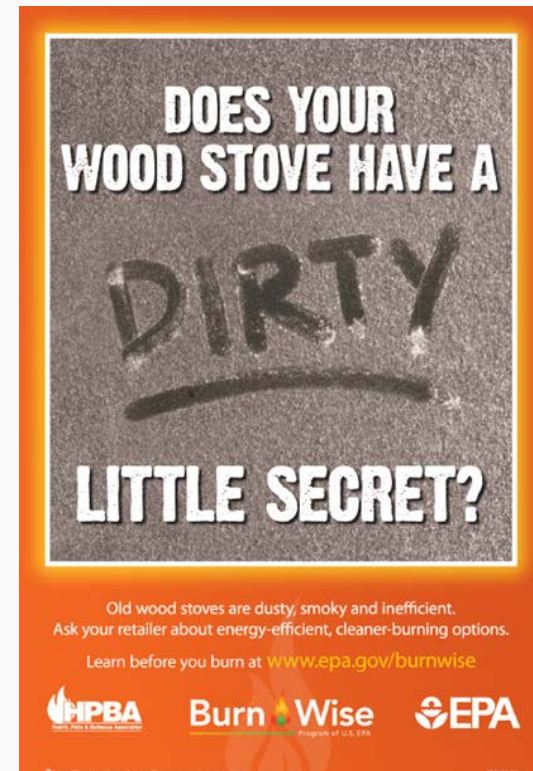


<https://www.epa.gov/burnwise/burn-wise-other-materials>

# Your Old Wood Stove's Dirty Little Secret Poster

## Overview

- Poster focuses attention to the issue of old stoves
- Ideally the similar brochure would accompany this poster
- The brochure explains why it is important to upgrade to a new stove
  - Available in English
  - Size: 17" X 11"



<https://www.epa.gov/burnwise/burn-wise-posters>

# Your Old Wood Stove's Dirty Little Secret Brochure

## Overview

- Brochure spells out the benefits of moving from an uncertified wood stove to a cleaner burning option like an EPA-certified wood stove
  - Available in both English and Spanish (Spanish version is only available online)
  - Size: 8 1/2" X 11"



<https://www.epa.gov/burnwise/burn-wise-brochures>

## Wet Wood Is A Waste Brochure

### Overview

- Brochure spells out four simple steps to properly drying firewood before burning it in a wood burning appliance
  - Available in both English and Spanish (Spanish version is only available online)
  - Size: 8 1/2" X 11"



<https://www.epa.gov/burnwise/burn-wise-brochures>

# Wet Wood Waste Tear Sheet

## Overview

- Tear sheet has a similar message as our “Split, Stack, Cover and Store” brochure
  - Developed in partnership with the United States Forest Service
  - Available in English
  - Size: 3 1/2” X 8 1/2”



<https://www.epa.gov/burnwise/burn-wise-other-materials>

# Build A Firewood Storage Shed - Plans and Materials List

## Overview

- This one pager provides a list of the materials, cost, photo and simple schematics for building a wood shed that holds about one cord of wood
  - Available in English
  - Size: 8 1/2" X 11"

**Burn  Wise**  
Program of U.S. EPA

**Build a Firewood Storage Shed**

**\$270**  
Wood Shed  
(price dependent on locality)

- Holds about one cord of wood
- Light enough to move by hand
- Easy to fabricate with mostly straight cuts and no mitered corners or joints
- Uses outdoor treated wood for the structure and liquid roofing primer for the roof
- Connectors and fasteners are galvanized
- Roof and sides are finished to owner specifications (e.g. composition, metal, wood shakes, etc.)
- Footings provided by owner (concrete post bases or pavers)

[www.epa.gov/burnwise](http://www.epa.gov/burnwise)



**Wood Shed Material List**

ITEM	QTY	DESCRIPTION	UNIT COST	SUBTOTAL
2" x 6" x 8'	2	Floor Frame	\$5.27	\$10.54
1" x 4" x 8'	18	Floor Slats, Side & Back Slats	\$4.97	\$89.46
2" x 4" x 8'	8	Floor Frame, Joists, Roof Rafter	\$3.37	\$26.96
4" x 4" x 12'	3	Posts	\$13.17	\$39.51
4" x 3" x 12'	3	Roof	\$15.77	\$15.77
1/2" x 5" Hex Lag Screws	12	Secure posts to 2" x 6" 2" x 4" floor frame	\$0.54	\$6.48
3" Galvanized Deck Screws	1lb. Box	Secure Floor Frame, Joists & Roof Rafter	\$9.89	\$9.89
1 1/2" Galvanized Deck Screws	1lb. Box	Secure Floor Slats, Side & Back Slats, Roof	\$3.80	\$3.80
Liquid Roofing	1-5 Gal	Weather Protection	\$47.00	\$47.00
12" Deck Bolts	6	Raise Woodshed off ground	\$6.55	\$39.30
			<b>TOTAL</b>	<b>\$269.95</b>

To view a 6 minute video on how to build this firewood storage shed, go to: [www.epa.gov/burnwise/burn-wise-video](http://www.epa.gov/burnwise/burn-wise-video)

(1) 4" x 4" x 12' Cedar Pinned Roof  
Attach with 1/2" bolts and use 6" along with the 4" x 4" x 12' roof of roof.

(2) 2" x 4" x 8' Roof Rafter  
Attach with 1/2" Deck screws at each end.

(3) 1" x 4" x 8" Side Slats  
Attach with 1/2" Deck screws at each end.

(4) 1" x 4" x 8" Side Slats  
Attach with 1/2" Deck screws at each end.

(5) 4" x 4" x 6' Posts in the Front of Shed  
Attach each post with 1/2" x 5" Hex lag screws.

(6) 4" x 4" x 6' Posts in the Rear of Shed  
Attach each post with 1/2" x 5" Hex lag screws.

(7) 1" x 4" x 8" Floor Slats  
Attach with 1/2" Deck screws at each end.

(8) 2" x 4" x 8' Floor Joists  
Attach with 1/2" Deck screws to 2" x 6" x 8' Floor frame.

(9) 2" x 4" x 8' Floor and Rear Floor Frame  
Attach to both 2" x 4" x 12' posts at floor frame with 1/2" Deck screws.

(10) 12" Concrete Deck Blocks



Based on and modified from the Anokah tribe's Modular Wood Shed design

<https://www.epa.gov/burnwise/burn-wise-other-materials>

Link to video demonstrating how to build this shed: <https://www.epa.gov/burnwise/burn-wise-videos>

## Test Your Wood with a Moisture Meter

### Overview

- The one pager spells out the benefits of knowing the wood moisture and how to properly test firewood using a moisture meter.
  - Developed to provide homeowner ability to check to see if wood is ready to burn.
  - Available in English
  - Size: 8 1/2" X 11"

[How-to" Burn Wise video also available.](#)

### Burn Wise: Test Your Wood with a Moisture Meter

**Why should I use a wood moisture meter?**

Burning wet wood is a waste of energy. Wood burns most efficiently when the moisture content is between 15% - 20%. When a live tree is cut the moisture content can be greater than 50%, (i.e., half of the weight of the wood is water).

Too much water in the wood reduces the temperature in the stove preventing the wood from completely burning (water puts out fires). Incomplete combustion results in smoke (wasted energy) going up the chimney and creates creosote (a fire hazard). The smoke can also negatively impact your air quality inside and outside your home.



**Burn drier. Burn better.**  
Use dry wood for a cleaner fire with more heat and less smoke.

**How do I test my firewood with a wood moisture meter?**

Split the firewood, then shortly after (less than 24 hours), stick the prongs of the wood moisture meter into the newly split side of the wood. This ensures you are testing the inside of the wood and not just the outer layer of the wood. Also, stick the wood so the prongs run parallel with the grain of the wood and test 2-3 different locations for the most accurate reading. If possible, test the wood when the outside temperature is 50°F - 90°F. Lower wood temperatures result in lower indicated moisture content. See correction table: <http://www.delmhorst.com/correction-tables#temperature>. You can purchase a basic moisture meter online or at most hardware stores for around \$15.00 - \$40.00.

Step 1:	Step 2:	Ready to Burn	Not Ready to Burn
Split the wood	Test <u>newly</u> split side	14%	37%

**How to Season Your Firewood?**

To season your wood split (split wood dries much faster), stack, cover the top and store your wood for at least 6-12 months.

For more information go to <http://www.epa.gov/burnwise>.  
Burn Wise: Split, Stack, Cover and Store Video- <http://www.youtube.com/watch?v=yo1-Zrh11s>

**Burn Wise**  
Program of U.S. EPA

<https://www.epa.gov/burnwise/burn-wise-other-materials>



## Wood Smoke Activity Book

### Overview

- Children can read the story about best burning practices, color the pictures, and do the activities included in this activity book.
  - EPA does not have copies of this available but you can download and make copies off of EPA's Burn Wise website.
  - Available in English
  - Size: 8" X 11", 16 pages



<https://www.epa.gov/burnwise/wood-smoke-activity-book>

## Learn Before You Burn Postcards

### Overview

- Postcards are a great reminder for homeowners to schedule an annual chimney inspection
  - Developed in partnership with the Chimney Safety Institute of America (CSIA)
  - Available in English
  - Size: 6" X 4"



**LEARN Before You Burn**

- 1 Burn the right wood**  
Burn only dry, well-seasoned wood that has been split properly.
- 2 The right way**  
The right way is hot and bright.
- 3 In the right appliance**  
The right appliance is an EPA-approved appliance, inspected annually by a certified chimney sweep.

**Burn  Wise**  
Program of U.S. EPA  
[www.epa.gov/burnwise](http://www.epa.gov/burnwise)

**CERTIFIED CHIMNEY SWEEP**  
[www.csia.org](http://www.csia.org)

**EPA**  
United States Environmental Protection Agency



**Wood-Burning Season Is Here!**  
Have you scheduled your annual inspection?

An estimated 25 percent of home heating fires are caused primarily by creosote buildup in the chimney.\* Make your home healthier, safer, and more cost effective. A properly installed and maintained appliance burns more efficiently and saves you money. Contact your local certified chimney sweep to schedule an annual inspection today.

\*Source: National Fire Protection Association

<https://www.epa.gov/burnwise/burn-wise-other-materials>

# Split, Stack, Cover and Store Video

## Overview

- Demonstrates the four simple steps to properly drying firewood
- Wet wood can create excessive smoke which is wasted fuel
- There is also a “Split, Stack, Cover and Store” brochure that relays this same message

## Video

<http://www.youtube.com/watch?v=y01--Zrh11s>



## How to Use a Moisture Meter Video

### Overview

- Moisture meters allows you to test the moisture level in wood
- Tips on how to properly use a moisture meter to test firewood
- Burning dry, seasoned firewood with a moisture content of 20% or less can save money and help reduce harmful air pollution - indoors and out

### Video

<http://www.youtube.com/watch?v=jM2WGgRcnm0>



## Asthma and Wood Smoke Videos

### Overview

- The videos highlight the health effects (e.g., asthma) related to particulate matter (PM) exposure from residential wood smoke



### Videos

- Wood Smoke and Asthma: Breathe Easier  
<http://www.youtube.com/watch?v=sJQ4IVDDA6Q>
- Wood Smoke and Asthma: Reduce Smoke  
<http://www.youtube.com/watch?v=aXj9j3g7EM>
- Wood Smoke and Asthma: Dry Firewood  
<http://www.youtube.com/watch?v=Z-OfbPjXPUU>

## Social Media

- Subscribe to RSS content
- Join us on Facebook  
<http://www.facebook.com/EPABurnWise>
- Follow us on Twitter  
<http://twitter.com/epaburnwise>
- Find photos on Flickr  
<http://www.flickr.com/photos/epaburnwise/>



**For more information or to request free copies of outreach materials contact**

Larry Brockman

[brockman.larry@epa.gov](mailto:brockman.larry@epa.gov)

Office: 919-541-5398

[www.epa.gov/burnwise](http://www.epa.gov/burnwise)