



Success Stories in Reducing Woodsmoke

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on behalf of HPBA, HPBAC, and APC

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Reduction of Woodsmoke: Success Stories

- Success Stories
 - Libby, Montana
 - Seattle, Washington
- Issues common to successful programs
- New programs underway
- U.S. EPA's continued support

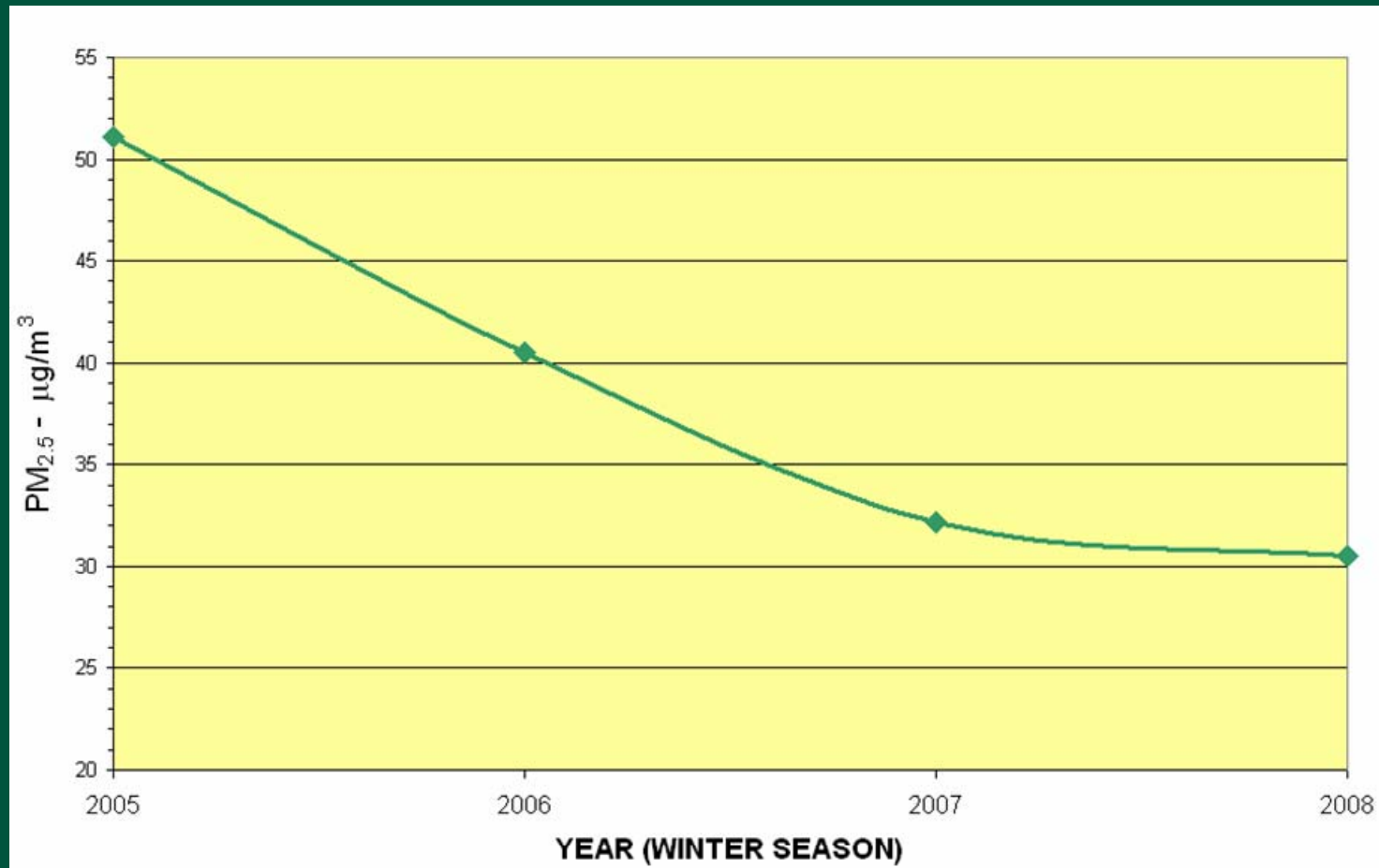


Libby—An “ENTIRE TOWN” Changeout

- 2,000 Households
- 1,200 were still using old wood stoves
- Serious & longstanding woodsmoke problem
- Total of 1,135 Household upgraded over 3 year period
 - EPA wood stoves
 - Pellet stoves
 - Propane stoves
- Ordinance prohibiting use of old stoves



Libby Results: PM_{2.5} 24-Hour Average



EPA Deputy Air Admin. Praises Libby Program 1/2008, Wash. D.C.



Libby Residents Celebrate Program's Success

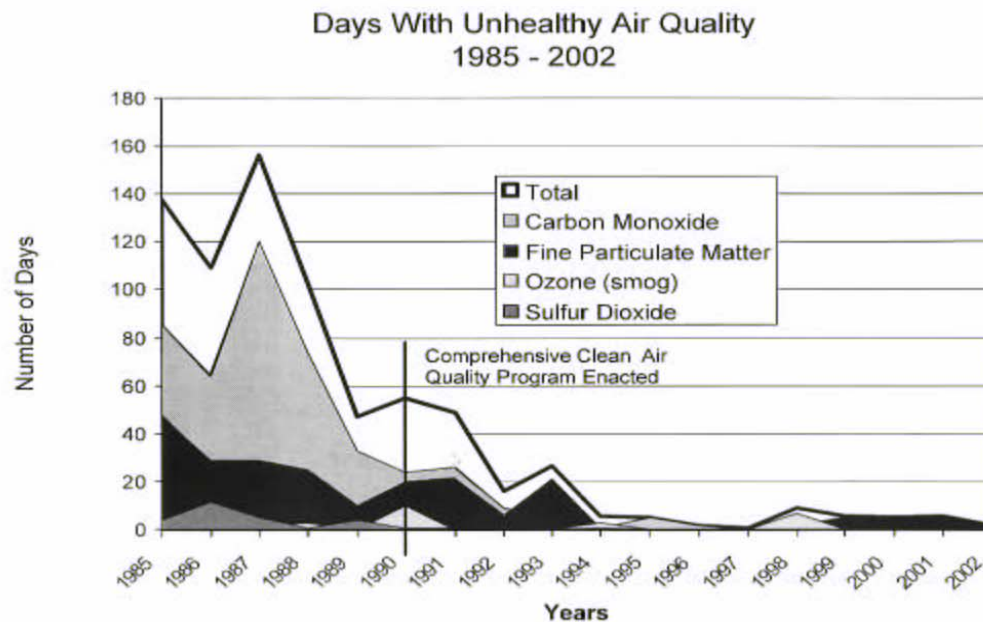


Seattle: 20 Years of Cooperative Woodsmoke Reduction/Education

- 1.2 Million Households
- 600,000 open fireplaces
- 100,000 wood stoves
- Program began in 1987
 - “No burn” program – enforced
 - Year around “opacity” limits
 - Woodburning Education
 - Changeouts –Pellet, Gas & EPA
- Work cooperatively with Industry & American Lung Association



Seattle: Dramatically Lower PM2.5



Source: Department of Ecology

December 9, 2002

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Addressing the Issue of Woodsmoke

- Majority of wood stoves are before EPA program – they do not wear out
- On cold nights many open fireplaces are used
- Some areas require old stoves be removed when house is sold
- No burn nights, with enforcement & exemptions for EPA, pellet & masonry heaters – WORKS



Broad Support for B415/EPA stoves & Changeouts

- www.epa.gov/woodstoves

Today, all wood stoves and fireplace inserts...sold in the U.S. must meet this limit. Stove manufacturers have improved their combustion technologies over the years, and now some newer stoves have certified emissions in the **1 to 4 g/h range**. The EPA certified emission rate is a reliable number that can be compared from one model to the next, but a 1 or 2 gram per hour difference in smoke emissions does not mean much in day-to-day use.



B.C. Ministry of Environment Supports Changeouts

(from the B.C. MOE website)

Provincial Wood Stove Exchange Program

The provincial wood stove exchange is a program designed to encourage British Columbians to change out their older smoky wood stoves for low emission appliances including new **CSA/ EPA-certified clean burning wood stoves**.

Old appliance changeout is one aspect of this new provincial program; Burn It Smart workshops are essential, since even newer wood stoves must be operated properly to realize the improved efficiency.



Environment Canada Supports Changeouts

- **The Great Wood Stove Changeout and Education Program In the Georgian Bay Watershed**
- **SAULT STE. MARIE - February 26, 2001** - Environment Canada supports the Great Woodstove Changeout and Education Program in the Georgian Bay Watershed, launched today in Sault Ste. Marie.



40+ Changeouts Underway or Completed

- Vermont – March 2009
- California – multiple – over 3 years
- B.C. – 30+ towns & districts
- Washington State
- Michigan - Summer 2008
- Ohio – Summer 2005
- Pennsylvania - Fall 2005
- All Including EPA stoves



Reducing Woodsmoke Requires Several Things

- Public Education – Especially about woodsmoke & How to Burn
- Consistent enforcement on inversion days – with exemptions for properly burning units
- Programs & Policies that lead to Changeouts
- Including CSA B415/EPA woodstoves

