

Prevent Poisonings

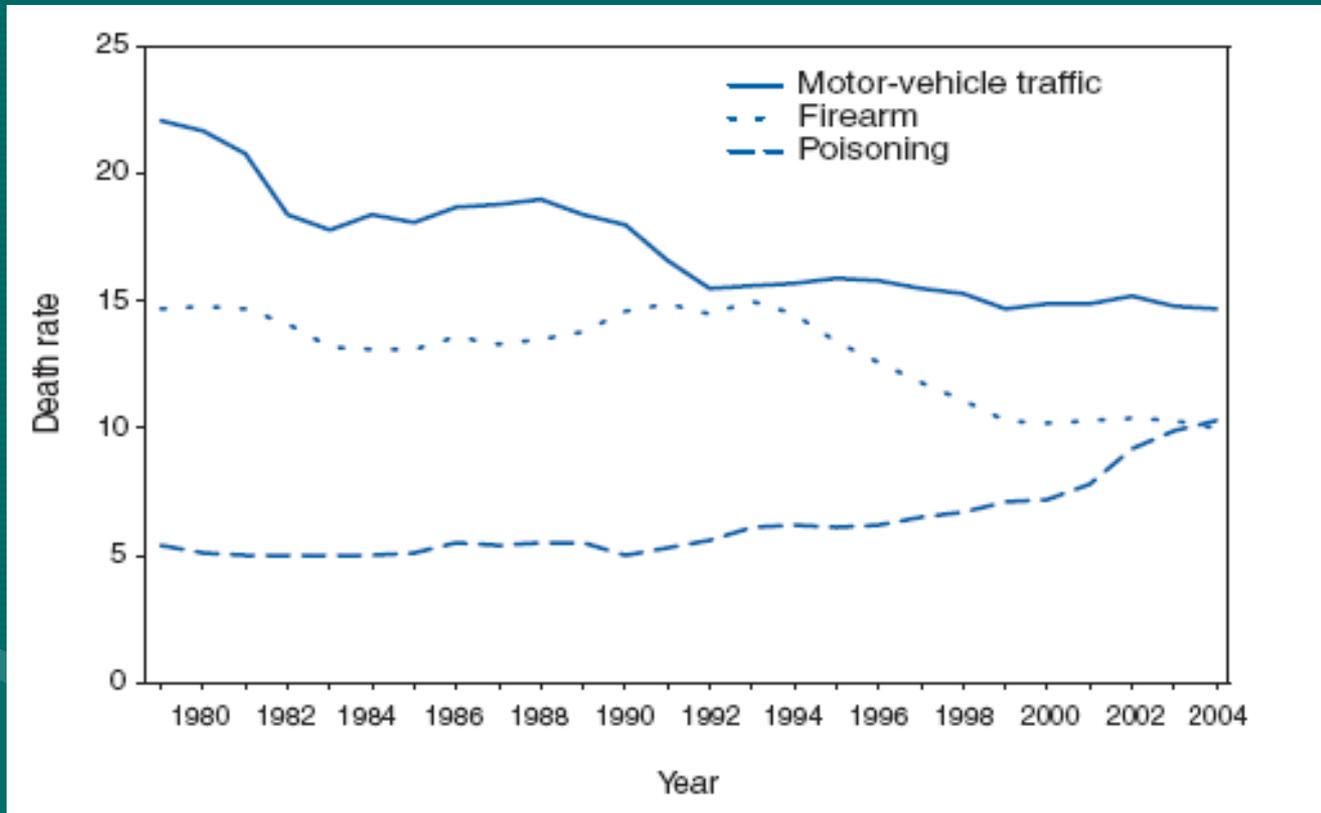
**Get Rid of Old
Medicines!**

Just don't ask us how.

Poisoning Significance

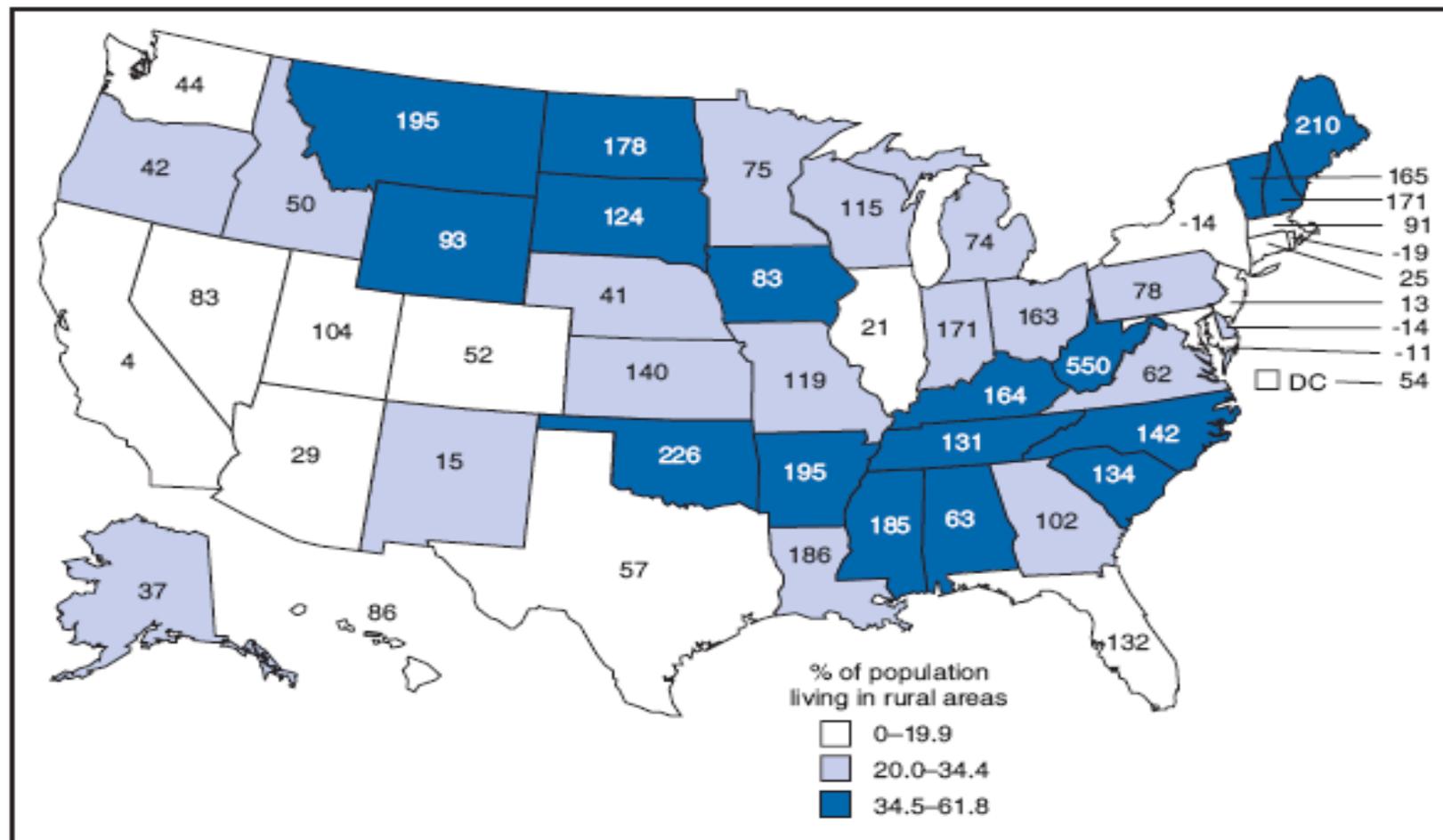
- As of 2004 – 2nd leading cause of unintentional injury deaths
- From 1999-2004
 - Drug-related poisoning death rates increased 68%
 - Other substance poisoning death rates increased 1.3%
- Largest increase occurred in rural states

U.S. Age-Adjusted Injury Death Rates, 1979--2004



Source: MMWR - Unintentional Poisoning Deaths --- United States, 1999--2004

FIGURE. Percentage change in unintentional poisoning mortality rates,* by rural status of state† — United States, 1999–2004



* Age-adjusted rates per 100,000 population.

† Defined as the percentage of the population living in census blocks below a certain population density, based on U.S. Census data for 2000 (4).

Northern New England Poison Center (NNEPC)

- Maine, New Hampshire and Vermont
- Mission: Prevent and Treat Poisonings
- Overall - #1 poisonings involve medications
- Trends:
 - Increase in medication abuse by youth and adults
 - Older adults and medication errors and questions

Prevention

Clean Out the Medicine Cabinet

- Medication Abuse/Suicides – limit access to medicines
- Medication Errors – Get rid of wanted or expired medicines
- Unintentional Poisonings – children and pets

Developing Recommendation

- Summarize research related to, and the controversy surrounding, medication disposal.
- Explain the methods used by the NNEPC to develop a comprehensive medication disposal recommendation
- Goal - Develop a “made-to-stick” medicine disposal recommendation.

Safe Disposal

Prevents medications from:

- Poisoning children or animals;
- Getting into the water supply or environment;
- Being stolen by drug users, who may break into your home;
- Supplying your children, grandchildren, and their friends with drugs to abuse; and
- Practical and inexpensive.

Background Controversy

- Pharmaceuticals and other personal care products (PPCP) – Found in water supply
- Sources - excrement, flushed products and landfills.
- No proven negative affect to humans.
- Long-term exposures - Unclear negative effect to humans

Methods

- Review the medication disposal recommendations available on the Internet:
 - Ten national
 - Eight Northern New England state-level agencies.
- Summarize and identify most frequent recommendations
- Identify strengths and weaknesses for most common recommendations

Results - Types of Recommendations

- 12 different recommendations (18 agencies)
- Most frequent recommendations:
 - Take-back incineration programs
 - Pharmacy take-back programs
 - Hazard waste management collections
 - Disposal in household garbage
 - Disposal in household sewage (toilet flushing). The NNEPC reviewed the strengths and weaknesses for each of these recommendations.

Results –Strengths of Recommendations

Strength	Take-back incineration programs	Pharmacy take-back programs	Hazardous waste management	Throwing away medicines in the garbage	Flushing medicine down the sink or toilet
Prevents children and pets from unintentional poisonings	√	√	√		√
Prevents drug users access to medicines	√	√	√		√
Low impact on the environment	√				
Relatively inexpensive for the participants and communities				√	√
Population in support	√	√	√		
Convenient				√	√

Results –Weaknesses of Recommendations

Weakness	Take-back incineration programs	Pharmacy take-back programs	Hazardous waste management	Throwing away medicines in the garbage	Flushing medicine down the sink or toilet
Costly	√	√	√		
Inconvenient for participants	√	√	√		
Not available in all communities	√	√	√		
Where available, it is infrequent and may lead to hoarding (e.g., storing of medicines for once a year disposal could lead to poisonings or drug diversion)	√		√		
Inconsistent disposal practices among pharmacies		√ ^{**}			
Potential risk of unintentional poisonings of children and pets				√	
Potential risk of access to medicines for drug users				√	
Increases the amount of medication in our water supply and environment		√ ^{**}	√ ^{**}	√ ^{**}	√
Not allowed to accept controlled substances	√ [^]	√ [^]	√		

Results

- Options vary based on residential location and most are not consistently available.
- The NNEPC was unable to develop a single message for all populations.
- Fact sheet to educate the public on available options.
- Technical document to support and explain recommendations.

Final Recommendation

- Avoid having medicines you need to get rid of:
 - Buy only the medicines you need.
 - Buy only the amount of medicine you need.
 - Do not take medicine samples you will not use.

Fact sheet

The best way to get rid of unwanted medicines:

- Take your medicines to a medicine drop-off site. Contact your pharmacy or local police department to learn if this option exists nearby.
- Other Options:
 - Garbage – Mix medicines in a plastic bag with used coffee grounds or kitty litter. Then put the tied plastic bag in your garbage.
 - Toilet – Flush medicines down the toilet

Never throw medicine in its original container or loose in the
garbage!

Never burn your own medicines!

Recommendation Impact

- Collaborate with state agencies
- Media coverage
- Clear, consistent recommendations



Future work

- Support proper messaging
- Risk communication
- Promote take back events

www.nnepc.org

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