Health Policy Publication





Missouri Foundation for Health

Meth in Missouri

Policies Targeting the Supply and Demand for Methamphetamine

Acknowledgments This paper was written by Cheryl Winter, Health Policy Fellow at the Mifor Health.	issouri Foundation

Issue Statement

Methamphetamine is an addictive stimulant with destructive effects. As the most common illicitly produced synthetic substance in the United States (U.S.),¹ the impact of methamphetamine (meth) abuse and production has drawn increased attention from U.S. citizens and policy makers. Small hidden laboratory sites, as well as larger "super labs," began to appear throughout the western U.S. in the late 1970s and spread into the Midwest in the following decades. As the number of first-time meth users grew throughout the 1990s and early 2000s, the demand increased for locally produced, purer versions of meth. Neighborhoods throughout the U.S. have witnessed the negative effects meth use and production can have on individuals, children, families, and community resources.² Rural communities disproportionately carry this burden, as they have higher rates of small clandestine meth lab production, as well as higher rates of persons entering substance abuse treatment for meth.^{3,4}

Pseudoephedrine (PSE), an over-the-counter drug used in cold and allergy medicines, is a necessary ingredient for meth production. Leaders at local, state, and federal levels have identified PSE regulation as a means of limiting meth production and availability.

Increased meth production and meth-related costs have prompted state and local governments to consider policies for controlling meth's supply and demand. International, federal, state, and municipal policy initiatives targeting meth production and supply have:

- limited the amount of PSE that individuals can purchase legally
- required retailers to keep products containing PSE locked behind counters and to maintain logbooks of PSE purchases
- invested in electronic tracking of PSE purchases,
- required prescriptions for PSE, and
- collaborated with law enforcement to implement successful policing strategies.

Policy initiatives concentrating on decreasing the demand for meth have focused on:

- accessibility and affordability of treatment, including treatment as an alternative to incarceration for non-violent, first-time drug-related charges,
- reduction of harm and the health risks that accompany non-therapeutic drug use, and
- prevention through education and public information campaigns.

Comprehensive and collaborative approaches to meth control are increasingly recognized as effective and necessary, yet resources for such strategies remain limited. This issue brief examines meth and its impact on communities; pseudoephedrine and its uses; existing policies addressing pseudoephedrine availability; and policy initiatives proposed to address meth use and production nationally and within Missouri.

Background

Methamphetamine is a psychomotor stimulant classified as a Schedule II substance under the Controlled Substances Act and U.S. Drug Enforcement Administration regulations. This classification reflects its highly addictive nature and neurotoxic effects. Sold illicitly for its ability to artificially stimulate the central nervous system, meth retains an addiction rate of 80 percent. The purity and potency of meth is dependent on type, dosage, and method of intake. While legal, therapeutic uses of meth are limited (e.g., meth has been prescribed in very small doses for obesity treatment). Non-therapeutic meth use, or illegal meth use, presents myriad negative consequences for users and their communities.

Meth Use: According to the 2010 National Survey on Drug Use and Health,⁸ rates of "past month" meth users decreased from 731,000 persons in 2006 (0.3%) to 353,000 (0.1%) in 2010.

Similarly, among young adults ages 18 to 25, decreases in meth use were observed from 2002 to 2010. The number of individuals, ages 12 and older, who initiated meth use dropped from 299,000 in 2002 to 105,000 in 2010.

Comparable decreases in meth use were reported within Missouri. The 2008 Missouri Student Survey found that lifetime use of meth had decreased from 4.9 percent in 2002 to 2.7 percent in 2008.9 Lifetime use among 12th graders in Missouri was slightly higher than the national average in 2009, with 4.3 percent of 12th graders having used meth, compared to 4.1 percent nationally. Rural areas report higher numbers of individuals admitted to publicly funded treatment programs for meth addiction. Cocaine and heroin treatment admissions are concentrated in urban areas. Marijuana admissions occur in urban and rural areas. In

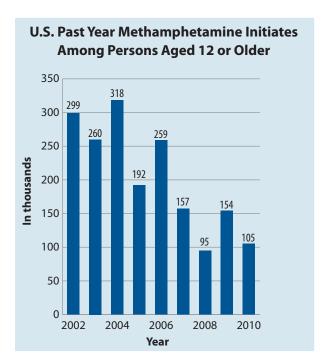


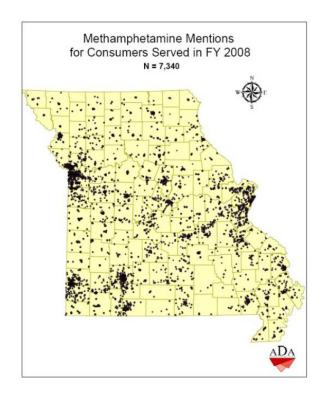
Figure 1. SAMHSA, 2001

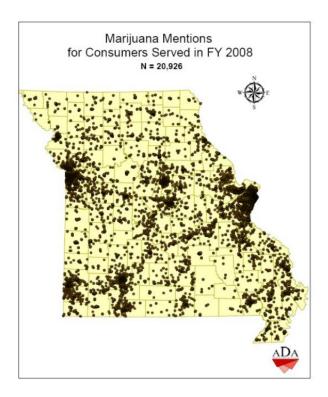
Meth Ingredients: Meth can be made with

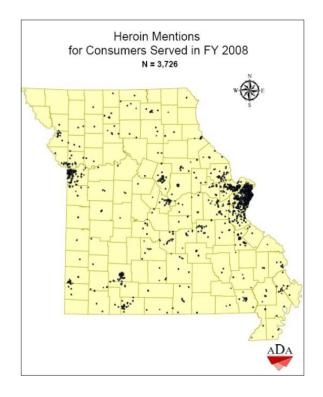
a variety of common household ingredients. PSE and its sister chemical ephedrine (EPH) are essential for meth production. PSE and EPH are called precursor chemicals of meth because their chemical structures can be synthetically reduced into meth through a chemical reaction process. Within Missouri, small meth lab "cooks" prefer to use PSE, rather than EPH, as it produces a more intense high. These ingredients often include acetone, anhydrous ammonia, battery acid, lithium from camera batteries, camp stove fuel, drain cleaner, Freon, rubbing alcohol, iodine, and ether (starting fluid).

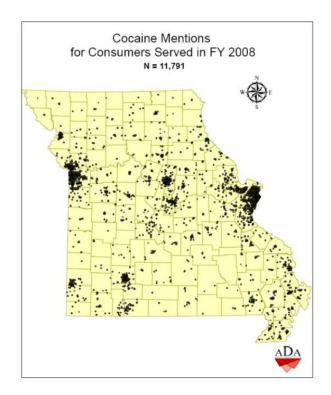
Clandestine Production: Illicitly produced meth is acquired from large, factory-like "super labs" commonly operated by Mexican drug cartels, and from small-scale, local laboratories often based in homes, hotels, and garages. ¹⁶ In 2005, a White House working group estimated that 65 percent of meth used in the U.S. originated from super labs (52.9% from Mexico, 12.5% from California). Rural areas are more likely to host small hidden laboratories for meth

Demographic data for consumers receiving substance abuse treatment in 2008

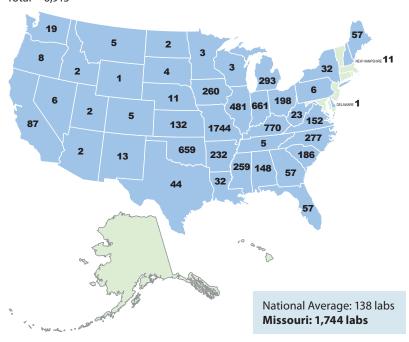












production, as strong odors released during production are more easily detected in urban areas. Within Missouri, the majority of meth is obtained from small "mom and pop" laboratories, the exception being in the northwestern part of the state where Mexican drug operations control the market. Corporal Tim Whitney of the Jefferson County Sheriff's Office reports that Missourians prefer meth that is locally produced, as it is more potent than meth sold by larger drug trade organizations. Lower income communities have the largest percentage of meth labs in Missouri. While urban areas tend to have fewer meth lab sites, metropolitan areas of the state, such as the St. Louis region, saw an increase in meth labs identified from 2008 to 2009.

Why does Missouri have so many meth labs?

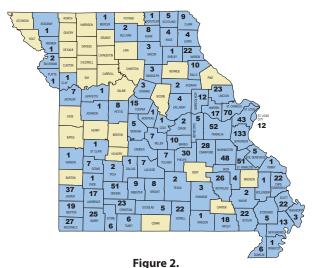
According to Detective Gary Stout of the Jefferson County Sheriff's Office, there may be several explanations for Missouri's high rates of meth lab seizures each year. Many Missourians prefer locally made meth over meth that is trafficked from Mexican drug cartels, for its convenience and potency.

Missouri law enforcement officers also play a key role. Officers receive training in lab detection, seizure, safety, and cleanup. Some gain additional expertise through national trainings provided by the U.S. Drug Enforcement Agency. Counties like Jefferson have placed a high priority on lab detection and trainings. Stout believes that lab seizure numbers reflect law enforcement officers' expertise and argues that others' rates could increase if trainings were promoted.

Missouri Lab Seizures: Since 2001, Missouri has had the highest rate of lab seizures in the nation. ^{21, 22, 23} Lab seizures within the state increased 57 percent from 2007 to 2010, ²⁴ and 7 to 8 percent in 2011. ²⁵ According to Corporal Tim Whitney of Jefferson County, lab seizures represent 10 to 15 percent of the estimated total number of meth labs in Missouri. Training in lab detection, seizure, safety, and cleanup has been promoted throughout the state. As of February 2011, more than 500 officers have received certification through 21 lab identification and clean up courses offered through Missouri State Highway Patrol and Missouri Department of Natural Resources. ²⁶ Northwest Missouri has not experienced high rates of lab seizures, as the majority of meth in and around Kansas City originates from Mexican drug organizations and is not produced within the state. ²⁷

Small lab production methods have evolved, shortening the cook time to produce meth. Detective Gary Stout of Jefferson County reported that the majority of Missouri meth cooks use

Methamphetamine Incidents Through June 2011 (Total = 1,112)



Missouri State Highway Patrol, 2011

the "one-pot" method, also known as "shake and bake." This method is more prone to explosion as it is made in smaller batches using a plastic bottle, often while cooks are driving. According to Stout, as cooks release pressure from the chemical reactions, oxygen can enter the bottle, causing it to ignite and mimic a blow torch. While the average small lab produces two ounces of meth per batch, one-pot lab cooks can purchase the legal monthly limit of 9 grams of PSE and cook this into 8 grams of meth. Meth is typically used in 0.25 gram increments and sold in 0.25 gram, 0.5 gram, and 3.5 gram units.

Cost of Meth

The impacts of meth use and production extend beyond the individual user. Although the global disease burden of meth and other

synthetic stimulants is lower than those created by tobacco, alcohol, and marijuana;²⁸ meth in Missouri continues to have negative effects on individuals, families, and communities, as well as on taxpayer-funded institutions and the environment.

Individual Costs: Meth produces synthetically stimulated pleasure in the user's brain, releasing twelve times the typical amount of dopamine released during other pleasurable human activities, and more dopamine than any other drug of abuse.²⁹ One unit of meth (0.25 gram) will produce a 20-minute "rush" followed by a 6- to 24-hour "high" for a first-time user. Both the "rush" and the "high" produced by meth last significantly longer than those produced by other drugs of abuse, including cocaine and heroin.³⁰ Meth use is associated with increased rates of viral replication in people living with HIV/AIDS as well as increased risky sexual behaviors among men who have sex with men (MSM) and heterosexual populations.³¹

Health effects of meth:

- increased wakefulness
- increased physical activity
- decreased appetite and anorexia
- euphoria
- irritability
- tooth decay
- increased breathing and heart rates
- increased blood pressure
- damaged blood vessels and stroke

- hallucinations (insects crawling on or under skin)
- · confusion and paranoia
- · tremors and convulsions
- anxiety
- dry, itchy skin
- · skin infections and sores
- acne
- numbness
- hypothermia
- insomnia

- increased viral replication in people with HIV/AIDS
- aggressive behaviors
- death

Missouri Dept. of Social Services. Child Welfare Manual, Chapter 27: Methamphetamine Use; Methamphetamine Abuse and Addiction, National Institute on Drug Abuse, 2006 As a highly addictive substance, meth has tremendous potential to damage the dopamine receptors, or pleasure sensors in a user's brain, causing permanent loss of cognitive ability.³² According to Ruthie Andrews, a licensed clinical substance abuse specialist, two days of meth use requires four months of meth abstinence to repair brain functioning.³³ With prolonged abstinence, some individuals are able to experience pleasure again as dopamine receptors repair, however, cognitive impairment persists despite prolonged abstinence. These impairments can impact an individual's attention, memory, psychomotor speed, learning, and cognitive performance.³⁴ Meth use among pregnant women can result in underdevelopment of the fetus' brain stem and lead to cognitive impairment.³⁵ From 2008 to 2010, the number of Missouri newborns identified as having been exposed to meth rose, totaling 469 meth-exposed newborns during the three year period.³⁶

Meth lab cooks are also at risk of incurring severe burns from meth lab fires and explosions. An estimated 10-15 percent of Missouri meth labs seized are uncovered due to lab fires and explosions.^{37,38} According to Detective Jason Grellner of the Franklin County Sheriff's Department, 30 percent of burn-unit beds regionally are occupied by uninsured meth lab burn victims.³⁹

Family/Community Costs: Meth use and production result in physical, social, and economic costs to families and community members. As meth is cooked, its toxic fumes are released and remain on anything that is in the same house. Child exposure to meth production and meth use is considered maltreatment and neglect. Children living in homes where meth is used or cooked are at risk of exposure to meth, precursor chemicals, and lab fires. Exposure to meth production and accidental inhalation of fumes can lead to headaches, dizziness, fatigue, shortness of breath, asthma, nausea, coughing, and chest pain. Children exposed to meth also have increased susceptibility to physical and sexual abuse. Repeat exposure can lead to cancer, as well as brain, kidney, spleen, respiratory, and immunologic system damage. 40 Children's clothing can test positive for meth and exposure can cause skin lesions and chemical burns.⁴¹ From 2000 to 2005, more than 15,000 children were found in meth labs throughout the U.S.⁴² Child welfare advocates have reported an increase in children removed from their homes due to meth exposure.⁴³ In Missouri, the numbers of children affected by meth exposure and placed in Department of Social Services (DSS) custody because of meth exposure continue to increase. From 2006 to 2010, 987 children were reportedly exposed to meth labs. More than half of the children (507) required placement in DSS custody.⁴⁴ In Missouri, the average child remains in DSS custodial care for 369 days. 45

Child welfare workers, home-based nurses, children and families living nearby, juvenile services office staff, law enforcement, therapists, and first responders are at increased risk of exposure to meth fumes or meth lab explosions. ⁴⁶ In Missouri, where the majority of small labs use the one-pot method, contaminated containers have been found discarded along roads and highways, and in community spaces. ⁴⁷ Homeowners and renters living on properties that were former meth sites may also be at risk of

Health Care Costs of Meth

- Hospital and ambulatory care
- Drug exposed infants
- Dental care
- Hepatitis B and C
- Crime victims' health care
- · Health care for addicts' children

U.S. Department of Health and Human Services, SAMHSA, Center for Substance Abuse Prevention, 2004 exposure to toxins. Meth contamination in foreclosed homes has led some states to require sellers to report methamphetamine contamination to potential buyers.⁴⁸

Environmental Costs: Concealed labs are hazardous to individuals in the surrounding area. As meth cooks are traveling to more urban areas and using the one-pot method to cook meth while driving, individuals living in urban areas are increasingly at risk of harm from car accidents, explosions, and discarded lab materials.⁴⁹ Within Missouri, more than 522,000 pounds of hazardous waste have been removed from mroe than 20,000 meth lab sites.⁵⁰ Waste produced by meth production requires specialized cleanup and disposal, with costs varying from \$5,000 to \$10,000. In some cases, cleanup is not sufficient, resulting in contamination and destruction of the site.⁵¹ As the majority of Missouri meth cooks are "convenience cooks," cooking for themselves and a few others, meth labs do not accumulate assets like other drug trafficking operations. Assets confiscated by other drug-related enforcement operations typically cover site cleanup costs, however, in the case of meth labs, these assets rarely exist.^{52,53}

Economic Costs: In 2005, meth use cost U.S. taxpayers an estimated \$23.4 billion dollars.⁵⁴ This estimate included costs for meth-related health care, incarceration and parole supervision, lab cleanups, property damage, drug arrests, hospital costs, custodial care for children, lost productivity, lower quality of life, and premature death.⁵⁵ Within Missouri, 31 percent of all drug convictions are meth-related.⁵⁶ Incarceration and supervision for meth-related convictions cost the state an estimated \$17.6 million annually.⁵⁷ On average, meth lab clean-ups cost Missouri state and local agencies \$2.1 million each year.⁵⁸ From August 2005 until April 2011, state custodial care for children exposed to meth labs cost an estimated \$3.4 million. Uninsured meth lab burn victims constitute 30 percent of burn-unit beds in Missouri hospitals.⁵⁹ Treatment in Missouri burn units costs approximately \$6,000 each day, with many meth-burn victims needing to stay for months.⁶⁰ The Missouri Department of Mental Health (DMH) reports \$8.3 million in meth addiction treatment costs each year.⁶¹ These state costs do not include loss of property due to crime or meth lab activity, loss of productivity, and loss of life.

Pseudoephedrine

Pseudoephedrine is a nasal decongestant found in over-the-counter (OTC) cough and cold medicines as well as allergy medicines. Within Missouri, both PSE and EPH are OTC drugs that are available for purchase in retail stores with pharmacies, as well as online. Products containing PSE and EPH are sold in many forms, including tablets, gel-caps, caplets, liquids, and nasal sprays. PSE and EPH work to treat symptoms of allergies and colds.⁶² Sixteen brand name OTC cough and cold medicines contain PSE, as well as numerous generic brands. Among these brands are decongestants that treat symptoms for 12 and 24 hours, more than any other nonpseudoephedrine decongestant. 63 Negative side effects of PSE include increased heart rate,

Common Brand Name PSE Products

- Sudafed
- · Codral Cold and Flu Tablets
- Claritin-D
- · Zyrtec-D 12 Hour
- Mucinex D
- · Allegra D
- Nurofen Cold & Flu
- TheraFlu
- · Aleve D

Oregon Alliance for Drug Endangered Children, 2010. www.oregondec.org/15.pdf

tremors, agitation, and vomiting.⁶⁴ PSE is not recommended for long-term use.⁶⁵

Pediatric Pseudoephedrine: From 1999 to 2006, one in 20 U.S. children used a PSE product during any given week.66 Among children younger than 2 years, this rate increased to one in 12, according to a 2008 epidemiologic study.⁶⁷ During the study period, several children's deaths were attributed to PSE misuse. From 2002 to 2006, PSE had the highest rates of adverse events associated with cough and cold products in children under 6.68 The FDA has since recommended against PSE use in children under age 4.69 Many children's medicines have since changed their active ingredient from PSE to phenylephrine. To differentiate between active ingredients, drugs containing phenylephrine are commonly marked "PE," such as Sudafed PE, while drugs containing PSE are now marked "D," like Allegra D.

Pseudoephedrine and Allergies: According to the St. Louis Chapter of the Asthma and Allergy Foundation of America (AAFA),⁷⁰ more than 1.1 million Missourians are living with asthma and allergies. Negative health effects caused by symptoms of allergies can impact worker productivity and school attendance when left untreated. The St. Louis Chapter of AAFA reports that for some Missourians, PSE is the only oral decongestant that provides effective relief from nasal allergy congestion symptoms.⁷¹ Treatment alternatives to oral PSE, recommended by the Allergy and Asthma Network Mothers of Asthmatics (AANMA) include allergy immunotherapy, topical intranasal antihistamine sprays, and topical intranasal corticosteroid sprays.72 AANMA has specified that these treatment alternatives do not produce negative side effects.⁷³

Both the AAFA and the AANMA have conducted studies among Americans who have allergies and asthma to determine **U.S. Timeline**^{3, 94, 95, 96, 97}

1887-1919: Amphetamine is created by a German chemist and refined into methamphetamine in Japan.

1937-1950s: Sold as Benzedrine, amphetamine is used by U.S soldiers, students, and truckers to treat narcolepsy, depression, attention deficit disorder, Parkinson's disease, and alcoholism. Fifty percent of Benzedrine sold is used for controlling weight and depression, and keeping awake.

1960s: Meth use becomes more widespread.

1970: Comprehensive Drug Abuse Prevention and Control Act

1976: Pseudoephedrine becomes available without a prescription. Meth that can be smoked is created in Hawaii and on the West Coast. Simpler recipes are discovered for purer meth or "ice."

1988: Chemical Diversion and Trafficking Act

1994: U.S. meth production becomes dominated by Mexican drug-trafficking organizations that manufacture meth in "Superlabs" in CA and Mexico

1996: Comprehensive Methamphetamine Control Act

2000: Methamphetamine Anti-Proliferation Act

2005: Combat Methamphetamine Epidemic Act

2005 - 6: OR makes PSE prescription-only

2007: PSE prescription-only bill proposed in MO legislature each year beginning in 2007

2007: First state-wide electronic tracking system is adopted in KY

2009: Electronic tracking system, NPLEx, becomes a multi-state system, including KY, IL, and LA

2010: Combat Methamphetamine Enhancement Act. MS makes PSE a prescription-only drug. MO implements NPLEx system, funded by the Consumer Healthcare Products Association. NPLEx is scheduled to begin in IA and KS.

2011: Meth Lab Elimination Act, MO H.B.658, seeking to make PSE prescription-only, has 60 co-signers and passes the House of Representatives. Fourteen other states proposed legislation to make PSE a prescription-only drug: CA, NV, CO, OK, TN, AL, HI, KS, AR, GA, IN, KY, WV, and VA. Thirteen states require electronic tracking of PSE purchases: AL, AR, FL, IL, IA, KS, KY, LA, MO, OK, SC, TN, and WA.

opinions regarding making PSE prescription-only. The two groups differ in both funding sources and views regarding prescription-only PSE. The AAFA survey demonstrated that 71 percent of asthma, allergy, cold, and flu patients oppose making PSE prescription-only. In response to AAFA's survey, AANMA conducted a survey of 400 families with members who have asthma or allergies, and asked about the medications they use for treatment. AANMA determined that none of the families surveyed used PSE to treat their allergies or asthma, concluding that PSE is used primarily to treat cold symptoms.⁷⁴

Diversion: One oxygen atom differentiates PSE and D-Methamphetamine, or meth.⁷⁵ The process of changing products containing PSE to meth is referred to as "pseudoephedrine diversion." Since 1988, federal and state legislation has sought to control precursor chemicals and reduce diversion activities. While both PSE and EPH can be used to make meth, PSE is currently the only required ingredient that can be purchased over the counter and cannot be substituted in the production of meth.⁷⁶ In response to diversion activities, existing federal laws limit the daily and monthly PSE amount that an individual can purchase, require manufacturers to keep records of transactions and licensing, and call for retailers to log all sales.⁷⁷ Meth manufacturers and traffickers have circumvented these legal thresholds by purchasing PSE from multiple retail locations and recruiting individuals, referred to as "smurfs," to purchase the legal limit of PSE in exchange for funds or meth.⁷⁸

Existing Policies

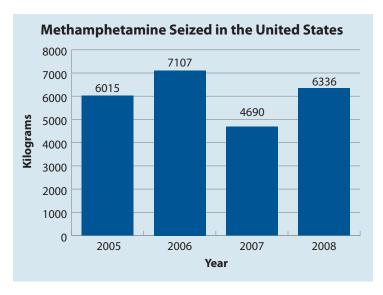
Federal Initiatives

Throughout the 1980s and 1990s meth use and manufacturing spread eastward from the western U.S. to the midwest and onward. During the mid-nineties super labs grew in production and distribution, under the control of Mexican drug trafficking organizations. By the year 2000, small clandestine labs were more common in rural areas of the U.S.⁷⁹ The federal government's policy responses to meth production have:⁸⁰

- classified meth as a schedule II drug with serious potential for abuse, requiring a prescription (Comprehensive Drug Abuse Prevention and Control Act);
- regulated and required recordkeeping of imports/exports of pseudoephedrine and tableting/ encapsulating equipment (Chemical Diversion and Trafficking Act);
- increased penalties for meth production and trafficking to reimburse costs of cleanup (Comprehensive Methamphetamine Control Act, Methamphetamine Anti-Proliferation Act);⁸¹
- restricted PSE transactions to 9 grams and package size to 3 grams PSE per package (Methamphetamine Anti-Proliferation Act);
- limited PSE and EPH to 3.6 g/day and 9g/month per person; placed PSE behind the counter; required purchaser ID to be recorded for each sale (Combat Methamphetamine Epidemic Act);⁸² and
- required retail sellers of PSE and EPH to train staff, comply with legal requirements and submit verification of compliance, including mail-order and online retailers (Combat Methamphetamine Enhancement Act).⁸³

International Initiatives

The majority of PSE and EPH is manufactured in China and India. Diversion of these chemicals for meth production is largely controlled by Mexican drug trafficking organizations (DTO), but also by Indo-Canadian trafficking organizations and Asian traffickers. Multiple nations have implemented control strategies addressing the diversion of precursor chemicals. Of these strategies, Mexico's ban on PSE imports and use had the most significant impact on the U.S. meth



supply in 2007. Yet within one year, the limited supply of meth from Mexican super labs was supplemented by an increase in U.S. domestic clandestine lab production. By 2008, Mexican DTOs found alternative supply routes for PSE and EPH through Argentina and other nations. Super lab producers, dominated by drug cartels, also responded by moving production to the U.S., fueled by coordinated pseudoephedrine trafficking from within the U.S. Mexican DTO super labs in Mexico and the southwest have returned to pre-legislation production, while small clandestine one-pot labs throughout the nation also continue to increase their production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production. Mexico and the southwest have returned to pre-legislation production.

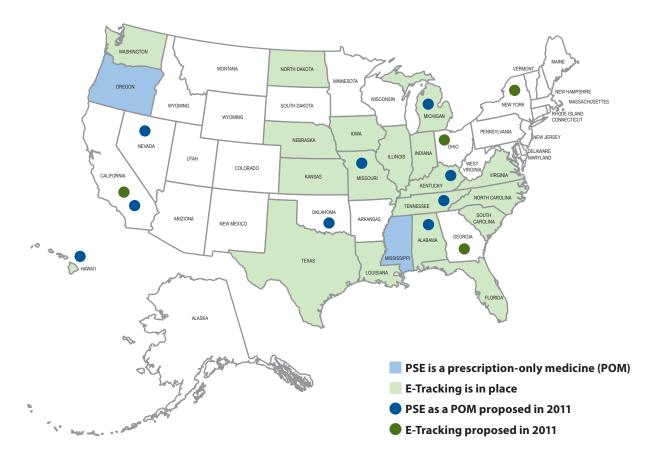
International efforts to control chemical diversion and meth production target:

- Regulation of imports, exports, and manufacturing
 - Introduce classification system for precursor chemicals (Canada, 2003)⁸⁸
 - Regulate registration and licensing for PSE imports/exports, sales and manufacturing (Canada, 2003;⁸⁹ Jordan, 2008; Argentina, 2008; Panama, 2008; United States, 2008; China, 2008; Czech Republic, 2009)
 - Increase restrictions on the amount of PSE and EPH imported (Mexico, 2005)⁹⁰
 - National prohibition on the import of PSE and EPH (Mexico, 2008; Nicaragua, 2008; Columbia, 2009)⁹¹
- Regulation of sales to individuals
 - Limit amount of EPH and PSE available for one OTC transaction (UK, Northern Ireland, 2008; China) or monthly purchase (U.S., 2005)
 - Require a prescription for drugs containing PSE (Argentina, 2008; Peru, 2008)⁹²
 - Control sale and use of EPH and PSE; ban use of all PSE sole ingredient drugs (Argentina, 2008)⁹³
- Prohibition of Pseudoephedrine and Ephedrine
 - National ban on the use of PSE and/or EPH (Mexico, 2009; Iceland, 2008; Nicaragua, 2008)
 - Ban import, possession, synthesis, consumption, trade, storage, distribution, and transportation of products containing PSE (Guatemala, 2009)

State Initiatives

States throughout the nation have enacted PSE diversion control legislation to:

- Introduce electronic tracking of PSE and EPH sales (AL, FL, HI, IL, IA, KS, KY, LA, MO, NE, NC, SC, TN, TX and WA)^{94, 95, 96}
- Classify PSE and EPH as Schedule III drugs, requiring a prescription (OR and MS)⁹⁷
- Increase penalties on vandalism and theft of anhydrous ammonia (IL)



Local Initiatives

As of November 7, 2011, 57 local municipalities within Missouri had passed ordinances requiring prescriptions for PSE. These are:

- Arnold, Barnhart, Belle, Butler County, Byrnes Mill, Cape Girardeau, Caruthersville, Cedar Hill, Cottleville, Crystal City, Cuba, Dardenne Prairie, De Soto, Desloge, Dexter, Doniphan, Ellisville, Eureka, Farmington, Festus, Foristell, Franklin County, Fredericktown, Gerald, Herculaneum, Hollister, Jackson, Joplin, Kennett, Lake St. Louis, Malden, Mountain View, New Haven, New Melle, O'Fallon, Owensville, Pacific, Perryville, Piedmont, Poplar Bluff, Portageville, Potosi, Ripley County, Scott City, Sikeston, St. Peters, St. Charles City, St. Charles County, St. Clair, Sullivan, Troy, unincorporated Jefferson County, Union, Washington, Wentzville, and Wildwood.⁹⁸
- Currently one-third of Missouri pharmacies require prescriptions for PSE.⁹⁹

Prescription-Only Pseudoephedrine

Approaches to curbing meth production are drawing the attention of local municipalities throughout Missouri as policymakers debate their positions regarding pseudoephedrine as a prescription-only medicine (POM). Numerous local, state, and national agencies and organizations have voiced their opinions regarding POM legislation.

Anti-POM stakeholders* include Consumer Health Products Association, Missouri Pharmacy Association, Missouri Grocers Association, Missouri Retailers Association, Associated Industries of Missouri, and the Asthma and Allergy Foundation of America, St. Louis Chapter.

Pro-POM stakeholders* include Attorney General Chris Koster, Governor Jay Nixon, Missouri State Highway Patrol, Missouri sheriffs and narcotics units, hospital burn units, child and family services workers, Missouri Narcotics Officers Association, independent local pharmacies and grocers, and the Allergy and Asthma Network Mothers of Asthmatics.

The Missouri State Medical Association, previously against POM ordinances, reviewed its position in July 2011 following reports from members in municipalities with such ordinances. MSMA has since moved to a neutral position on the issue.**

- * Stakeholder positions can be found on stakeholder websites
- ** Interview with Jeff Howell, Director of Government Relations and General Counsel, Missouri State Medical Association

Policy Initiatives to Control Meth

Supply and Diversion Control Policies

Within the U.S., more than 100 bills have been filed in 24 states and numerous localities in an effort to curb the diversion of PSE. ¹⁰⁰ Of those proposed, 26 are related to electronic tracking and 43 involve requiring a prescription for PSE. ¹⁰¹ In an effort to limit the supply of meth, states have responded with policies targeting the diversion of PSE and EPH, as well as policies targeting the vandalism and theft of other precursor ingredients. Several Missouri state initiatives targeting meth have focused on access to precursor ingredients. In 2008, the General Assembly voted in favor of a statewide electronic tracking system for PSE and EPH purchases. Two years later, Governor Jay Nixon announced the implementation of the multi-state electronic system, NPLEx, funded by the Consumer Health Products Association. ¹⁰² Missouri legislators have proposed prescription-only legislation for PSE and EPH during every session since 2007. In 2010, 60 co-signers supported a prescription-only bill in the House.

Prescription-Only Pseudoephedrine: In 2006, Oregon made pseudoephedrine a prescription-only drug. Thirty-five weeks after the measure was signed into law, there were decreases in:¹⁰³

- meth-related hospitalizations (35%),
- meth treatment admissions (33%),
- local arrests for meth-related crime (10%),
- amphetamine possession (36%),

- amphetamine sales (21%),
- meth lab incidents (96%),
- violent crime (10.6%), and
- property crime (6.9%).

Reductions in local arrests and hospital patients testing positive also were reported in Oregon. Four years later, Mississippi also passed legislation to return PSE to a prescription-only drug. Since its enactment in July of 2010, there has been a reduction in meth lab incidents (68%), meth arrests (62%), and the number of children removed from meth lab sites (76%).¹⁰⁴

Electronic Tracking: In 2010, Missouri implemented an electronic tracking system to record all PSE sales and block any PSE sales to individuals who have reached the 3.6 gram daily and 9 gram monthly limits. The National Precursor Log Exchange, or NPLEx, is the electronic tracking system in place in Missouri and 18 other states. NPLEx is currently being considered in several other states as well.

Beginning in Kentucky, promoters of NPLEx report that with the system in place, 99.8 percent of PSE purchases are now below the legal limit within the state. ¹⁰⁶ Law enforcement officials have access to the names of individuals who have been blocked from purchasing beyond the legal limit. Officers also are able to search the system using an individual suspect's name; however, law enforcement officers do not have access to the names of individuals purchasing the legal limit, which may limit their ability to identify smurfing patterns. ¹⁰⁷ With NPLEx, states have the authority to block purchases by individuals formerly in the prison system, including convicts, pre-trial releases, and parolees.

Is Meth Unique Among Abused Substances?

Meth use has had devastating effects on individuals, families, and communities across Missouri, yet meth is not the leading drug abused or misused in the state. Abuses of prescription drugs, marijuana, and cocaine surpass meth in number of lifetime users and first-time users. Additionally, more Missourians enter treatment facilities for marijuana and cocaine than for meth and heroin. Often rural communities report drug treatment admission rates for meth and marijuana, while urban communities report admission rates for cocaine, marijuana, and heroin.

Because violent behavior can increase when an individual is misusing meth, some treatment centers have expressed concerns about including meth users in group treatment programs. These concerns have been challenged by substance abuse treatment counselors currently providing treatment programs for meth abuse. Individuals seeking treatment for meth addiction demonstrate the same rate of success following treatment as individuals seeking treatment for cocaine and other stimulants. A task force from the National Institute on Drug Abuse (NIDA) has recommended that research examine similarities between cocaine and methamphetamine in order to determine if best practices from cocaine treatment programs can be borrowed for meth addiction programs.

Since electronic tracking began in 2009:

- 51,981,850 grams of PSE have been tracked at the time of purchase,
- 1,559,083 grams of PSE have been blocked,
- 27,050,040 boxes of PSE meds have been sold, and
- 642,739 boxes of PSE meds have been blocked (about 2% of attempted purchases). 108

Supply-side policies remain controversial as they have had unintended consequences and, as in the case of the Mexican government's ban of PSE, can lead to other illicit trafficking, smurfing, and an increase in small laboratories that are more difficult for law enforcement to track. For these reasons, the Drug Policy Alliance Director of National Affairs recommends against supply-side interventions for addressing meth addiction.¹⁰⁹

Policing: Drug abuse is an issue of public health and public safety. Proponents of policing recognize that law enforcement must be included in strategies to reduce violence, theft, property damage, reckless driving, and criminal networks involved in producing and selling drugs. The Missouri Division of Alcohol and Drug Abuse has recognized the value that collaboration with law enforcement, health care, and other professionals offers to agencies addressing drug abuse.

Demand Approaches

Various states have explored and implemented strategies addressing drug addiction and the demand for drugs. These multi-faceted approaches often involve drug treatment, harm reduction, and prevention education programs.

Treatment: A RAND Corporation study found treatment to be 10 times more effective at reducing drug abuse than the interception of illegal drugs; 15 times more effective than domestic law enforcement; and 23 times more effective than interventions that sought to eliminate the source of drugs. Another study, conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA),¹¹⁰ identified treatment to be effective in reducing:

- drug dealing (78%),
- criminal arrests (64%),
- shoplifting (82%),
- assaults (78%),
- inpatient mental health visits (25%), and
- substance abuse-related medical visits.

Treatment and Referral Services in Missouri

Referrals to treatment programs across the state are provided through the Missouri Division of Alcohol and Drug Abuse. These services include detoxification programs, inpatient and outpatient rehabilitation services, and a continuum of care services provided through the Comprehensive Substance Abuse Treatment and Rehabilitation Program (CSTAR) for women, men, and adolescents. Access to treatment services can be limited, particularly for individuals who are uninsured, underinsured, or living in rural communities.

Missouri Department of Mental Health, 2004, Methamphetamine in Missouri 2004, Missouri Division of Alcohol and Drug Abuse. Treatment also has been found to reduce recidivism.¹¹¹ California's Substance Abuse and Crime Prevention Act has successfully prevented continued drug use and recidivism by diverting first-and second-time non-violent offenders who were convicted of possession to treatment rather than incarceration. From 2000 to 2007, 150,000 individuals began addiction treatment; more than half of those used meth as their primary drug. Success rates were measured following completion of treatment and three years after treatment, known as "third-year completion rate." This program has led to successful third-year completion rates for offenders, including many who had abused drugs for more than 10 years. Third-year completion rates were highest for methamphetamine users (35%), followed by cocaine and heroin (32% and 29% respectively). California reported more than \$1.5 billion in savings during the first seven years.

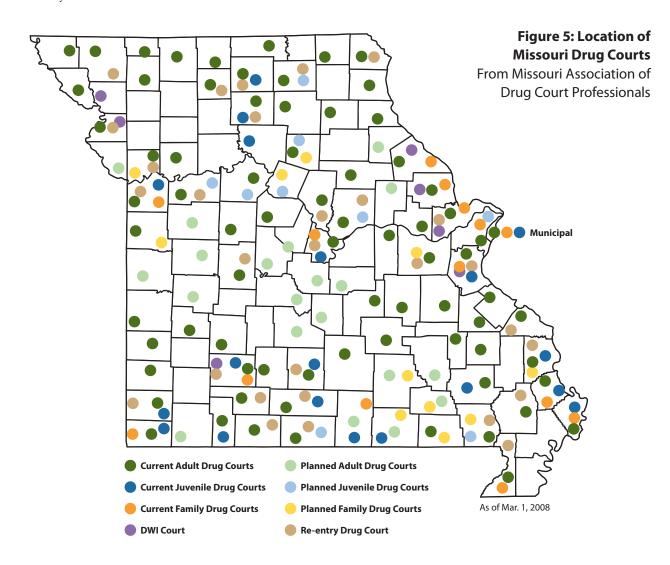
Harm Reduction: This approach seeks to reduce negative health risks associated with addiction. Meth use is associated with an increase in risky behaviors including unprotected sex and sharing syringes. These behaviors can lead to the transmission of HIV/AIDS, hepatitis C, and other diseases. Within Missouri, meth users prefer intravenous use, as it provides a longer-lasting rush. A harm reduction approach to intravenous drug use encourages access to sterile syringes through syringe exchange programs and the deregulation of prescription-only syringes. The efficacy of this approach is supported by the National Academy of Sciences, the American Medical Association, American Public Health Association, and the Centers for Disease Control and Prevention, as access to sterile syringes has been found to decrease the spread of infection without increasing drug use. 113

Prevention: Drug abuse can begin in childhood and often peaks during adolescence. As such, many successful research-based prevention programs seek to promote protective factors and reduce risk factors for drug abuse in children, adolescents, and their families. ¹¹⁴ Research has demonstrated that one effective way to reduce youth drug abuse is through policies that increase access to after-school programs. In some rural communities after-school programming is limited, ¹¹⁵ but drug prevention programs have recently expanded to other community locations such as churches and community centers. ¹¹⁶

Experts warn against fear-based programs that use scare tactics and exaggeration in their teaching, as these have proven ineffective and in some cases have contributed to an increase in drug use. 117 Despite these negative findings, some states and school districts continue to use fear-based programs. Policies implementing random, suspicionless drug testing in schools have also been found ineffective in decreasing illegal drug use. 118 Alternatively, a variety of research-based prevention programs have proven effective. Some of these programs have been designed to serve all members of a community or school. Others target specific at-risk groups, such as teens who are already using drugs or children who are not achieving in school. 119 The most successful prevention policies support programs that are fact-based, interactive, peer-led and long-term, and that reach communities in multiple settings. 120

Drug Courts: A transdisciplinary approach

Law enforcement officers, attorneys, judges, case managers, treatment counselors, and drug court administrators all can play important roles in a drug offender's access to treatment. Drug courts reduce recidivism rates, help to keep families together, reduce crime, divert non-violent offenders from prison, decrease the need for foster care, and have been found to support pregnant mothers in remaining drug-free during their pregnancies. Some supporters of drug



courts propose that all non-violent offenders using meth without causing harm to others should be referred to treatment and addressed by public health agencies, whereas violent offenders should be the priority of law enforcement.¹²³

Policies expanding access to drug courts have included:

- increased funding for treatment facilities,
- · vouchers for those seeking treatment,
- required treatment for non-violent first- and second-time drug offenders,
- treatment for non-violent first-time pregnant and post-partum offenders,
- treatment for parolees and probationers with drug abuse,
- funding for housing, health care, and job training to reduce recidivism and relapse, and
- increased funding for treatment research.

In 2010, Rep. Russ Carnahan (D-MO), together with 10 bipartisan co-sponsors, introduced the Universal Access to Methamphetamine Treatment Act. Similar to California's Substance Abuse and Crime Prevention Act, Carnahan's proposal offered treatment rather than incarceration for pregnant and post-partum first-time offenders, in an effort to prevent recidivism and keep families together. SAMHSA and the Missouri Division of Alcohol and Drug Abuse both recommend policies addressing access to treatment programs as effective strategies for reducing drug abuse. 124

Conclusion

While the rate of meth abuse among Missourians remains consistent with that of other states, Missouri communities face additional costs, as more small labs are seized in Missouri than in any other U.S. state. As state and local governments promote efforts to reduce drug use and decrease costs associated with meth production, leaders must consider the

Missouri's Drug Courts

In 2008, Missouri had the highest rate of drug courts per person in the nation, with 108 operational courts. These drug courts provide alternatives to incarceration through access to treatment, case management, monitoring and drug testing, and incentive programs. Missouri's drug courts are funded largely through the Drug Court Resources Fund, enacted through state legislation in 2001. In 2008, the state's drug courts requested \$9.8 million in funding, nearly twice what they were provided through the Drug Courts Coordinating Commission.

Each drug court in Missouri is developed and managed at the local level; however, most courts limit their services to individuals charged with nonviolent drug offenses. Prosecuting attorneys play a critical role in deciding to offer drug courts as an option for drug offenders.

From Missouri Association of Drug Court Professionals website: http://www.modrugcourts.org/showpage.php?page=5

effectiveness and unintended consequences of policy options. Meth abuse and consequent law enforcement strategies have disproportionately impacted women with children, lowincome individuals, and rural communities. While some "supply side" policies targeting meth production present promising statistics regarding decreases in meth lab seizures, environmental contamination, and meth-related hospitalization, there is not yet sufficient evidence to prove that such policies are also directly correlated to decreased drug abuse. Successful meth abuse reduction strategies have targeted at-risk groups by offering alternatives to incarceration for nonviolent drug offenses, particularly for pregnant and post-partum mothers. As outlined earlier, multiple studies have found treatment to be a more effective alternative for reducing drug use when compared to incarceration, interception of illegal drugs, domestic law enforcement, and supply-side interventions. Other components of effective policies for controlling meth abuse have included funding for treatment, research, and child and family services, as well as fact-based drug education rather than fear-based education. Harm reduction strategies have proven to reduce disease transmission without increasing drug use. It is recommended that further studies examine the role other foundations have played in promoting effective drug control strategies.

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