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Participant Manual

Methamphetamine — One of Rural Nebraska's Greatest Challenges

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One of rural America's and Nebraska's greatest challenges is substance abuse. One of those substances, methamphetamine (commonly called meth), is a growing epidemic. As Nebraskans, we need to become more aware of the magnitude of the problem; how it impacts our families; how it relates to our public's health, safety, environment, and rural economic development; as well as to our own well being.

As individuals and communities, we need simple strategies to help combat this growing problem.

Nebraskans will become aware of the origins and spread of meth across our state and country.

Meth, a type of amphetamine, was first created in Germany in 1887. During World War II, the Nazi and Japanese armies used it widely. Japanese kamikaze pilots were documented to be high on meth. This became a major challenge in postwar Japan.

After World War II, biker gangs began to distribute meth in the U.S. As use spread, so did abuse.[1] Amphetamines became a cure-all, helping long-haul truckers complete their routes without falling asleep, aiding weight control, helping athletes perform better and train longer, and treating mild depression.[2] The meth used during those early years was 100 percent less powerful than it is today.[1]

In 1990, meth use increased dramatically in the Midwest. The primary source of meth in the U.S. is produced in Mexico and California and is distributed along I-80, making Nebraska a vital link in the fastest growing drug trafficking route in the U.S. In 1994 to 1997, the Nebraska Department of Probation recorded a 789 percent increase in probationers testing positive for meth.[3]

Nebraskans will become aware of risk factors that may lead to addiction.

One of the most effective ways to prevent drug abuse is by focusing on youth. Research shows that a person who can make it to age 21 without ever using drugs is more likely to never use them.[4]

What factors might increase a youth's risk for later drug use?

Risk factors for youth occur in all four domains of human interaction: family, individual/peers, school, and community. Protective factors have been identified for each of these domains. Bonding is the most powerful protective factor. Bonding occurs when all three of the following elements are present in a person's life:

- Positive social and relationship skills.
- Opportunities for positive involvement.
- Affirmative recognition.[5]

According to research, the major transition periods in a child's life are key times when risk is higher. Major transition periods include leaving home for school, changing from elementary to middle, middle to high school, and high school to college or work. These transitions are when youth encounter new academic and social situations, and a broader group of peers.[6]

Family interactions or lack thereof, which can increase youth's risk for later drug use are:

- lack of attachment and nurturing;
- physical or sexual abuse; and
- ineffective parenting.

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Outside of the family, major risk factors include:

- inappropriate classroom behavior;
- poor social skills;
- academic failure; and
- association with drug-abusing peers (the most immediate risk).

Parental attitudes and involvement in a teen's alcohol use, the availability of the drugs within the community, as well as how accepted drug use is in the community increase the risk factors that encourage youth to use alcohol and move on to more dangerous drugs. A National Institute on Drug Abuse article states that early abuse often includes substances such as tobacco, alcohol, inhalants, marijuana and prescription drugs (sleeping and anti-anxiety pills). If drug abuse persists into later adolescence, abusers become more heavily involved with marijuana and may advance to other drugs.[5]

With all of this in mind, some disturbing statistics should be considered. Nebraska ranks ninth in the nation in teenage binge drinking. The state ranks third nationally for teenagers reporting that they drive after drinking, and second in the number of teenagers who report riding with a drinking driver.[7] Other eye-opening statistics on Nebraska teenage drinking include the following:

- Twenty-seven percent report having their first drink prior to age 13.
- Fifty-three percent report currently using alcohol (sixth in the nation).
- Seventy percent who drink have obtained alcohol from an adult (compared to 30 percent nationally).
- Thirty-eight percent drank with an adult present.
- Twenty-one percent drank at home with a parent's permission.[7]

Nebraskans will become familiar with meth, the symptoms of meth use, and signs of meth production.

Meth users come from a variety of age groups, lifestyles, and communities. Curious teens and college students are attracted by the drug's erroneous reputation of increasing energy and sexuality. Some truck drivers and shift workers use the drug to stay awake and alert for extended periods of time.[8] Young and middle-aged women are particularly at risk because they see meth as a quick way to increase energy and uplift a depressed mood.

Meth is a powerful, addictive drug made in illegal laboratories (clandestine labs) with a high potential for drug abuse and dependency. This highly toxic drug is associated with serious health problems, including memory loss, aggression, violence, psychotic behavior, and heart and neurological damage. Meth affects the central nervous system and may contribute to increased transmission of infectious diseases, especially HIV/AIDS and hepatitis.

Meth is odorless, water soluble and bitter tasting. It comes in many forms and can be smoked, snorted, orally digested or injected. Street names are numerous: crank, crystal, speed, chalk, glass, ice, fire, and zip, to name a few.

Meth's euphoric effects last longer than cocaine's, from eight to 24 hours. This is a big part of its popularity. The high is followed by a severe crash causing the user to sleep for up to three days straight. No matter how meth is used, it is eventually circulated to the brain.

As in other parts of the body, it can affect brain structures, most notably the ones that contain dopamine. Dopamine is a feel good chemical sometimes called the pleasure chemical. Dopamine helps you feel good about things like eating a piece of chocolate cake or enjoying a walk with friends and/or family. Meth and dopamine are similar in shape, size, and chemical structure. Because of this, meth is able to fool the brain into releasing lots of dopamine, causing a person a distorted sense of pleasure that can last all day. Meth blocks the dopamine from returning to the nerve cells. As the pleasurable effect stops, it is followed by unpleasurable panic and fear (the crash) that leads a person to want more of the drug. Over time, continued use of meth causes the drug abuser to have a difficult time feeling pleasure without the drug, which leads to addiction.[8]

Short-term meth use causes increased alertness, paranoia, euphoria, hallucinations, aggression, anxiety, loss of appetite, acne or sores, and convulsions. Long-term effects can include kidney and lung disorders, brain damage, depression, hallucinations, violent and aggressive behavior, severe weight loss, gray or black decayed teeth, paranoid-schizophrenia, putrid body odor, open sores, self-inflicted wounds from removing hallucinatory "crank bugs," liver damage, heart attacks, stroke, and possibly death.

Some physical symptoms that might identify a meth user could be agitation, excited speech, decreased appetite, increased physical activity

level, dilated pupils, high blood pressure, and irregular and increased heart rate.

Meth is easily made in clandestine labs with relatively inexpensive over-the-counter ingredients, such as cold and allergy medicines (containing ephedrine or pseudoephedrine), iodine, ammonia, starter fuel or de-icer, drain cleaner or rubbing alcohol, and lithium batteries.

Clues that could indicate the presence of a meth lab:

- Strong odor of urine or other unusual chemical odors like ether, ammonia, or acetone.
- Little or no traffic during the day, but lots of traffic at late hours.
- Never putting out trash.
- Extra efforts to cover windows or reinforce doors.
- Smoking outside due to fumes.
- Basic chemistry paraphernalia, such as laboratory glassware, rubber tubing, etc.
- Items such as lantern fuel cans, red- or brown-stained coffee filters, clear glass jugs, and duct tape on the property.[9]
- Unfriendly, paranoid, or secretive behavior.
- Renters who pay landlords in cash.
- Unemployed persons who seem to have plenty of cash.

If there is a concern or any of the above is present, immediately contact a local law enforcement agency.[10]

Nebraskans will recognize the impacts of meth on families and the costs and effects on public health, safety, environment and rural economic development.

Meth use and production affects many areas of society, including increasing the number of child neglect and abuse cases, adding strain on the emergency and health-care systems, causing toxic harm to the environment, and placing time and budget constraints on local law enforcement. Costs related to health care, first responders, legal systems as well as businesses, cause a ripple effect.[11] The ripple effect is evident in additional health-care costs needed for treatment, increased law enforcement for patrolling and enforcing, and if charges are filed, a burden on the legal system. Additionally, the cost of increased child neglect and abuse cases, both from the agency as well as legal standpoint, do not include the long-term ramifications on the children. Retailers have increased costs due to money and inventory lost as a result of theft, plus the need for increased insurance and security. Businesses may not consider locating in an area where there is a meth problem, because of the lack of a reliable labor pool and increased business costs.

In 1998, 8 percent of Nebraska's state bud-get, or approximately $291 million, was spent on costs related to substance abuse. Of the $291 million, 91 percent ($265 million) was a burden to public programs such as Medicaid and welfare, 6 percent ($17 million) was for regulation and compliance, and 3 percent ($9 million) was spent on prevention. This does not include federal and local dollars. Meth admissions for substance abuse treatment doubled from 1997 to 2001. There are long waiting lists and declining treatment services in many localities.[9]

Meth addicts commit many crimes each year. These crimes range from mail theft, check forgery, credit card fraud, and identity theft to shoplifting, stealing, and assault. Federal sentences from meth-related drug convictions in Nebraska are five times the national average.[12]

In addition to dollars spent and safety issues, poisonous gases can be released into the atmosphere, causing environmental and health and concerns. Many lab operators dump the toxic waste down household drains, in fields and yards, or on rural roads, which can potentially contaminate drinking water supplies, soil, and air. Toxic by-products contaminate meth lab sites, posing serious health and environmental hazards to those nearby.

The risk of explosion and fire is high. Ether, a commonly used ingredient, is highly explosive and a simple spark of a light switch can ignite its vapors. Health hazards from labs to the first responders, other unsuspecting citizens, and the children of meth producers can include respiratory and eye irritation, headaches, dizziness, nausea, and shortness of breath. The long-term effects for children and others exposed to these toxic chemicals are unknown.

When dealing with cleanup of meth production labs, five to seven pounds of toxic waste are produced per one pound of meth. An average cost to clean up one meth lab often exceeds $4,000. Taxpayers on the federal, state, and local level pay this cost.

Nebraska individuals and communities will plan strategies to help take steps to fight this growing problem.

Steps to help fight this growing problem are found in NebFact 608, "Fighting Methamphetamine in Nebraska: Strategies for Individuals and Communities," available at your local University of Nebraska Cooperative Extension office.

Although Nebraska communities might be isolated, they are not alone in feeling the effects of meth abuse and production. The severe drug-related problems in these communities are beginning to receive attention because our rural economy, law enforcement, youth and families are involved. We need to consider the quality of life we desire in rural Nebraska, and as Nebraskans do our part to ensure it.

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