



# Methamphetamine

Sue Dempsey, MS

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# METHAMPHETAMINE

## History Manufacturing Nebraska's Regulations Meth & Your Health Identification & Hazards

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# What is methamphetamine?

- Methamphetamine is a stimulant drug that is a white, bitter-tasting powder or a pill.
- Crystal methamphetamine is a form of the drug that looks like glass fragments or shiny, bluish-white rocks.
- It is chemically similar to amphetamine, a drug used to treat ADHD and narcolepsy.

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Amp	Billy (England)	Choad	Dirt	Glass	Jasmine
blue belly	Bitch	Chunkylove	Dirty	Go	Jenny Crank
crank	Biznack	Clavo	Dizzy D	Go Fast	Jetfuel
crystal	Blanco	Clean out the	Dizzle	Go-ey	Jib
la glass	Bling	chimney (New	Dizzo	Go-Go	Jib Nugget
speed	Blizzard	Zealand)	D-Monic Or D	Go-Go Juice	Jibb Tech Warriar
white cross	Blue Acid	Coco	Do Da	Gonzales	Jinga
white crunch	Blue Funk, Bomb	Coffee	Doody	Goop	Juddha
20/20)	Booger	Cookies	Doo-My-Lau	Got Anything	Juice
222	Boorrit-Cebuano	Cotton Candy	Dope	Grit	Junk
417	(Philippines)	CR	Drano	Gumption	Kibble
Agua	Boo-Yah!	Crack Whore	Dummy Dust	Gyp	Killer
Albino Poo	Bottles (New	Crank	Dunk	Haiwaiian Salt	KooLAID
Alffy	Zealand)	Crankster Gansters	Dyno	Hank	Kryptonite
All Tweekend Long	Brian Ed	Creek Rock	Epimethrine	High Speed Chicken	Lamer
Anny	Buff Stick	Cri,Cri	Epod	Feed	Laundry Detergent
Anything Going On	Bugger Sugar	Criddle	Eraser Dust	High Riders (New	Lemon Drop
the Attenborough	Buggs	Cringe	Ethyl-M	Zealand)	Life
(London)	Bumps	Critty	Evil Yellow	Highthen	Lily
Artie	Buzzard Dust	Crizzy	Fatch	Hillbilly Crack	Linda
Bache Knock	Caca	Crothch Dope	Fedrin	Hippy Crack	Livin the Dream
Bache Rock	Candy	Crow	Fil-Layed	Holy Smoke (Hong	(Canada)
Bag Chasers	Cankinstien	Crunk	Fire	Kong)	Lost Weekend
Baggers	CC	Crypto	Fizz Wizz	Homework	Love
Barney Dope	Chach	Crysnax (LA area)	G	Honk the BoBo	Low
Batak (Philippines)	ChaChaCha	Crystal Meth	G-unit	Hoo	Lucille
Bato	Chalk	Crystalight	Gab	Horse Mumpy	M Man
Bato-(Philippines)	Chalk Dust	Cube	Gackle-a Fackle-a	Hydro	Magic
Batu Kilat	Chank	Debbie, Tina, And	Gagger	Hypes	Meth
(Malaysia)	Cheebah	Crissy	Gak	Ibski	Meth Monsters
Batu or Batunas	Cheese	Desoxyn (drug	Gas	Ice	Methaine
(Hawaii)	Chicken Flippin	name for meth at	Gear Or Get	Ice Cream	Methandfriend
Batuwhore	Chikin or Chicken	the pharmacy)	Geared Up	Icee	Methandfriendsof
Beegokes	Chingadera	Devil Dust	Gemini	Ish	mine
Bianca	Chittle	Devils Dandruff	George	Izice	Methanfelony
Bikerdope	Chizel	Devils Drug	Gina	Jab	Methatrim
	Chiznad	Dingles			

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Methmood	Quartz	Shiznack, Shiznac,	Sprizzlefracked	Tweak
Method	Q'd	Sciznac or	Sprung	Tweedle Doo
Moon Juice	Quick (Canada)	Shiznastica	Spun Ducky Woo	Tweek
Motivation in a bag	Quill	Shiznittlebang	Squawk	Tweezwasabi
Cleve	Rachet Jaw	Shiznit	Stallar	Twistaflexin
Nazi Dope	Rails	Shiznitty	Sto-Pid	Twiz
Ned	Rails	Shizzo	Styels	Twizacked
Newday	Rank	Shnizzie Snort	Sugar	Ugly Dust
Night Train	Redneck Heroin	Shwack	Suger	Vanilla
No Doze	Richie Rich	Skeech	Sweetness	Pheromones
Nose Candy	Rip	Sketch	Swerve	Wake
On A Good One	Rock	Ski	Syabu ("shabu" - SE	Way
(New Zealand)	Rock	Skitz	Asia)	We
Patsie	Rocket Fuel	Sky Rocks	Ta'doww	Whacked
Peaking	Rocky Mountain	Sliggers	Talkie	White Bitch
Peanut Butter	High	smack	Tasmanian Devil	White Ink
Peel Dope	Rosebud	Smiley Smile	Tenner	White Junk
Phazers	Rudy's	Smurf Dope	The New Prozac	White Lady
Phets	Rumdumb	Smzl	The White House	White Pony
Philopon (East Asia)	Running Pizo	Snap	Tical	White
Pieta	Sack	Sniff	TIK (South Africa)	Whip (Australia)
Pink	Sam's Sniff	Snow, Motivation	T. D. - for - Tink	Who-Ha
Poison	Sarabs	Space Food	Dust	Work
Pookie	Satan Dust	Spaceman	Talkie	Wigg
Poop	Scante	Spagack	Time	Xaing
Poop'd Out	Scap	Sparacked	Tina Or Teena	Yaaba (Thailand)
Poor Man's	Schlep Rock	Sparked	Tish - Shit	YAMA (Bangkok)
Cocaine	Scooby Snax	Sparkle	Backwards	Yammer Bammer
(Philippines)	Scud	Speed Racer	Tobats	Yank
Pootananny	Scwadge	Spin, Spin, Spin	Toots	Yankee
Powder	Shab	Spinack	Torqued	Yay
Powder Monkeys	Sha-Bang	Spindarella	Trippin Trip	Yead Out
Powder Point	Shabs Shabu	Spinney Boo	Truck Stop Special	Yellow Barn
Project Propellant	Shamers	Spinning	Tubbytoast	Zingin
Puddle	Shards	Spishak	Tutu (Hawaii)	Zip
Pump	Shit	Spook	Twack	Zoiks
Quarter Tee Bag	Shia	Sprack	Twacked Out	Zoom

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# History

- **Ephedra** - a shrub used to make tea and to help treat asthma and congestion.
- **In 1919** a Japanese chemist synthesizes amphetamine.
- **World War II** - the Japanese and Germans used the drug to keep tank drivers awake and increase workers' productivity.
- **Nazi leaders** distributed millions of doses of meth in tablets to their infantry, sailors and airmen.
- **The Japanese** are reported to have given meth to their Kamikaze pilots.
- **After World War II**, amphetamine was manufactured, sold and prescribed in the United States and much of the world.



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the “reducer”  
happy



**‘METHEDRINE’<sup>®</sup>**  
**in OBESITY**

means help

- For those who eat too much
- For those who are depressed

‘Methedrine’ dispels abnormal craving  
for food, subtly elevates the mood.

‘Methedrine’<sup>®</sup> brand Methamphetamine  
Hydrochloride Tablets 5 mg., scored



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# History

- **Late 1950s - early 1960s** – It's harder for the medical community to ignore a growing number of individuals hooked on Benzedrine and Dexedrine, “amphetamines”.
- **1960s -1970s** - Amphetamine, “speed” or “uppers”, used by athletes, college students, and truck drivers.
- **1980 Crystal Meth** - West Coast motorcycle gangs discover ephedrine, in over-the-counter cold remedies, produces methamphetamine “crystal meth” with twice the potency.
- **Methamphetamine** is amphetamine with a methyl group. It's like a high-octane gasoline versus a low-octane gasoline.



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# History

- **1980s - Enter the Cartels**, Jesus and Luis Amezcua (Mexican cocaine traffickers) become top meth dealers.
- **Home meth labs** also begin spreading throughout the West Coast .
- **1986 The DEA** authors legislation requiring chemical companies to keep sales and import records for diet pills & cold medicines containing ephedrine and pseudoephedrine.
- **Late 1980s** - The pharmaceutical industry mounts a strong lobby against the proposed regulation.

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# History

- **1988** – New law exempts pills from regulation but importers of raw powders will have to keep records of purchases and sales.
- **Early 1990s** - Meth Explodes (literally & figuratively). Meth cooks switch to using unregulated pills.
- **1990s Super Labs** - Mexican cartels begins buying bulk ephedrine powder from factories overseas.



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# History

## **“Smurfing”**

- **1996** - Congress passes a law regulating pseudoephedrine sales but exempts foil blister packs.
- Within three years, **blister packs** of pseudoephedrine were found in 47% of seized meth labs.

*“Essentially the decision was made to give everyone time to adjust to the new controls and that's just what they did.” DEA*



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- Congress passed the ***Combat Methamphetamine Epidemic Act of 2005***.
- The law mandates that pseudoephedrine is sold behind the counter and buyers must sign a registry.
- **2005 – Mexico**, only licensed pharmacies with full-time pharmacists can sell medicines containing pseudoephedrine, reducing retail outlets selling the drug from 51,000 to 17,000.
- **2006**, The U.N. World Drug Report calls meth ***“the most abused hard drug on earth,”*** with 26 million meth addicts, the combined number for cocaine and heroin users.



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# Homemade Meth Ingredients

- Pseudoephedrine
- Red phosphorous (matches)
- Drain cleaner
- Sulfuric acid
- Paint thinner
- Iodine
- Freon



- Driveway cleaner
- Lye
- Acetone (nail polish remover)
- Methanol (brake fluid)
- Ammonia
- Ether
- Lithium metal (batteries)
- Pesticide
- Anhydrous ammonia

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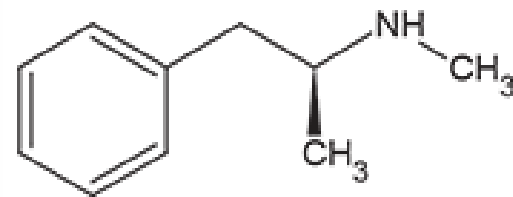
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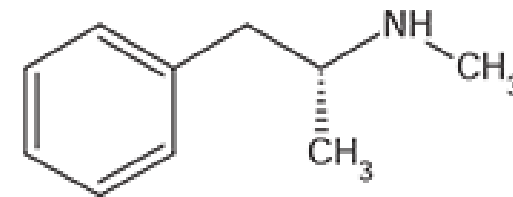
# Cooking Methods

## Red Phosphorus, “Mexican” Method, or Ephedrine/Pseudoephedrine Reduction

High quality and high quantity (pounds) of *d*-methamphetamine.



D-Methamphetamine  
(dextro-Methamphetamine,  
S(-)-Methamphetamine)



L-Methamphetamine  
(levo-Methamphetamine,  
R(+)-Methamphetamine)

**Hydriodic acid/red phosphorus.** E or P, hydrodic acid, and red phosphorus.

**Iodine/red phosphorus.** E or P, iodine, and red phosphorus. Hydriodic acid produced from Rx of iodine, water, and red phosphorus.

**Iodine/hypophosphorous acid or “Hypo” Method.** E or P, iodine, and hypophosphorous acid. Hydriodic acid produced from Rx of iodine, water and hypophosphorous acid (more prone than the red phosphorus methods to cause a **fire** and deadly **phosphine gas**).

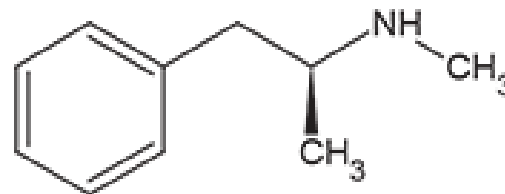
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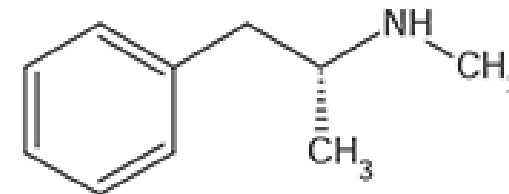
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# Cooking Methods



D-Methamphetamine  
(dextro-Methamphetamine,  
S(-)-Methamphetamine)



L-Methamphetamine  
(levo-Methamphetamine,  
R(+)-Methamphetamine)

**Birch or “Nazi” Method** – High quality, low quantity (ounces) of d-methamphetamine.

**Birch.** E or P, anhydrous ammonia, and sodium (Red Devil drain cleaner) or lithium metal. The method typically used in smaller labs.

**Phenyl-2-propanone “P2P”** - This method yields lower quality *dl*-methamphetamine and traditionally was associated with outlaw motorcycle gangs (OMGs) but is one of the primary methods used in Mexico.

**P2P.** Phenyl-2-propanone, aluminum, methylamine, and mercuric acid.

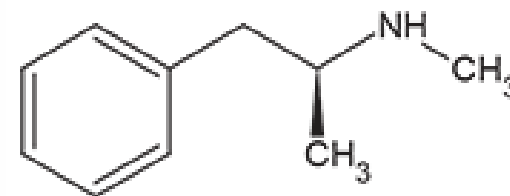
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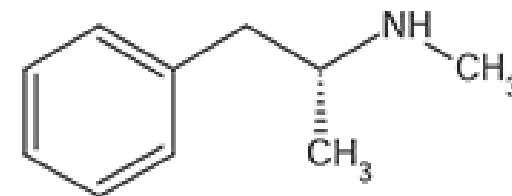
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# Cooking Methods



D-Methamphetamine  
(dextro-Methamphetamine,  
S(-)-Methamphetamine)



L-Methamphetamine  
(levo-Methamphetamine,  
R(+)-Methamphetamine)

## Nitrostyrene Method or the “New P2P” Method

- 2014, benzaldehyde and nitroethane as key precursors and nitrostyrene is produced in the Rx.
- The nitrostyrene intermediate is then converted into P2P using a second chemical reaction.
- The primary method of production for samples seized at the U.S.-Mexico border and also in the interior of the country.
- The new P2P category (nitrostyrene-based) is now in the majority of methamphetamine made using P2P.

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# Cooking Methods

**Cold Cook or “Shake n’ Bake” Method** – High quality, low quantity.

**Shake n’ Bake.** Ephedrine, iodine, and red phosphorus are mixed in a plastic container, and meth oil precipitates into another plastic container through a connecting tube.

The oil is heated, typically by sunlight, shaking, or by burying the containers in hot sand, to produce small quantities of highly pure d-meth.



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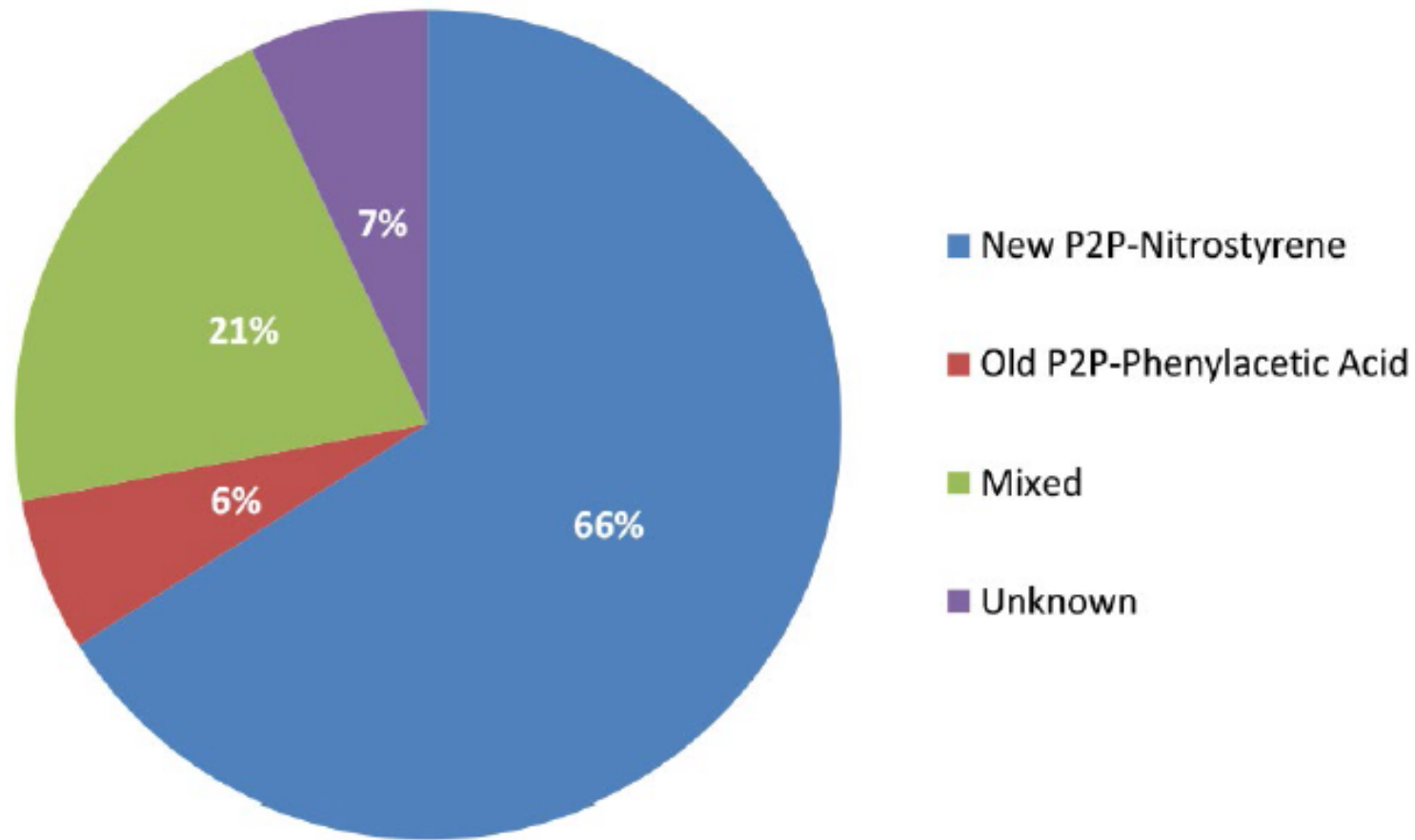
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Figure 71. P2P Sub-Category Results for the 2nd-Half 2016.



Source: DEA Methamphetamine Profiling Program

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Figure 76. Methamphetamine Concealed Inside of Tortillas.



Source: U.S. Customs and Border Protection

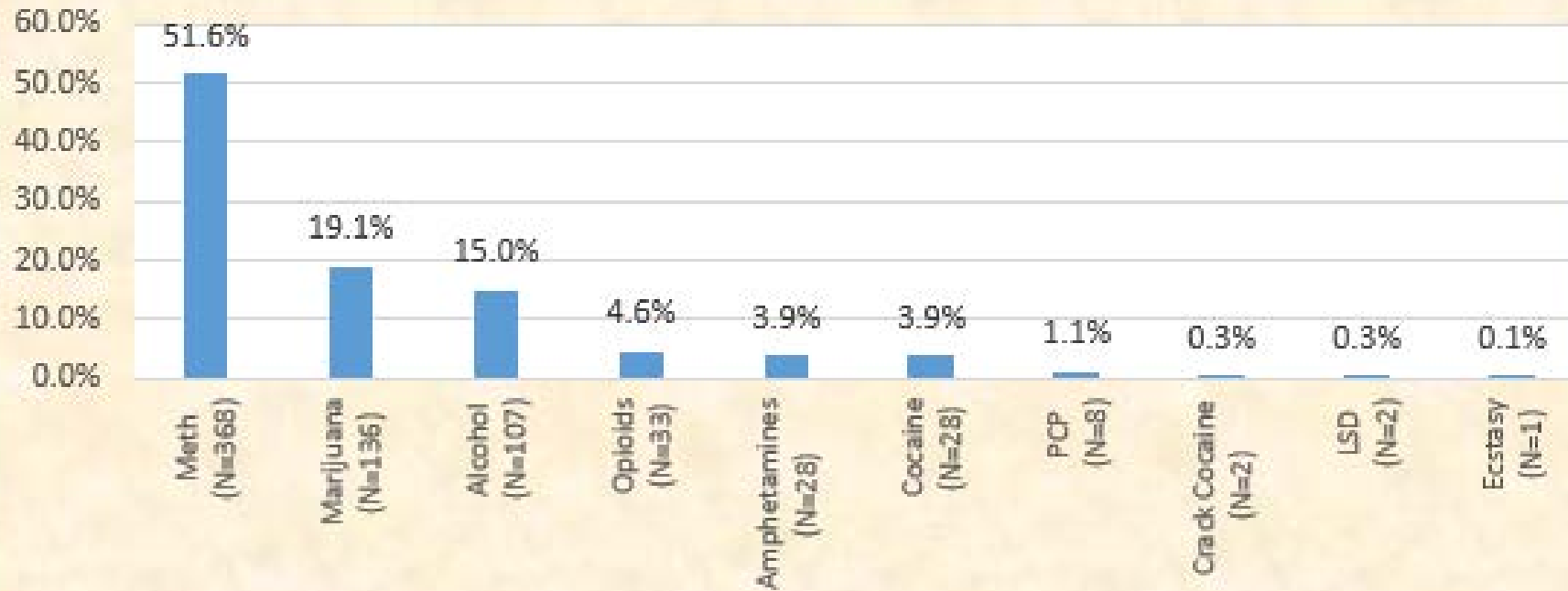
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## Children with Parental Drug/Alcohol Usage at Removal by the Type of Drug



# States with Meth Decontamination Guidance or Regulations

## Guidance Only

Connecticut  
New Hampshire  
New York  
North Carolina  
Michigan  
Arkansas  
Kansas (use EPA guidance only)  
Missouri (disclosure requirement only)

## Regulations

West Virginia	Colorado	Washington
Kentucky	Utah	Oregon
Tennessee	Wyoming	Nebraska
Indiana	California	
Minnesota	Hawaii	
Wisconsin	Alaska	
New Mexico	Idaho	



# Meth Lab Decontamination



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# Meth Lab Decontamination



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# Meth Lab Decontamination



**Before**



**After**

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# Meth Lab Decontamination



**Before**



**After**

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PPE includes disposable outerwear that is hooded, and poly-coated to protect against the permeation of liquids and gases (ASTM F1001 certified), a full-face or half-mask with air purifying combination respirators for particulates, gases and vapors (NIOSH approved), two pairs of chemical-resistant gloves (both inner and outer), and chemical resistant boots.

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# Meth Lab Decontamination

*For every pound of meth produced  
5 to 7 pounds of chemical waste is left behind*

1. **Restrict access** to only those individuals responsible for implementing the decon.
2. **The air distribution system must be isolated** between the decon. area and other residential units, if applicable.
3. **Openings, such as doors, must be sealed off** between the decon. area and other areas that have not been contaminated using polyethylene sheeting 4-mil (0.004 inch) to provide a moisture and vapor barrier.
4. **The structure must be aired out for a minimum of 72 hours** before beginning decon. to circulate air out of the structure. The structure must remain secure during this process.

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# Meth Lab Decontamination

5. **A visual inspection must be done** to determine where clandestine laboratory chemicals were manufactured, stored, or disposed of.
- Hazardous chemicals and/or chemical storage tanks that may have been overlooked by response personnel
  - The air distribution system
  - The ventilation system(s)
  - The water supply system (if a private well is present)
  - The plumbing and septic system
  - Stained porous surfaces
  - Burn pits or trash piles
  - Areas of suspected soil contamination

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# Meth Lab Decontamination

6. **Maintain sign-in sheets** documenting who enters the property for the duration of the decon.
7. Require all individuals who enter to **wear Level C PPE**.
8. Require all individuals, **before leaving the work area**, to remove all disposable outer clothing, place clothing in a plastic bag, and properly dispose of them.
9. **Clean the surfaces of all tools and equipment** used in the work area prior to removal from the contaminated property.

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# Meth Lab Decontamination

*Note: Decontamination may lead to the disturbance of other materials such as asbestos or lead paint (if the residence is pre-1980) which may require services by a licensed contractor who specializes in the remediation of these materials.*

## Phase 1 – Removal of Items for Disposal

1. Complete a thorough assessment of the property for sharps.
2. Remove all household chemical products.
3. Remove and dispose of all general site debris.
4. Remove and dispose of all items that cannot be properly decontaminated; these items include but are not limited to: window mounted air conditioning units, ceiling fans, and drop in or acoustic ceiling tiles.

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# Meth Lab Decontamination

## Phase 1 – Removal of Items for Disposal

5. **All fabric items from the cooking area must be removed and disposed of. It is prohibited to attempt to remove stains from porous fabric items or other items that can be easily disposed of. Some chemicals, such as iodine and red phosphorus, if spilled, result in staining. Attempting to remove these stains can produce toxic and deadly vapors. These items include but are not limited to: carpeting, drapery, and fabric covered furniture.**

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# Meth Lab Decontamination

## Phase 1 – Removal of Items for Disposal

6. Dumpsters must be covered and locked prior to landfill disposal.
7. Turn off electricity to the contaminated area if possible, and cover all electrical outlets and light fixtures to prevent exposure to water during cleaning.

## Phase 2 – Cleaning Procedures

1. **Clean one room at a time.** When complete, close the door and isolate the room to prevent recontamination.
2. **Use an alkaline aqueous cleaning solution** to remove the oily residue that remains after cooking methamphetamine and for neutralizing many of the chemical residuals.

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# Meth Lab Decontamination

## Phase 2 – Cleaning Procedures for the Air Distribution and Ventilation System(s)

3. The air distribution system and ventilation system(s) must be turned off.
4. All air filters must be removed and properly disposed of and all air registers must be removed and cleaned (repeat x2).
5. A fan-powered HEPA filtration system must be connected to the ductwork to develop negative air pressure to aid in removal of particulates.
6. Rotary brushes or other forms of mechanical agitators must be inserted into all ductwork openings to loosen and remove particulates.
7. All ductwork openings must be sealed off using polyethylene sheeting with a minimum thickness of 4-mil (0.004 inch).

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# Meth Lab Decontamination

## Phase 2 – Cleaning Procedures for Removable Items

8. All removable items (for example, appliances, mini-blinds, and, light fixtures), that are not disposed of must be cleaned by both HEPA vacuuming and one of the following methods:
- Steam cleaning with a hot water and detergent solution and extraction by wet vacuum;
  - Washing in a washing machine or dishwasher with hot water and a detergent solution; or
  - For non-porous surfaces only, wash by wiping down with hot water and an alkaline aqueous cleaning solution.
9. These items must then be moved out of the room prior to decontamination of the ceiling, walls, and floor(s).

# Meth Lab Decontamination

## Phase 2 – Surface Cleaning Procedures

10. Cover the floor of the room with polyethylene sheeting 4-mil and tape up onto the baseboard to contain excess solution while rinsing the ceiling and walls.
11. Spray cleaning solution on all remaining exposed surfaces (ceilings, walls, doors, windows, and closets) and leave for a minimum of 10 minutes prior to removal.
12. Beginning at the ceiling, all surfaces must be scrubbed, including walls, windows, doors, and closets.
13. An extraction machine or pressure washer must be used to rinse and extract the contamination from the scrubbed surfaces. Repeat x2.
14. Remove the polyethylene sheeting and repeat the decontamination process for the floor.

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# Meth Lab Decontamination

## Phase 2 – Surface Cleaning Procedures

15. When the cleaning is complete, air-out the site for 24 hours minimum to draw out excess moisture.

## Phase 2 – Plumbing and Septic Cleaning Procedures

16. The accessible plumbing components where chemicals of potential concern have been disposed of must be cleaned and tested to meet regulatory standards.
17. The septic system (if present) must be pumped as part of the decontamination. The system must be pumped prior to site cleaning and again after completion of site decontamination to avoid overflow into the absorption field.

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# Meth Lab Decontamination

## Phase 2 – Soil Decontamination Procedures

18. NDEQ must be consulted regarding removal of contamination in, or decontamination of burn areas, trash areas, and dump sites.
19. If soil or ground water cleanup is required, please consult

### Confirmation “Clearance” Sampling

1. Samples must be analyzed using EPA modified method #8270. Confirmation sampling is required to ensure that concentrations of the chemicals of potential concern are not present at the site above the standards outlined in the regulations.

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## Confirmation “Clearance” Sampling

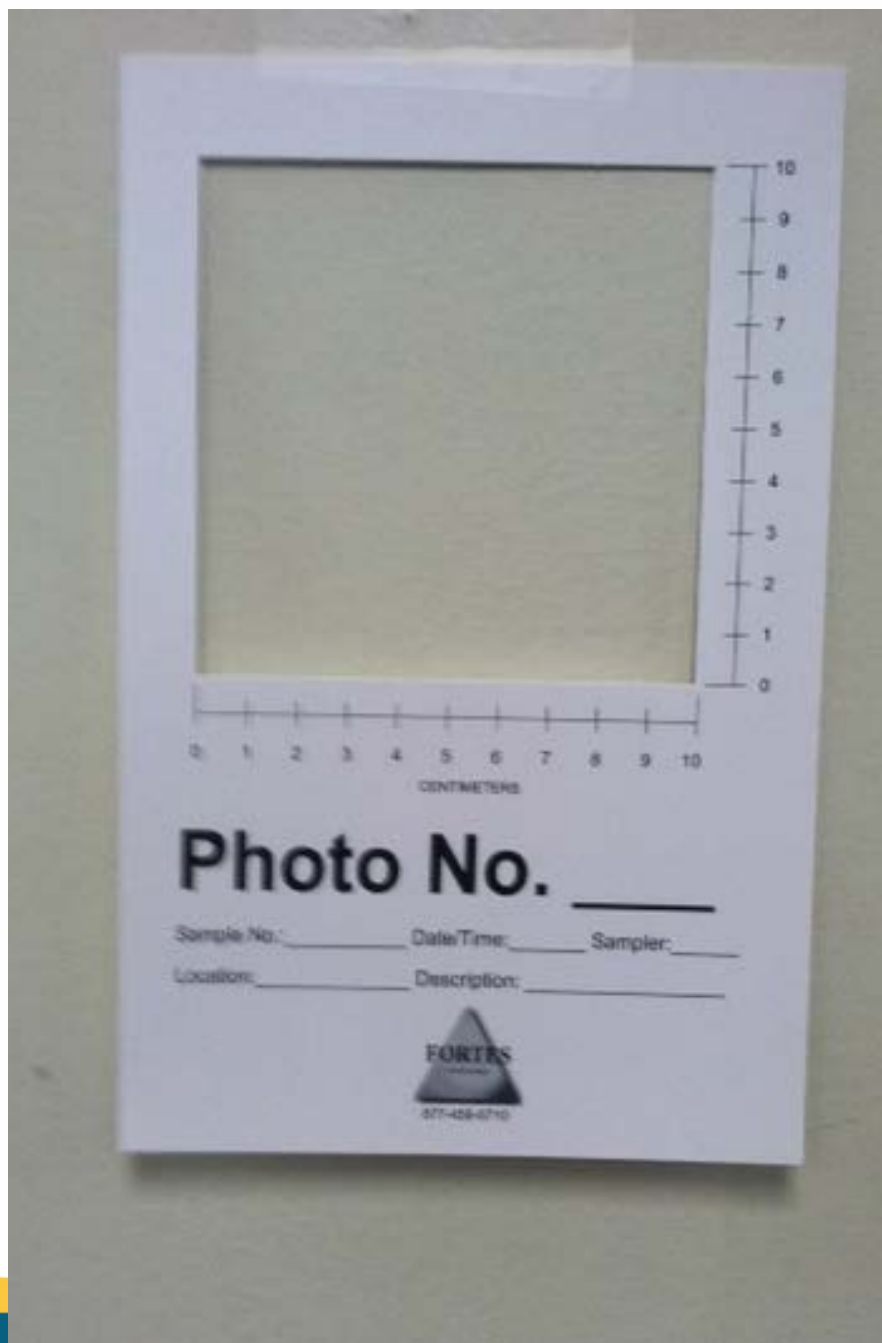
2. All sample locations must be photographed and all samples must be collected by strict adherence to the sample kit or laboratory instructions.
3. At a minimum, one sample media blank, treated in the same fashion but without wiping, must be submitted for every ten samples collected.
4. All samples must be obtained, handled, and preserved under a chain-of-custody (COC) procedure.
5. All samples must be labeled with the site address, sample location, sample number, date and time of collection, and the name of the sample collector.

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**Fortes Laboratories**

25749 SW Canyon Creek Rd #600

Wilsonville, OR 97070

Office (877) 458-6710 Fax: (503) 582 1039

Client: Nebraska Department of Health & Human Services

Address: P.O. Box 95026, Lincoln, NE 68509

Phone: 402-471-8880

Email: Sue.Dempsey@nebraska.gov

## CHAIN OF CUSTODY

### Analysis: Meth

Service: 2<sup>nd</sup> Day or 24 Hour

Project:

Name:

Location:

Collector:

Date of Collection

[illegible]

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME

**SAMPLE RECEIPT**

Total Number of Containers \_\_\_\_\_

Chain of Custody Seals    Y / N

Seals Intact?                 Y / N

Received Good Condition   Y/ N

Notes: \_\_\_\_\_  
\_\_\_\_\_

Notes:

### IMPORTANT SHIPPING INFORMATION

**Only if you use USPS (United States Postal Service)**

**Please ship samples to:-**

**Fortes Laboratories PO BOX 2990 Wilsonville, OR 97070**

Date Shipped Carrier FedEx/UPS/USPS/Other

**FED EX & UPS use this address:**

**Fortes Laboratories 25749 SW Canyon Creek Rd,  
Suite #600, Wilsonville, Oregon 97070**

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# Meth Lab Decontamination

## Confirmation “Clearance” Sampling

6. **Air Distribution System and Ventilation System(s)** - At a minimum, one 100 cm<sup>2</sup> wipe sample must be collected and analyzed from the ductwork directly inside the inlet of the air distribution system and each ventilation system.
7. **Removable Items and Surfaces** - At a minimum, one 100 cm<sup>2</sup> wipe sample must be collected and analyzed from all surfaces in the cooking area (ceiling, floor, & each wall), each room/area at the site, each room/area served by the air distribution system, and from all removable items that the property owner would like to retain.

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Method	Chemical	Sample Type	Decontamination Standard
P2P	Lead (total) <sup>1</sup>	Surface Area Wipe	Less than or equal to 40µg/ft <sup>2</sup>
	Mercury <sup>2</sup>	Air	Less than or equal to 300 ng/m <sup>3</sup>
	Methamphetamine <sup>3</sup>	Surface Area Wipe	Less than or equal to 0.1µg/100cm <sup>2</sup>
	Total VOCs <sup>4</sup>	Air*	Less than or equal to 1 ppm
Ephedrine/ Pseudoephedrine Reduction	Methamphetamine <sup>3</sup>	Surface Area Wipe	Less than or equal to 0.1µg/100cm <sup>2</sup>
	Total VOCs <sup>4</sup>	Air*	Less than or equal to 1 ppm
Unknown	Lead (total) <sup>1</sup>	Surface Area Wipe	Less than or equal to 40µg/ft <sup>2</sup>
	Mercury <sup>2</sup>	Air	Less than or equal to 300 ng/m <sup>3</sup>
	Methamphetamine <sup>3</sup>	Surface Area Wipe	Less than or equal to 0.1µg/100cm <sup>2</sup>
	Total VOCs <sup>4</sup>	Air*	Less than or equal to 1 ppm

(1) Units in micrograms of lead per square foot

(2) Units in nanograms of mercury per cubic meter of air

(3) Units in micrograms of meth per 100 square centimeters

(4) Units in parts per million

\*Air from plumbing trap

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# Alternatives to Cleanup

## Demolition

1. An asbestos inspection must be completed prior to demolition on all properties.
2. All other demolition debris to be removed from the property needs to be taken to a municipal solid waste landfill or stored onsite in a locked dumpster until it can be taken to the landfill.



## Fire Training Burn

1. An asbestos inspection must be completed prior to the fire training burn on all properties.
2. The property can be used for a fire training burn by obtaining permits from the NDEQ, the State Fire Marshall, and the local fire department.





# Meth and Your Health

## Personality/Physical changes:

- Short-term: breathing issues, skin irritation, headaches, nausea and dizziness, scabs on skin, strong chemical body odor, unusual obsessive/repetitive or aggressive behavior, and paranoia/delusions.
- Long-term: loss of weight, withdrawal from activities, rotting teeth, liver and kidney damage, neurological problems, and an increased risk of cancer.

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**Ingestion.** Toxic chemicals can be ingested either by consuming contaminated food or beverages or by inadvertently consuming the chemicals directly. (Young children present at laboratory sites are at particular risk of ingesting chemicals.) Ingesting toxic chemicals—or methamphetamine itself—may result in potentially fatal poisoning, internal chemical burns, damage to organ function, and harm to neurological and immunologic functioning.

In addition, methamphetamine production threatens the environment. The average methamphetamine laboratory produces 5 to 7 pounds of toxic waste for every pound of methamphetamine produced. Operators often dispose of this waste improperly, simply by dumping it near the laboratory. This can cause contamination of the soil and nearby water supplies.

### What can I do?

If you suspect that someone in your neighborhood is operating a methamphetamine laboratory, report your concerns to the local police department or sheriff's office immediately. For your own safety, do not investigate the suspected laboratory or confront the occupants. In addition to the hazards discussed above, many laboratories are equipped with security devices or booby traps that could cause serious injuries or death.

### Products Used in Methamphetamine Production

Acetone  
Alcohol (isopropyl or rubbing)  
Anhydrous ammonia (fertilizer)  
Ephedrine (cold medications)  
Ether (engine starter)  
Hydrochloric acid (pool supply)  
Iodine (flakes or crystal)  
Kitty litter  
Lithium (batteries)  
Methanol (gasoline additive)  
MSM (nutritional supplement)  
Pseudoephedrine (cold medications)  
Red phosphorus (matches or road flares)  
Salt (table or rock)  
Sodium hydroxide (lye)  
Sodium metal  
Sulfuric acid (drain cleaner)  
Toluene (brake cleaner)  
Trichloroethane (gun cleaner)

### Equipment Used in Methamphetamine Production

Aluminum foil	Pails and buckets
Blenders	Paper towels
Cheesecloth	Plastic storage containers
Clamps	Propane cylinders
Coffee filters	Rubber gloves
Funnels	Rubber tubing
Gas cans	Strainers
Ice chests	Tape
Jugs and bottles	Tempered glassware
Laboratory beakers and glassware	Thermometer
Measuring cups	Towels and bed sheets

### Other products of interest:

- *Methamphetamine Fast Facts*
- *Crystal Methamphetamine Fast Facts*

For more information on illicit drugs check out our web site at:

[www.usdoj.gov/ndic](http://www.usdoj.gov/ndic)

National Drug Intelligence Center  
319 Washington Street, 5th Floor  
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RISS	<a href="http://ndic.riss.net">ndic.riss.net</a>
INTERNET	<a href="http://www.usdoj.gov/ndic">www.usdoj.gov/ndic</a>

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to request NDIC products**

NDIC Product No. 2004-L0559-001  
Cover photo: Snohomish Regional Drug Task Force (WA)

# Methamphetamine Laboratory IDENTIFICATION and HAZARDS Fast Facts



## Questions and Answers



National Drug Intelligence Center  
a component of the  
U.S. Department of Justice



## What is a methamphetamine laboratory?

A methamphetamine laboratory is an illicit operation that has the apparatus and chemicals needed to produce the powerful stimulant methamphetamine. (See list of products and equipment.) These laboratories vary dramatically in size and output. Large laboratories, known as super labs, produce 10 pounds or more of the drug per production cycle. Much smaller laboratories—sometimes called box labs—produce as little as an ounce or less of the drug and are small enough to fit in a box or backpack.

## How common are they?

Methamphetamine laboratories are increasingly prevalent throughout the United States. In 2002 more than 7,500 laboratories were seized in 44 states, according to the Drug Enforcement Administration (DEA) El Paso Intelligence Center National Clandestine Laboratory Seizure System. While methamphetamine production remains most common in the western portion of the United States—particularly California—seizures of methamphetamine laboratories in the west central part of the country have become more commonplace.

## Where are methamphetamine laboratories found?

Methamphetamine laboratories may be located virtually anywhere. Laboratories have been found in secluded rural areas as well as in residential, commercial, and industrial districts. Law enforcement officers have

seized laboratories at private residences, commercial properties, hotels and motels, and outdoor locations. Mobile laboratories have been discovered in automobiles, boats, and luggage.

## What are the signs that a methamphetamine laboratory may be present?

The following, often in combination, may indicate the presence of a methamphetamine laboratory:

- Unusual odors (ether, ammonia, acetone, or other chemicals)
- Excessive amounts of trash, particularly chemical containers (see list of products and equipment), coffee filters or pieces of cloth that are stained red, and duct tape rolls
- Curtains always drawn or windows covered with aluminum foil or blackened on residences, garages, sheds, or other structures
- Evidence of chemical waste or dumping
- Frequent visitors, particularly at unusual times
- Extensive security measures or attempts to ensure privacy (no trespassing or beware of dog signs, fences, large trees or shrubs)
- Secretive or unfriendly occupants

## What hazards are associated with them?

The chemicals used to produce methamphetamine are extremely hazardous. Some are highly volatile and may ignite or explode if mixed or stored improperly. Fire and explosion

pose risks not only to the individuals producing the drug but also to anyone in the surrounding area, including children, neighbors, and passersby.

Even when fire or explosion does not occur, methamphetamine production is dangerous. Simply being exposed to the toxic chemicals used to produce the drug poses a variety of health risks, including intoxication, dizziness, nausea, disorientation, lack of coordination, pulmonary edema, serious respiratory problems, severe chemical burns, and damage to internal organs.

**Inhalation.** Inhaling chemical vapors and gases resulting from methamphetamine production causes shortness of breath, cough, and chest pain. Exposure to these vapors and gases may also cause intoxication, dizziness, nausea, disorientation, lack of coordination, pulmonary edema, chemical pneumonitis, and other serious respiratory problems when absorbed into the body through the lungs.

**Skin Contact.** The chemicals used to produce methamphetamine may cause serious burns if they come into contact with the skin.

Chemical	Hazards
Pseudoephedrine	Ingestion of doses greater than 240 mg causes hypertension, arrhythmia, anxiety, dizziness, and vomiting. Ingestion of doses greater than 600 mg can lead to renal failure and seizures.
Acetone/ethyl alcohol	Extremely flammable, posing a fire risk in and around the laboratory. Inhalation or ingestion of these solvents causes severe gastric irritation, narcosis, or coma.
Freon	Inhalation can cause sudden cardiac arrest or severe lung damage. It is corrosive if ingested.
Anhydrous ammonia	A colorless gas with a pungent, suffocating odor. Inhalation causes edema of the respiratory tract and asphyxia. Contact with vapors damages eyes and mucous membranes.
Red phosphorus	May explode as a result of contact or friction. Ignites if heated above 260°C. Vapor from ignited phosphorus severely irritates the nose, throat, lungs, and eyes.
Hypophosphorous acid	Extremely dangerous substitute for red phosphorus. If overheated, deadly phosphine gas is released. Poses a serious fire and explosion hazard.
Lithium metal	Extremely caustic to all body tissues. Reacts violently with water and poses a fire or explosion hazard.
Hydriodic acid	A corrosive acid with vapors that are irritating to the respiratory system, eyes, and skin. If ingested, causes severe internal irritation and damage that may cause death.
Iodine crystals	Give off vapor that is irritating to respiratory system and eyes. Solid form irritates the eyes and may burn skin. If ingested, cause severe internal damage.
Phenylpropanolamine	Ingestion of doses greater than 75 mg causes hypertension, arrhythmia, anxiety, and dizziness. Quantities greater than 300 mg can lead to renal failure, seizures, stroke, and death.

Source: DEA Office of Diversion Control.

# ANY QUESTIONS??

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# Governor Pete Ricketts

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## Vision:

Grow Nebraska

## Mission:

Create opportunity through more effective, more efficient, and customer focused state government

## Priorities:

- Efficiency and Effectiveness
- Customer Service
- Growth
- Public Safety
- Reduced Regulatory Burden

## We Value:

- The Taxpayer
- Our Team
- Simplicity
- Transparency
- Accountability
- Integrity
- Respect

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# DHHS Accomplishments

- Completed 19 of 25 initiatives in last years' Business Plan and made substantial progress on the others. Over 93% of the 213 deliverables were completed.
- Implemented Heritage Health, Medicaid's managed care program integrating physical, behavioral and pharmacy health services.
- Launched the Behavioral Health System of Care for children and youth, integrating services and supports for those with a serious emotional disturbance through collaboration with public and private partners. Youth Mobile Crisis Response was the first service available statewide.
- Improved Economic Assistance ACCESSNebraska average call wait times from nearly 24 minutes in August 2014 to under the goal of five minutes.
- Since April 2016, ACCESSNebraska has exceeded the federal standard to process 95% of SNAP applications on time, consistently processing 98%-99% on time.
- Expanded Medicaid services for at-risk youth, gaining federal approval for multi-systemic therapy and functional family therapy.
- Established a Family Focused Case Management pilot in North Platte and Omaha, coordinating economic assistance and child welfare services to identify barriers and help clients reach self-sufficiency.
- Developed, gained federal approval for, and implemented Medicaid Developmental Disabilities Home and Community-Based Services waivers focused on person-centered, customer-focused planning.
- Reviewed all individuals on the Developmental Disability Registry of Unmet Needs to better determine service needs, funding source, and utilization data.
- Expanded the use of Alternative Response, which addresses the needs of families with less severe reports of child abuse and/or neglect so they avoid further involvement in the child welfare system, to 57 Nebraska counties.
- Developed a Medicaid Long Term Services and Supports redesign plan outlining opportunities for improvement and integration of services.
- Expanded access to, and enhanced use of, the Prescription Drug Overdose Prevention and Prescription Drug Monitoring program by providers.
- Created a more user friendly application process for Developmental Disability services, reducing the number of pages from 14 to 3, and slashing the wait time to determine eligibility from 69 days to 14.
- Developed a Centralized Data System across behavioral health system partners, allowing for improved data analysis and service planning for children and adults.
- Achieved national accreditation for the Division of Public Health, meeting national standards and increasing accountability and continuous improvement.
- Simplified licensing applications, streamlined screening, and shortened turnaround times for nurse, medication aide, and other licensees. The medication aide process decreased from 39 to nine days.

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# DHHS 2017-2018 Priorities

- Increase availability of community-based services through the Behavioral Health System of Care for children and youth, reducing reliance on inpatient and residential services.
- Keep families together by stabilizing and strengthening families, helping prevent intergenerational poverty and achieving self-sufficiency.
- Establish the Beatrice State Developmental Center as a statewide resource providing short term intervention and respite services for individuals with developmental disabilities.
- Develop a standardized assessment and transition plan as part of the Medicaid managed care Long-Term Services and Supports Redesign initiative.
- Decrease the amount of time that elapses between when an individual accepts a funding offer for developmental disability services and when services begin.
- Increase the participation of pharmacies and enrollment of eligible users in the Prescription Drug Monitoring Program, and develop and implement naloxone education resources.
- Safely prevent and reduce the percent of state wards in out-of-home placements by implementing best-practice interventions and services.
- Implement Alternative Response statewide, resulting in families engaged with Alternative Response more likely to have their children remain in their home six months after case closure than families in Traditional Response.
- Develop and implement a web-based portal for caseworkers to use when completing a caregiver survey with foster parents in their home, saving 15 minutes per survey.
- Launch an electronic benefits transfer pilot for the WIC program, known as eWIC, that will offer flexibility and individualized nutrition education to families as well as providing additional data for program management.
- Reduce single state audit findings and questioned costs.
- Develop a web portal and implement changes to the child and adult abuse central registry to improve timeliness and accuracy of background checks.
- Improve the integration of community-based behavioral health treatment and fiscal data through the Centralized Data System and Electronic Billing System.
- Develop the data management analytics system and claims broker services as part of the Medicaid Management Information System replacement project.
- Implement NTRAC, a new Medicaid eligibility and enrollment system to ensure compliance with federal requirements.
- Decrease the average days waiting for admission to the Lincoln Regional Center for both court-ordered individuals and mental health board-committed individuals.
- Develop and implement a quality management system for developmental disability home and community-based services and intermediate care facility services.
- Streamline operations to reduce new hire turnover and the average length of time from job posting to job offer, and to consolidate document imaging and interactive voice technologies.
- Decrease time for issuing provisional center-based child care program licenses and initial certification for community-based developmental disability provider agencies.
- Review child care and preschool regulations to determine modifications to reduce regulatory burden and make them clearer.

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