

Methamphetamine

Speed for the 21st Century

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Scripps Mercy Trauma

San Diego, CA

Meth: History

- ***WWII - fatigued GI'S***
- ***Korea - meth and heroin***
- ***1960'S - used iv ~ LSD***
- ***1970'S - biker gangs***
- ***1990'S - Mexican supply***

Meth: Production

Precursors

- ***Ephedrine***
- ***Pseudoephedrine***
- ***Red phosphorus***
- ***Hydrochloric acid***

Meth: Sale

- ***Easy to make, sell, and buy***
- ***Cheaper than cocaine***
- ***Mexican connection***
- ***Readily available***
- ***It's everywhere***

Meth: Users

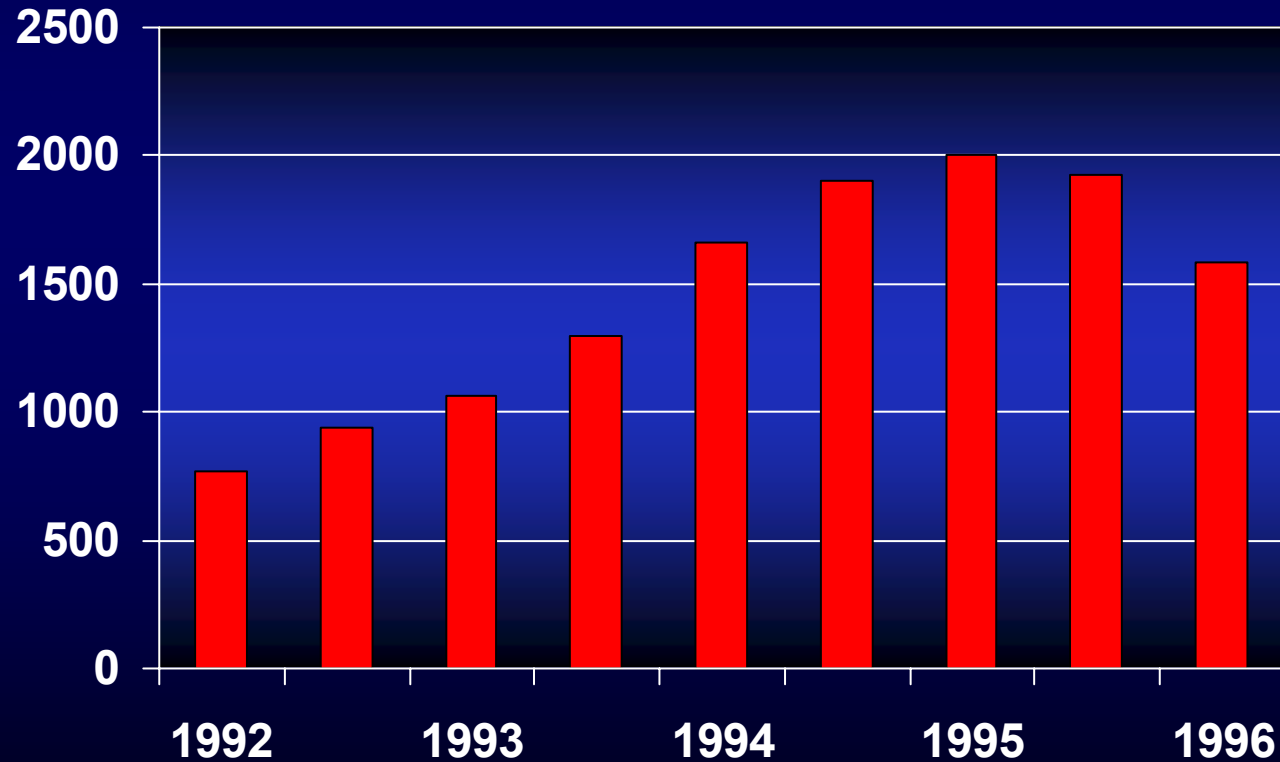
- ***Before - blue collar
white men***
- ***Now - women, teens,
college age, older men,
minorities***

Meth: Users

***42 yr old construction worker
driving in fast lane I-8, slumps
over the wheel, drives into
median divide.***

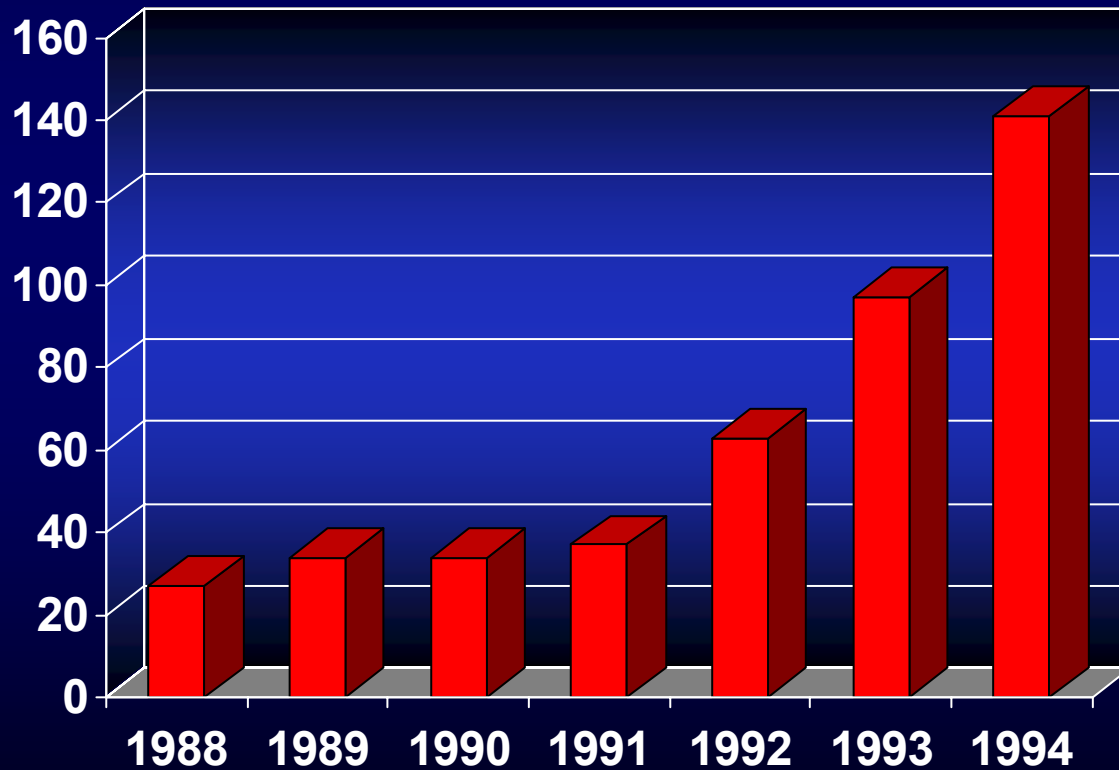
***Bystander CPR - brought to the
Trauma Center***

METH ADMSSIONS *SAN DIEGO COUNTY*



→ *2003*

METH: MEDICAL COSTS *CALIFORNIA HOSPITALIZATIONS*



→ *2003*

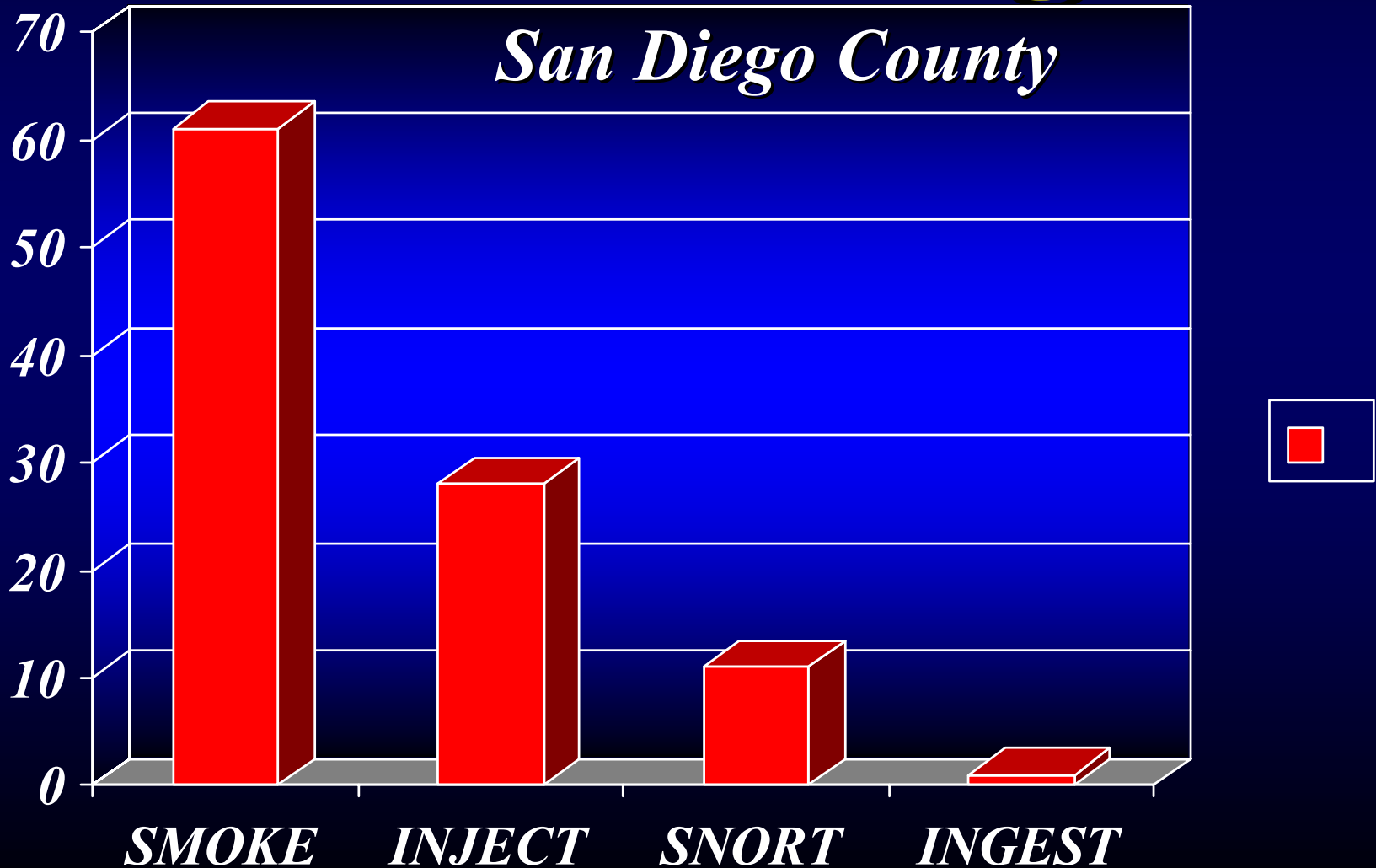
Meth: the drug

- ***Desoxyn***
- ***Amphetamine class***
- ***DEA Class II***
- ***Rx: obesity, ADD,
narcolepsy***

Meth: the drug

- ***Ingested – 1 to 3 hours***
- ***Snorted – rapid onset***
- ***Smoked - immediate***
- ***Injected - immediate***

Meth: the drug



Meth: the drug

- ***Fat soluble***
- ***Well absorbed by mouth***
- ***Liver degrades it***
- ***Kidneys excrete it***

Meth: the drug

- ***Meth and metabolites active & excreted***
- ***Meth → amphetamine***
- ***Half life = 10 – 30 hours***

Meth: the drug

- ***Acts like cocaine***
- ***Alters brain chemistry***
- ***Excites nerve cells***
- ***Prolonged high***

Meth: the drug

d-Meth

- ***Most common form***
- ***Ephedrine method***
- ***Very powerful effects***

Meth: the drug

d-Meth

- ***Releases adrenalin***
- ***Dopamine “high”***
- ***Depletes both chemicals***

Meth: the drug

Profound effects...

- ***Racing heart beat,
high blood pressure***
- ***Dilated pupils, sweating***
- ***Psychotic behavior***

Meth: Users

***28 yr old man frequent meth user
jumps from a freeway overpass
when his girl friend leaves him...***

Meth: Users

***Back and ankle fractures
three operations, months
of rehabilitation...***

Meth: Users

***25yr old mother of two, Meth O.D.
stroke, heart attack, dead bowel.***

***To O.R., ICU, for days of care -
eventual brain death.***

Meth: Toxicity

- ***Stroke***
- ***Heart attack***
- ***Paranoid psychosis***
- ***Seizures***
- ***Hyperthermia***

Meth: Toxicity

- ***Malignant hyperthermia***
- ***Thermal – positional asphyxiation:***
death in custody

Meth: Tolerance

- ***Develops rapidly***
- ***Neurochemical depletion***
- ***High doses tolerated***
- ***“Highs” decreased***
- ***Psychosis risk grows***

Meth: Users

***26 yr old male student -
low speed car crash,
cuts and abrasions.***

Drug screen - Crystal Meth

Meth: Use patterns

Low intensity

- ***Swallow or snort***
- ***Weight loss, fatigue***
- ***Teens, shift workers,
truck drivers***

Meth: Users

*30 yr old gay man bingeing on Meth,
left leg turns cold and numb, waits
two days.*

*In E.R. - no blood flow to leg, to O.R.
twice - leg saved , poor prognosis*

Meth: Use patterns

Binge users

- ***Addicted***
- ***Smoke or inject***
- ***Stage: rush, high, tweaking, crash***

Meth: Use patterns

High intensity

- ***Repeatedly binge***
- ***Try to prevent crash***
- ***Weight loss, pale skin
sweating, skin sores***

Meth: Use patterns

Dangerous tweakers

- ***Keep your distance***
- ***Don't shine bright lights***
- ***Move, speak slowly***
- ***Keep the tweaker talking***

Meth: Addiction

- ***Not like other drugs***
- ***Mainly psychological***
- ***Profound depression***
- ***Usually restart Meth***

Meth: Toxic waste

- ***Precursors toxic***
- ***Meth labs covert***
- ***“Toxic dumps”***
- ***Long term impact***
- ***\$\$\$millions clean up***

Meth: Diagnosis

- ***High index of suspicion***
- ***Vital signs, appearance***
- ***Mental status – tweaking***
- ***Drug screen – ⊕'ve 2-3 days***

Meth: Treatment

- *Mild intoxication*
reassurance, quiet
- *Moderate – Valium*
- *Overdose – **Emergency!***

Meth: Treatment Overdose

- ***ABC's – call 911***
- ***Control blood pressure***
- ***Agitation – Valium***
- ***Fever – Dantrolene***

Meth: Treatment Overdose

- ***Keep patient hydrated***
- ***Acidify the urine***
- ***Watch for psychosis***

Meth: Prognosis Poor!

- ***Less than 10% quit***
- ***High death rate***
- ***Many complications***

Meth means death

- ***Severe medical effects***
- ***Psychotic behavior***
- ***Child abuse – neglect***
- ***Violent results***

Meth: Users

***35yr old man shot in the head
and face during robbery by
three neighbors on meth...***

Meth: Users

***42 yr old man, unemployed, on
Meth and alcohol, drives wrong
way on I-8, head on collision...***

He breaks leg, arm;

***other car - mother, 2 teenage
sons Christmas shopping, dead
at scene...***

Meth:

The worst of it...

Meth: Pregnancy

- ***Growth retardation***
- ***Prematurity, lethargy***
- ***Late effects: dystonia
learning disabilities***

Meth: Child abuse

- ***Meth = neglect, abuse***
- ***Children exposed***
- ***Toxic environment***
- ***Unbelievable results...***

METH

MEANS

DEATH...

METH

***What can we
do about it?***

METH

***For every complex social
problem there is a simple,
elegant solution
that is just plain wrong...***

METH

***Community problems are
solved by communities...***

everybody has a role...

Meth: Strategy

- ***National – precursor control***
- ***State – drug labs, dealers***
- ***Local – prevention
intervention, treatment***

Meth: Strategy

- ***Prevention***
- ***Intervention***
- ***Treatment***
- ***Interdiction***
- ***Apprehension***
- ***Incarceration***

Meth: Strategy

*Who pays for
all this?*

Meth: Strategy?

Prevention

Interdiction

Intervention

Apprehension

Treatment

Incarceration

San Diego County Meth Strike Force

- *Multi-agency*
- *Public and private sectors*
- *Collaborative*
- *Community resources*
- *Service based leadership*
- *National Model*

Meth: Strategy

Who pays?

*San Diego
County*

1998

● Alcohol and
drug abuse
\$3.9 billion

Meth: Strategy

***Anyone for cutting
government spending?***

***Prevention – a business
plan with a +’ve ROI***

Meth: Strategy

Intervention

Interdiction

Apprehension

Treatment

Prevention

Incarceration

*San Diego's
Meth Strike Force*

Meth Strike Force

- *Define the problem*
- *Create a **Meth Hot Line***
- *Include the Media*
- *Find what works*
- *Measure effectiveness*

Meth Strike Force

Report Card

- 1. Meth deaths***
- 2. ED visits***
- 3. Drug Rx admits***
- 4. Meth + arrestees***
- 5. Juveniles meth +***
- 6. Labs taken down***
- 7. Meth arrests***
- 8. Meth price etc.***
- 9. Hotline calls***
- 10. Media stories***

Meth: Prevention

- ***Homes***
- ***Schools***
- ***Streets***
- ***Businesses***
- ***Hospitals***

Meth: Users

***16 yr old male skateboarder,
falls, concussion and bruises***

Drug screen - Crystal meth

Meth: Prevention

Teenagers

- ***Talk about it***
- ***Be there every day***
- ***Consider testing***
- ***Be relentless***

***Meth: Prevention
Teenagers***

***Avoiding high risk
behavior...***

95% just being there

Meth: Prevention
Teenagers

DDE strategy

Delay, Deter, Exhaust

How do we reach teens?

- *Communication strategy?*
- *Who, when, how?*
- *What works?*
- *Signs of trouble?*

Communication strategy

- *Age appropriate*
- *Make clear rules*
- *Good role models*
- *Teachable moments*

Age appropriate message

Pre-teens

- *Complex drug facts*
- *Rehearse scenarios*
- *Myths vs. reality*

Age appropriate message

Early teens

- *Long term drug effects*
- *Focus on appearance*
- *“not everyone does it”*
- *Know their friends*

Age appropriate message

Early teens

- *Explain deadly consequences*
- *Alcohol poisoning
meth deaths*

Age appropriate message

Late teens

- *Savvy by this age*
- *Casual us vs. addiction*
- *Emphasize choice*
- *Need better information*

Age appropriate message

Better information

- ***Link with birth defects***
- ***Dangerous combinations***
- ***Future consequences***
- ***Not a victimless crime***

A few basic rules...

- *Be firm on alcohol, drugs*
- *Use teachable moments*
- *Good parental monitoring*
- *Be available, stay involved*
- *See help for problems*

Warning signs...

- *Developmental problems*
- *Inappropriate behavior*
- *School problems*
- *Depression, psychosis*

METH

***There is so much
at stake...***

METH

everybody has a role...

METH

***So much
at risk...***

