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In Our Own Backyard: Methamphetamine Manufacturing, Trafficking and Abuse in Rural America

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In Our Own Backyard: Methamphetamine Manufacturing, Trafficking and Abuse in Rural America

By Joseph F. Donnermeyer and Ken Tunnell

In Brief...

The Situation:

- The illegal manufacture of methamphetamine shifted from the "super labs" located in large West Coast cities to makeshift and clandestine small-scale operations situated in cities and hamlets across the rural U.S. during the 1990s.
- Meth seizures increased by 562 percent over the 1990-2005 period in the U.S.
- Expanded law enforcement efforts have resulted in the decreased production of meth in small-scale labs, resulting in the re-emergence of "super labs" in larger population centers found in California and Mexico, with smaller production and distribution shops located in rural areas of the country.
- Rates of methamphetamine use in rural areas rival or surpass urban rates when comparing usage among youth living in metropolitan and nonmetropolitan counties. Methamphetamine represents the most frequently used illicit hard drug in rural America today.
- Meth use contributes to a series of major problems for users, their families, and communities. These include poor health, family/child neglect, poor work performance, criminal activity, disengagement from the community, and environmental fallout.

Policy Options:

- Scientifically proven education programs should be adopted that address the dangers of highly addictive drugs such as methamphetamine.
- Community-based first time responders must be better trained to deal with possible meth production sites, including the use of proper protection and equipment needed to tackle the clean up of soil and water.
- Given the limited health resources available in rural areas, federal and state health officials should invest in drug treatment services that are readily accessible to rural residents who are dealing with drug abuse problems in their localities.
- As an alternative to incarceration, both urban and rural communities should consider drug courts as one important avenue to deal with drug users. Evidence suggests that such drug courts help reduce recidivism, work to reunite families, and promote abstinence from methamphetamine.
- Expanded efforts should be undertaken to educate and train farmers and ranchers about clandestine labs in rural areas, and to immediately report suspected sites to local law enforcement officials.

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The abuse of methamphetamine (or meth) is dramatically evident in the "before and after" faces of meth arrestees. Yet these pictures provide only a glimpse of the larger personal, environmental, and community fallout from methamphetamine use and production, an issue that barely existed 15 years ago in rural America, but has since grown into a larger, more serious problem. Increased crime, neglected children, toxic waste, and strained community resources are just some of the costs that rural areas face. Meth use is higher in rural areas, and a recent study finds that rural users have more medical and psychiatric problems that may inhibit recovery than their urban counterparts. Rates of psychosis, for example, are approximately 1.5 times higher among rural meth users.[1] And few rural areas have the necessary services to combat the addiction.

The Drug Abuse Warning Network reports that emergency department visits of those mentioning methamphetamine increased by 128 percent from 1996 to 2003.[2] Likewise, the number of treatment admissions for meth abuse tripled, from 47,695 in 1995 to 152,368 in 2005. Admission rates were higher for nonmetropolitan counties with cities of 10,000 or more than in metropolitan counties and nonmetropolitan counties without a city (Figure 1).[3]

This issue of *Rural Realities* reviews the patterns and prevalence of meth use in rural America, its impact, and steps that can be taken to curb the problem.

Methamphetamine Production and Trafficking

Since bootleggers and moonshine, rural areas have produced illegal substances. However, methamphetamine is vastly different from moonshine and even marijuana, and imposes far greater costs. Clandestine meth production is relatively easy. No chemistry degree is required and recipes and ingredients are readily found on Internet sites.[2] Meth is manufactured by mixing several ingredients, some of which are toxic: pseudoephedrine, ether, paint thinner, freon, acetone, iodine crystals, brake cleaner, drain cleaner, battery acid, and anhydrous ammonia, a nitrogen fertilizer common on many farms and ranches.[2]

Before and after methamphetamine abuse: after 2.5 years (l) and after 3 months (r).

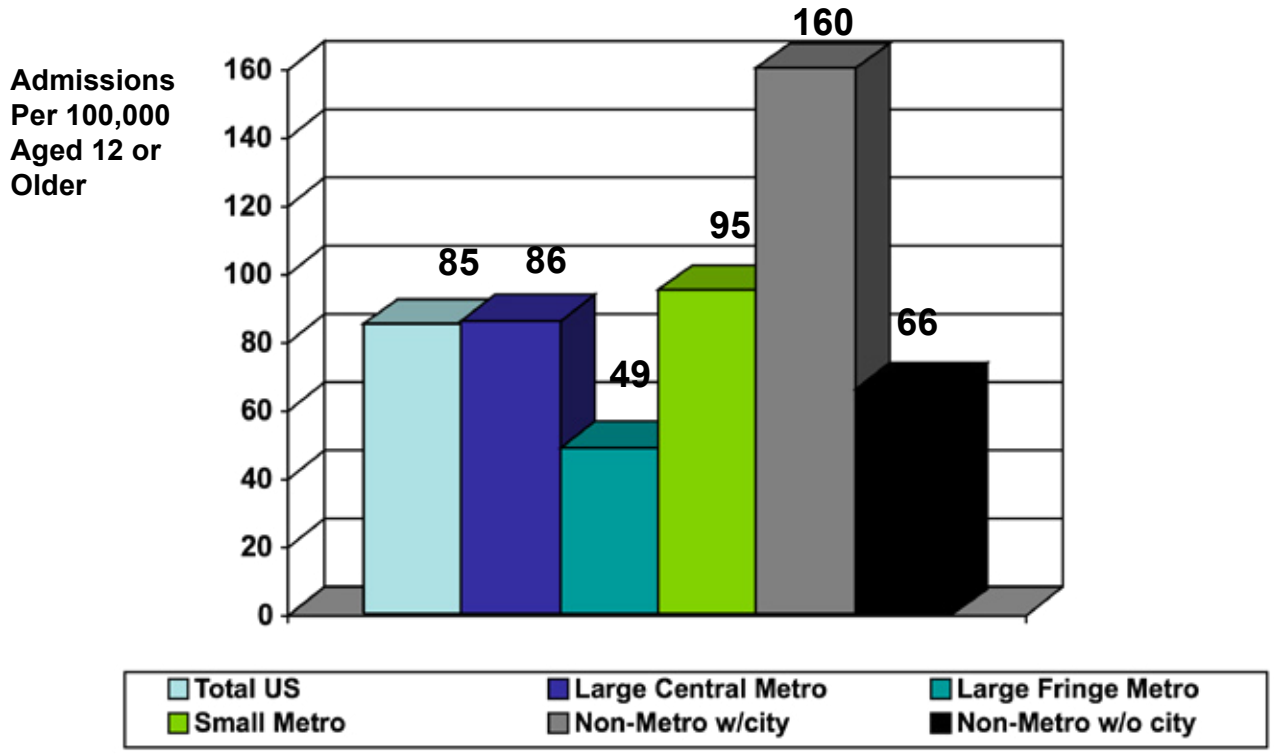
Reprinted with permission from Faces of Meth,™ Multnohma County Sheriff's Office, 2007.

During the 1990s, illegal manufacturing moved from "super labs," where large quantities were produced daily in large cities on the West Coast, to small, makeshift, clandestine, and at times mobile production in small towns and hamlets across the United States. As manufacturing migrated east, it took a particular toll on states such as Arkansas, Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, and Ohio, each of which has substantial rural populations and home-grown interested consumers.[4] This transformation from large-scale to small-scale manufacturing and the explosive increase in the number of meth labs caused considerable alarm and numerous problems in small towns and rural communities.

Over the past few years, 38 U.S. states reported that methamphetamine was their greatest drug threat. From 1990 to 2005, methamphetamine seizures increased by 562 percent compared with 49 percent for cocaine and 75 percent for marijuana, an indication of focused law enforcement on this particular illicit drug.[5]

Owing to expanded law enforcement efforts and chemical sales restrictions, domestic meth production has recently declined (especially in small-scale labs and among small-time operators who often "cooked" up batches in abandoned farms or their own kitchens). Since 2004, 44 states have restricted retail sales of ephedrine and pseudoephedrine products, resulting in a 43 percent decline in the number of small labs in the United States (from a high of 10,212 in 2003). Today the manufacture and distribution has shifted back to some degree to "super labs" in California and Mexico. However, home labs and small-scale distribution rings are not extinct, and small meth labs have even been

Figure 1: Methamphetamine/Amphetamine Admission Rates, by Urbanization, 2004.

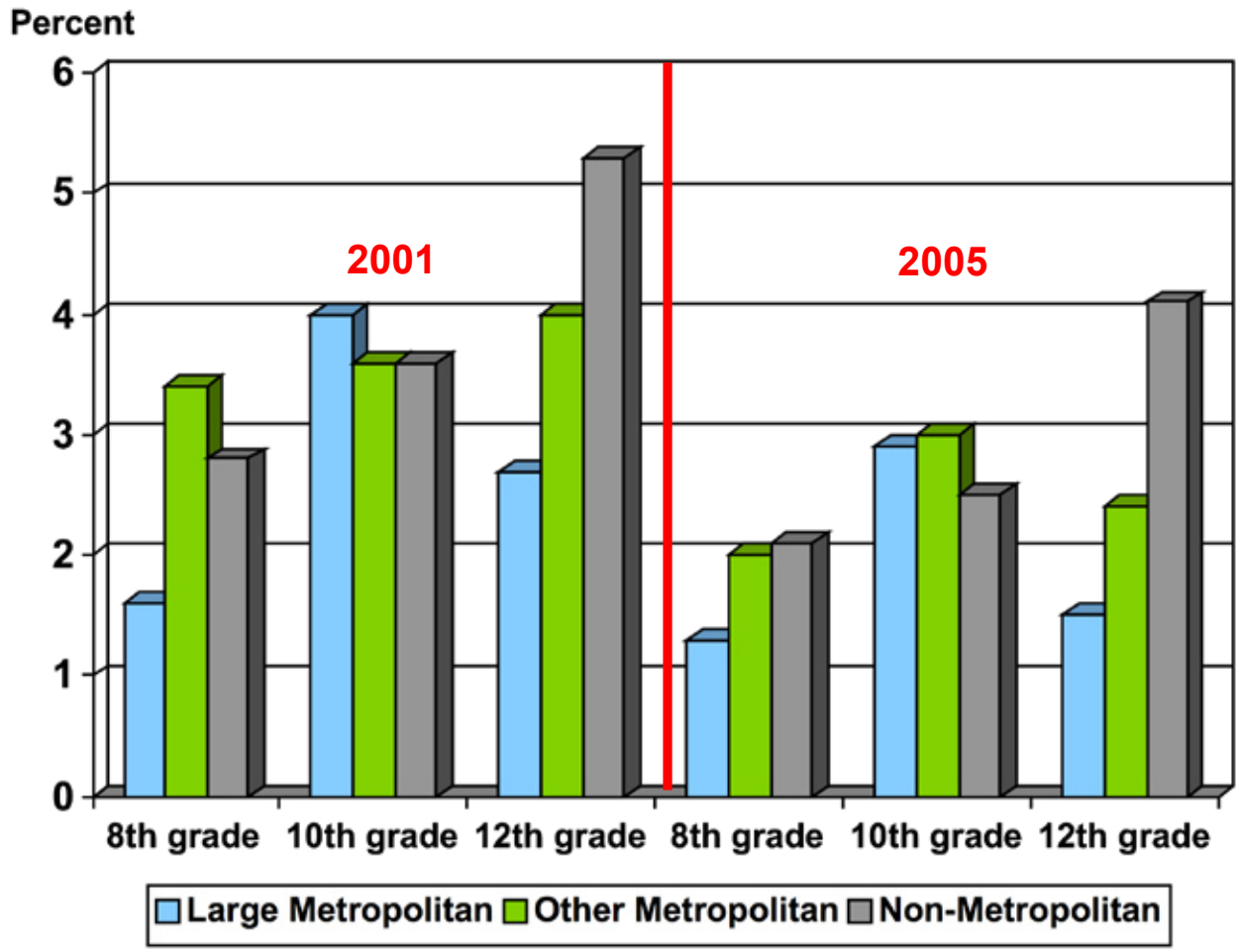


found on public property. During 2002 alone, 187 labs were discovered on National Forest Service lands.[4] Given increased law enforcement attention, there is the fear that clandestine labs may once again become smaller and more subterranean in such greatly isolated areas.

Trafficking meth in the United States was formerly dominated by domestic outlaw motorcycle gangs, but since around 1994, Mexican criminal organizations have controlled a larger share of the market as small labs were shut down and local operators put out of business.[5] Since 2001, Mexican groups (some based in Mexico and others in the United States) have mainly distributed the high purity "ice" (meth that is clear and crystal like) that typically is smoked, resulting in a quicker onset of addiction. In 2004, the Mexican government placed restrictions on the importing of ephedrine and pseudoephedrine and, as a result, expanded meth production in Mexico is believed to be less likely.[5]

The net effect is that we find in rural America today a national network of meth production and wholesale distribution dominated by international sources coexisting with much smaller production and distribution shops operated mostly by locals. This situation is analogous to the distribution of legitimate businesses in many rural communities where large and powerful franchises

Figure 2: Meth Use in Past 12 Months Among Non-Metro and Metro Youth, 2001 and 2005.



exist side-by-side with independently owned and operated enterprises of the same type.

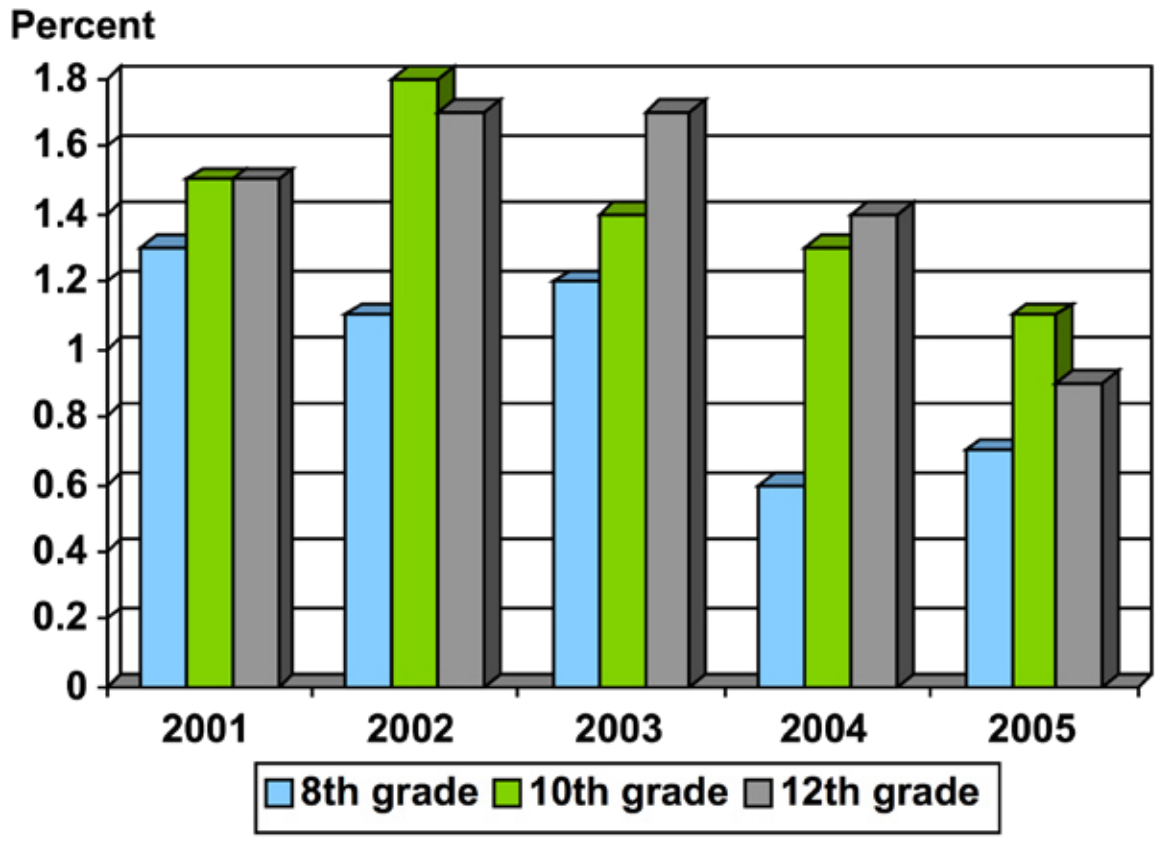
Methamphetamine Abuse

Meth is highly addictive and because it is not metabolized as rapidly as other stimulants, such as cocaine, the rush or euphoric state lasts several hours.[6] To avoid the unpleasant effects of "tweaking," or coming down off the drug, meth users can ingest up to a gram every two to three hours, often over several days, until the supply is depleted or the user is too disoriented to continue. The street price for a gram of meth is around $100, making the need for cash nearly insatiable.[2] Not surprisingly, crime often goes hand-in-hand with meth use.[7-8]

The adverse physiological effects from meth abuse include convulsions, dangerously high body temperature, stroke, cardiac arrhythmia, tooth loss, stomach cramps, shaking, and, with prolonged use, brain damage.[9,4] Meth abuse also is linked to HIV, hepatitis C, and sexually transmitted diseases from increased needle sharing and unprotected sex.[10] Acute and long-term psychological and behavioral problems from meth abuse include paranoia, hallucinations, delusions, rage and violence.[5] Addicts often suffer from "formication," a feeling that insects are crawling under the skin. A telltale sign of meth addiction are the open sores and irritated skin from repeated obsessive scratching.[11]

Non-metro rates of methamphetamine use rival and even surpass metro rates when comparing use among youth in grades 8, 10, and 12 from the nation's 16 largest metropolitan areas, all other metropolitan areas, and nonmetropolitan areas

Figure 3: Meth Use in the the Past 30 Days, 2001 - 2005.



(Figure 2). Furthermore, use is higher among low-income and unemployed young white males. In depressed or economically vulnerable rural areas and small towns, young white males who have little hope for economic improvement may turn to meth, which is more readily available and less expensive than other illicit drugs.[12] Among young adults (aged 19–28), meth use nationally has remained nearly stable, with 2.8 percent reporting use in 1999 and 2.4 percent in 2005.[13]

Looking at current use (defined as within the past 30 days), meth use has declined slightly, and hovers around 1 percent for those in middle and high school (Figure 3).[13] Compared with underage drinking and marijuana use, reported meth use is low. However, it remains one of the most frequently abused illicit "hard" drugs (that is, drugs such as heroin and hallucinogens) in rural America today, and given its serious consequences to users, their families, and their friends, the rate is indeed costly.

Clandestine methamphetamine lab in a rural county of Western Kentucky.
Photograph courtesy of Scott Sharp.

Impact on Rural Communities

Personal Fallout

Meth addiction contributes to poor health, family and child neglect, shoddy and irregular work performance, criminal behavior, and a general dropping out of the community.[7,14] Children of meth producers and addicts suffer neglect, often necessitating their placement in foster care, which can strain rural family support systems. Even though the street price of meth has declined as super-labs have made production more efficient, abusers nationwide are estimated to spend more than $5 billion on meth, money that ordinarily would be used for adequate housing, food, clothing, and education.[15]

Meth addiction increases the chances of property and violent crime, and arrestees who test positive for meth are more likely to cycle in and out of prison.[7,8] Making matters worse, treatment facilities and health care professionals trained to deal with meth addiction are less available in rural areas, often leaving addicts with nowhere to turn for help.[16-17]

Environmental Fallout

Rural communities also must deal with the environmental fallout from meth production. At a typical meth lab located in a rural area (like the one pictured to the left), each pound of illegally produced methamphetamine yields up to five pounds of toxic waste.[11] Clandestine labs contaminate local water systems and soil, poison those living on the premises, and those who unknowingly occupy the structure at a later date. Volatile chemicals can lead to fires. Landowners, users of forest and recreation lands, and rural police and fire officials (many of whom are volunteers) are at risk of exposure to toxic chemicals used in meth production.

Specialized equipment to prevent respiratory damage must be worn by those who deal with onsite criminal investigations, disposal of hazardous materials, and clean-up.[11] The average cost of recovery or clean-up is declining as technology improves, although the price for clean-up of a single site is still $2,000–$3,000 dollars and higher.[18]

Community Fallout

Addicts' family members and their psychological and social needs can strain schools, workplaces, and other local and state institutions, such as hospitals, emergency rooms, and foster care systems.[14] There are also costs to rural communities that cannot be so readily calculated. The emergence of organized crime and the possibility of corruption of local officials are examples (especially in areas with larger meth operations). Lost time from work, family problems, and higher poverty are the additional costs that tear at the fabric of rural communities and the quality of life enjoyed by rural residents.

Policy Options

The meth problem in rural America is not intractable, but the fix is by no means easy. Little will be accomplished without resources and local leaders' commitment to developing comprehensive strategies to reduce meth abuse and production. The following are important components to any strategy for addressing this problem in rural America:

- Local first-responders and Community Emergency Response Teams should be better trained to deal with suspected meth production sites, to protect themselves from harm, to conduct adequate onsite criminal investigations, and to effectively clean up contamination. Proper training, personal protection, and other equipment for site recovery are necessary.
- Communities should adopt scientifically proven drug education programs at elementary, junior high, and high school levels, especially those that focus on the dangers of highly addictive drugs. A study by the Rand Corporation estimated that even small to modest reductions in substance use from prevention education programs translate into substantial public benefits to police, corrections, education and medical services, ranging from $300 to $840 for every $150 spent, which is the average cost per student of school-based prevention programming.[19-20] A strategy of sustained prevention education with programs offered at several grade levels is more effective than "single shot" efforts.[21] To ensure sustainability, funding should be shared by local, state and federal governments. Support for prevention education from local leaders, parents, clergy and other key stakeholders in the community helps sustain and reinforce the positive effects of in-school prevention education.[22] Family-based drug prevention programs and peer-based drug mentoring programs, especially for young people with less parental oversight, and "stay in school" programs for those at risk of dropping out, also help reduce all forms of substance misuse.
- Public awareness campaigns, involving various constituents from across the community, can help educate the population about methamphetamine addiction, its costs, and how to identify suspected labs. These campaigns can be effective in strengthening community intolerance to meth and other drug abuse.
- State and federal health officials should provide effective treatment services to rural populations. Cost-benefit analyses demonstrate decisive

Solutions to the Meth Problem in Rural America

- Training for Community Emergency Response Teams.
- Providing adequate and long-term financial support for school-based prevention education programs.
- Creating public awareness campaigns in rural communities about the dangers of methamphetamine abuse, production and trafficking.
- Funding of treatment services, drug courts, job preparation and other diversion programs for rural meth abusers/arrestees.
- Disseminating educational materials for farmers, rural dwellers, and users of rural-located park and recreation facilities on recognizing signs of clandestine meth labs and reporting suspicious sites to law enforcement.

economic and social benefits of treatment. The Washington State Institute for Public Policy estimated savings between $2.05 and $3.77 for every dollar spent on treatment.[23]

- One proven way to deal effectively with drug users in both rural and urban communities is drug courts. A drug court is an alternative to incarceration. Under the strict supervision of the court, an offender is provided an array of alternative medical and social services, ranging from treatment to job training. So long as the offender adheres to the court's regimen, jail time is avoided. Drug courts have been shown to be "the most effective tool available to restore communities, reduce recidivism, reunite families, and promote abstinence from methamphetamine."[8]
- Providing drug-involved offenders with comprehensive drug treatment, vocational education, and job preparation while in prison, and improving the case management of parolees, represent promising strategies for reducing recidivism. As such, they provide a cost-effective alternative to the simplistic "lock-em up and throw away the key" approach.[24]
- Users of park and forest land should be informed about clandestine labs and their appearance, and be encouraged to report suspected sites immediately to local law enforcement.
- Farmers and ranchers should be educated in recognizing signs of clandestine labs. Farmers also must better secure anhydrous ammonia and other chemicals, which are often stolen by meth producers.[25] Information on identifying methamphetamine labs and a program called "Walk Your Land" at the University of Kentucky's Cooperative Extension Service could be replicated in other rural areas. See www.ca.uky.edu/heel/land.[26] "Rural Security Planning: Protecting Family, Friends, and Farm" is also available from Purdue University's Cooperative Extension Service.[25]
- Policies that help improve the economic and social well-being of rural people and rural communities are needed so that alternative and illegal forms for making a living are no longer attractive.

Methamphetamine production, trafficking, and addiction are local problems with national implications. It is indeed a problem happening in rural America's own backyard. Therefore, rural leaders would do well to follow the sage advice of the popular bumper-sticker that reminds us to "Think Globally, Act Locally," but with two additional words: "Plan Cooperatively." Without a comprehensive strategy cutting across local rural governments and jurisdictions, and without a strong partnership of local rural government agencies with state and federal agencies, the problem of meth will remain.

About the Authors

Dr. Joseph F. Donnermeyer is a professor in the Rural Sociology Program and a faculty member of the Criminal Justice Research Center at The Ohio State University. He is chair of the Executive Committee for the OSU Academy of Teaching and serves as the Research Coordinator for the Centre for Rural Crime at University of New England, New South Wales. His primary research focus is rural crime, including agricultural crime and security, social change and crime in rural communities, and substance abuse among rural adult and adolescent populations. In collaboration with colleagues at the Centre for Rural Crime, he is co-editor of *Crime in Rural Australia*, published in 2007 by the Federation Press, Sydney.

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- Deregulation: How Has it Affected Rural Areas
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Rural Realities is a quarterly publication of the **Rural Sociological Society (RSS)**. Its purpose is to: (1) Provide valuable insights on the current and emerging issues impacting people and places in rural America and beyond; and (2) Offer policy and program options that might prove effective in addressing important rural challenges and opportunities. Articles showcased in the series draw upon high quality social sciences-based studies conducted by researchers and practitioners located within universities/colleges, government, philanthropic, and nonprofit organizations.

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