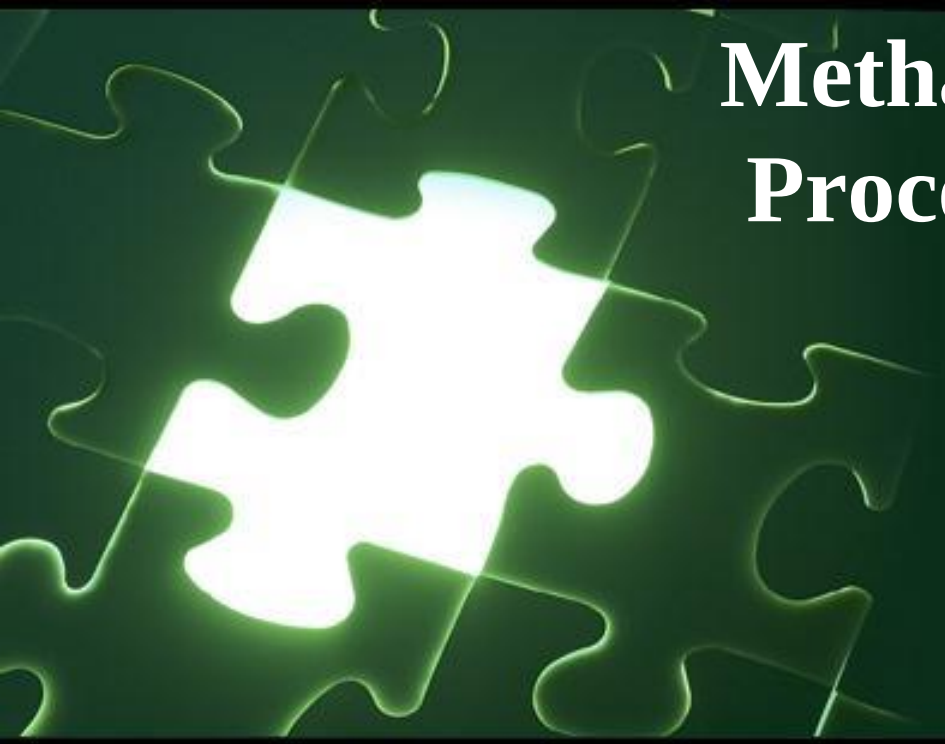
Assessing Children from Methamphetamine Homes: Process, Documentation & Preliminary Findings



Rashi K. Shukla, Ph.D. &
Kathy Bell, MS RN

University of Central Oklahoma
&
Tulsa Police Department

National DEC & CCAN Conference
Oklahoma City, Oklahoma
November 18, 2013

Objectives

1. Describe key components to an effective nursing response to children removed from methamphetamine homes

2. Provide information on how to identify appropriate evidence collection & documentation

3. Demonstrate the value of forensic observational data for understanding the well-being & needs of children removed from methamphetamine homes

How it works here

Two exam locations

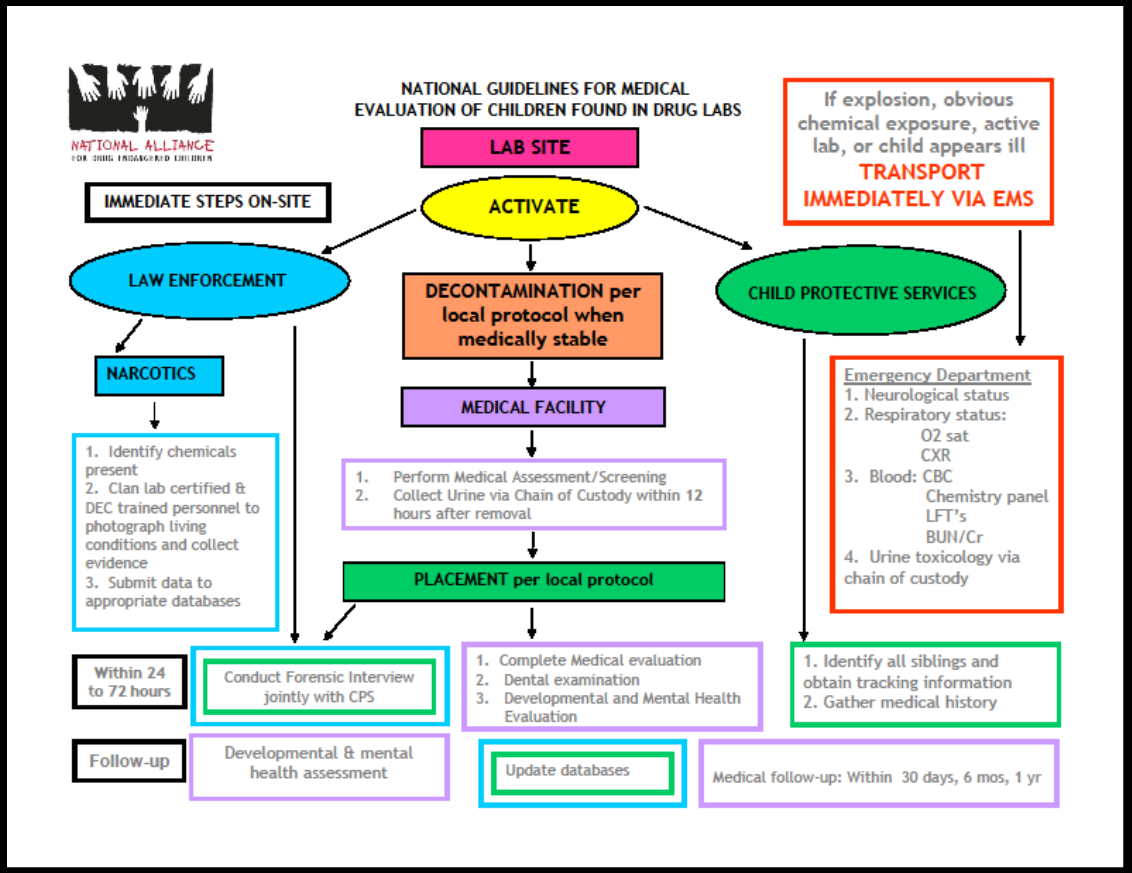
HILLCREST MEDICAL CENTER

CHILDREN'S JUSTICE CENTER

Decontamination Issues

- Transport via EMS to ED if: Fire, explosion, or if child appears ill

- Otherwise:
  - Decontaminate per local protocol


NATIONAL ALLIANCE
NATIONAL GUIDELINES FOR MEDICAL EVALUATION OF CHILDREN FOUND IN DRUG LABS
LAB SITE
If explosion, obvious chemical exposure, active lab, or child appears ill
TRANSPORT IMMEDIATELY VIA EMS
IMMEDIATE STEPS ON-SITE
ACTIVATE
LAW ENFORCEMENT
DECONTAMINATION per local protocol when medically stable
CHILD PROTECTIVE SERVICES
NARCOTICS
MEDICAL FACILITY
Emergency Department
1. Neurological status
2. Respiratory status:
O2 sat
CXR
3. Blood: CBC
Chemistry panel
LFT's
BUN/Cr
4. Urine toxicology via chain of custody
1. Identify chemicals present
2. Clan lab certified & DEC trained personnel to photograph living conditions and collect evidence
3. Submit data to appropriate databases
1. Perform Medical Assessment/Screening
2. Collect Urine via Chain of Custody within 12 hours after removal
PLACEMENT per local protocol
Within 24 to 72 hours
Conduct Forensic Interview jointly with CPS
1. Complete Medical evaluation
2. Dental examination
3. Developmental and Mental Health Evaluation
1. Identify all siblings and obtain tracking information
2. Gather medical history
Follow-up
Developmental & mental health assessment
Update databases
Medical follow-up: Within 30 days, 6 mos, 1 yr

NATIONAL GUIDELINE FOR MEDICAL EVALUATION OF CHILDREN FOUND IN DRUG LABS

PERSONNEL DECONTAMINATION
Decontamination of the children should occur prior to transport to the medical facility as medically appropriate. Basic life support takes precedence over decontamination. Removal of clothing, cleansing of the skin and hair and new clothes are the minimum requirements of decontamination.
DO NOT USE WIPES!

LAW ENFORCEMENT

Immediate

1. Document the quantity and types of chemicals present and document how found (e.g. uncapped, in tin cans), so that the exposure of the child can be determined. Document the condition of the home. Document odors and state of lab (actively cooking, deoanting stage, drying stage, etc.) Document the people at the scene and those who also reside in the home. Share this information with medical facility
2. Personnel on scene should be both clan lab and DEC certified in order to be able to accurately collect, document, and photograph the scene to aid in the child endangerment prosecution (e.g., height of chemicals, location of drugs, general state of children, guns, pornography).
3. Collect and submit all the required data to appropriate databases.
4. Transport child as per local DEC protocol in conjunction with CPS.

Within 24 to 72 hours

1. Children need to be interviewed by personnel trained in the forensically correct method for children. Coordinate this process with CPS.

Follow-up

1. Update databases as needed.

MEDICAL PERSONNEL

Symptomatic - Immediate

1. Head to toe exam of the children within 2 to 4 hours to ensure medical stability and document any acute findings that might need treatment or change over time. This may occur in an ED, physician's office or by EMTs on scene. This should include but not be limited to a good pulmonary exam, skin exam, neurologic exam, and affect (scared, happy, detached). May include observations by EMTs, RN on scene, or other personnel to document the affect of the children.
2. Collect urine for toxicology. This should happen as soon as possible but must occur within 12 hours for optimal results. Submit to a lab that screens and reports for the level of detection of the test, not just at NIDA standards. Chain of Evidence forms may be utilized or usual medical protocols for urine toxicology screens may be followed.
3. Blood tests. Can be done acutely or within 24 to 72 hours: a CBC (anemia, cancers, thrombocytopenias), Chemistry Panel to include BUN/Cr and LFT's (kidney and liver damage, electrolyte imbalances), Hepatitis B and C panels.

Asymptomatic - Within 24 to 72 hours

1. A complete medical evaluation.
2. If seen within 12 hours, collect urine for toxicology
3. Blood tests as above
4. Developmental evaluation using an age-appropriate standardized tool.
4. Mental health evaluation.
5. Dental evaluation.

Follow-Up

1. Repeat medical evaluation in 30 days, 6 mos & 1 year
2. Follow up developmental evaluations as needed based on the initial evaluations.
3. Follow up mental health interventions and assessments as needed.

EMERGENCY ACTIVATION
Transport immediately to the ED by emergency personnel if there is an explosion, active chemicals at the scene or the child appears ill i.e. fast breathing, obvious burns, lethargy or somnolence.

CHILD PROTECTIVE SERVICES

Immediate

1. Assist law enforcement in the collection and documentation of the scene from the child's perspective. Decide who will photograph scene.
2. Transport child as needed to facility as designated in your local DEC protocols.
3. Placement of children in a safe environment as per local protocol.

Within 24 to 72 hours

1. There may have been other children in the family or home who were not present at the time of the seizure. All children who have lived in the home will need to be examined and their information collected for tracking.
2. The medical histories of the children need to be investigated and documented.

Follow-up

1. Input all the gathered information into a database as determined by the local, state and national protocols.

EMERGENCY DEPARTMENT

1. Complete medical evaluation to assess acute medical needs.
2. Specific attention to the pulmonary exam as the chemicals can cause acute respiratory problems. RRs, O2 saturation and a CXR in the symptomatic child are the minimum required.
3. Blood tests as needed in addition to a CBC, Chemistry Panel to include BUN/Cr and LFTS.
4. Collect urine for toxicology. This should happen as soon as possible but must occur within 12 hours for optimal results. This should be submitted to a lab that screens and reports for the level of detection of the test, not just at NIDA standards. Chain of Evidence forms may be utilized or usual medical protocols for urine toxicology screens may be followed.

Medical Evaluation Protocol

- Child must be medically evaluated preferably within 2 but for sure within 4 hours of removal from lab site.
- Multi-disciplinary response is best
- Law enforcement, CPS to ensure safe placement of child.

P. Grant

TABLE 3
Reported signs and symptoms of methamphetamine exposure via ingestion in children

System	Findings
CNS: mental status	Irritability24,25,27
	Agitation23Q25
	Inconsolable crying24
	Hyperactivity23
	Inconsolable25
CNS: movement	Ataxia24
	Constant movement25
	Seizure24
	Flailing movements of head, neck and extremities25
	Involuntary side-to-side head turning27
Ocular	Roving eye movements24
	Cortical blindness27
Peripheral nervous system	Hyperthermia24
	Tachycardia24,25
	Hypertension25
Gastrointestinal	Vomiting20,24
Respiratory	Respiratory distress20,23
Musculoskeletal	Rhabdomyolysis24

Penny Grant
JOURNAL OF EMERGENCY NURSING 33:1 February 2007

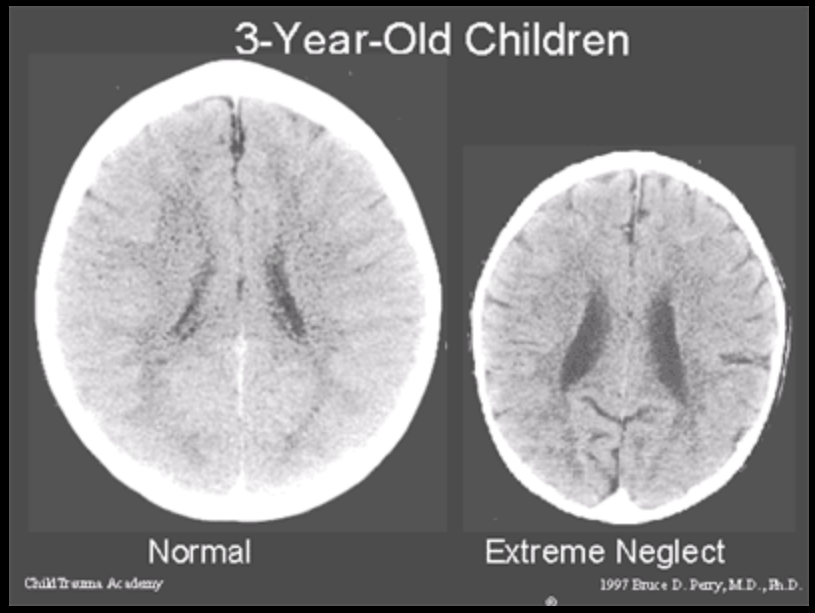
Child Abuse

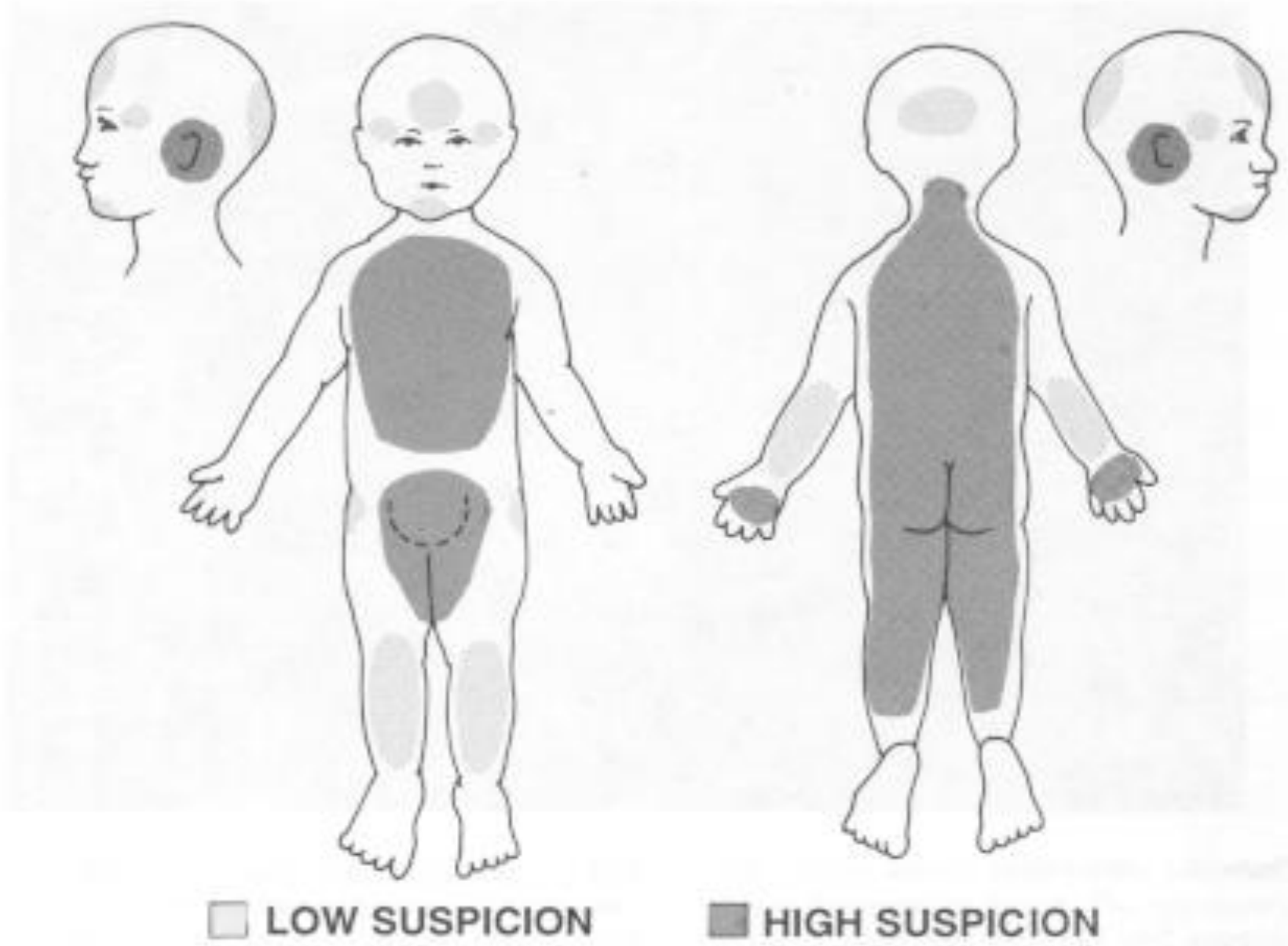
- Physical
- Emotional
- Sexual

Child Neglect:

Omission in care that results in actual or potential harm to the child .

- Physical
- Educational
- Emotional
- Medical


3-Year-Old Children
Normal
Extreme Neglect
ChildTrauma Academy
1997 Bruce D. Perry, M.D., Ph.D.


LOW SUSPICION
HIGH SUSPICION

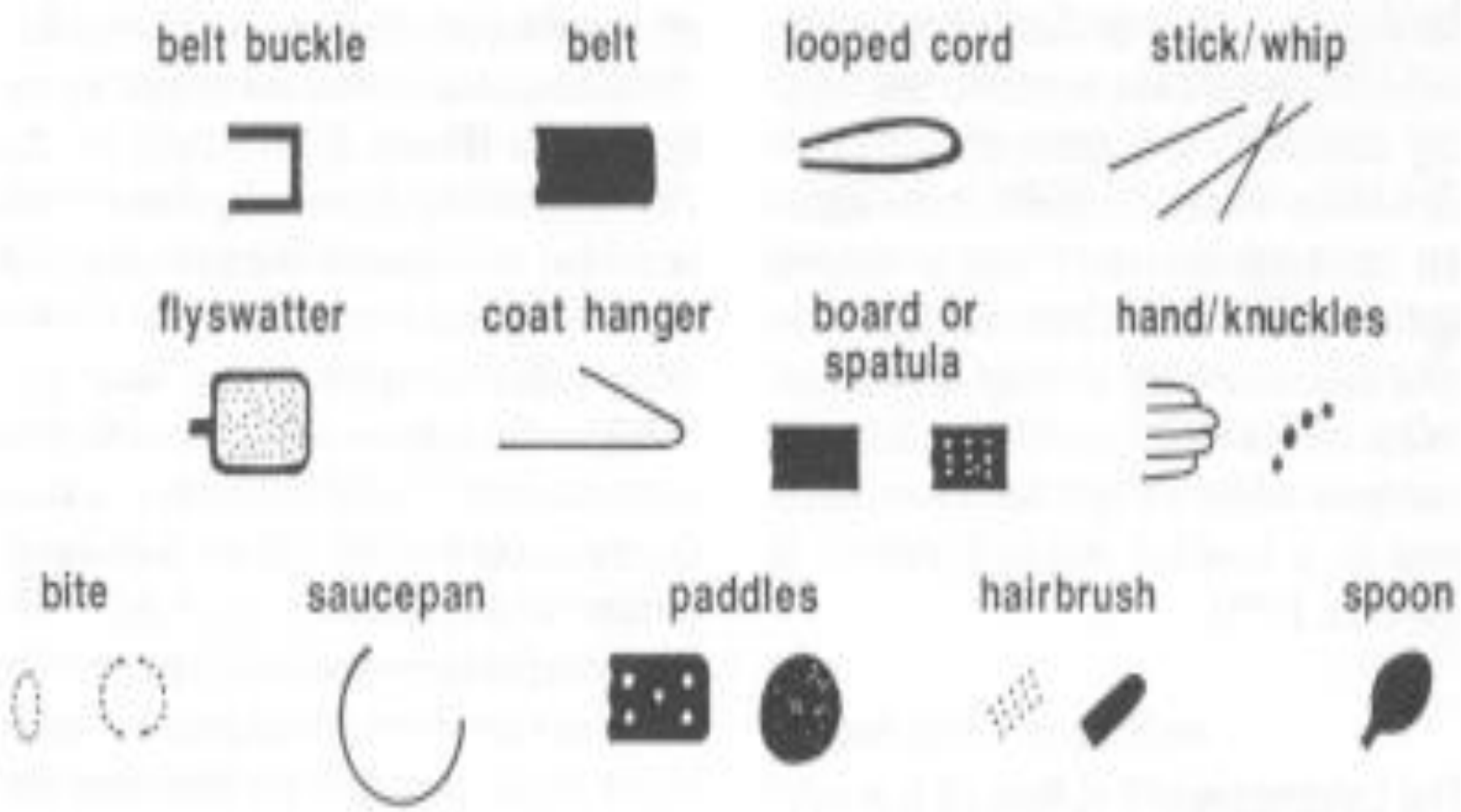
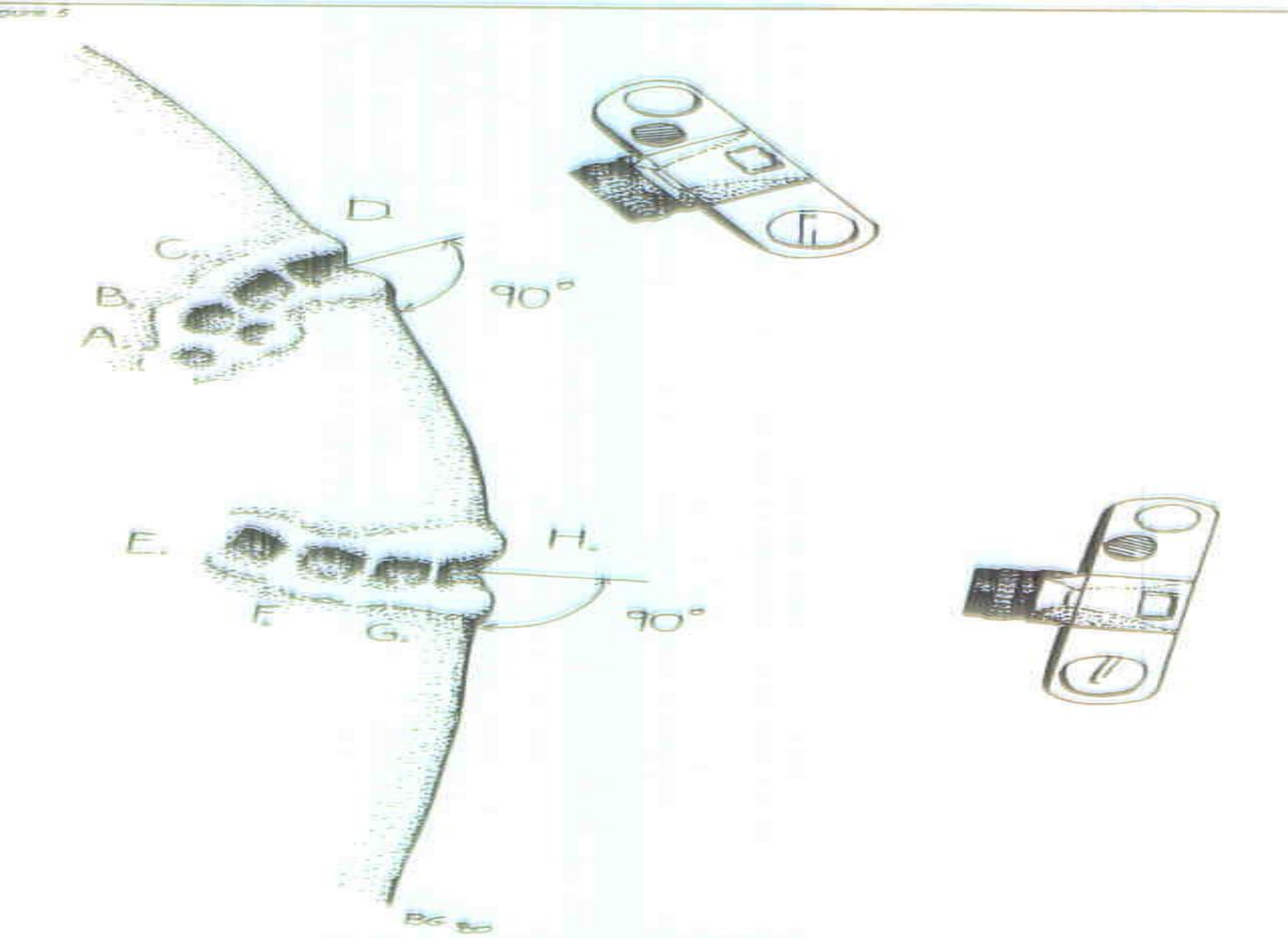
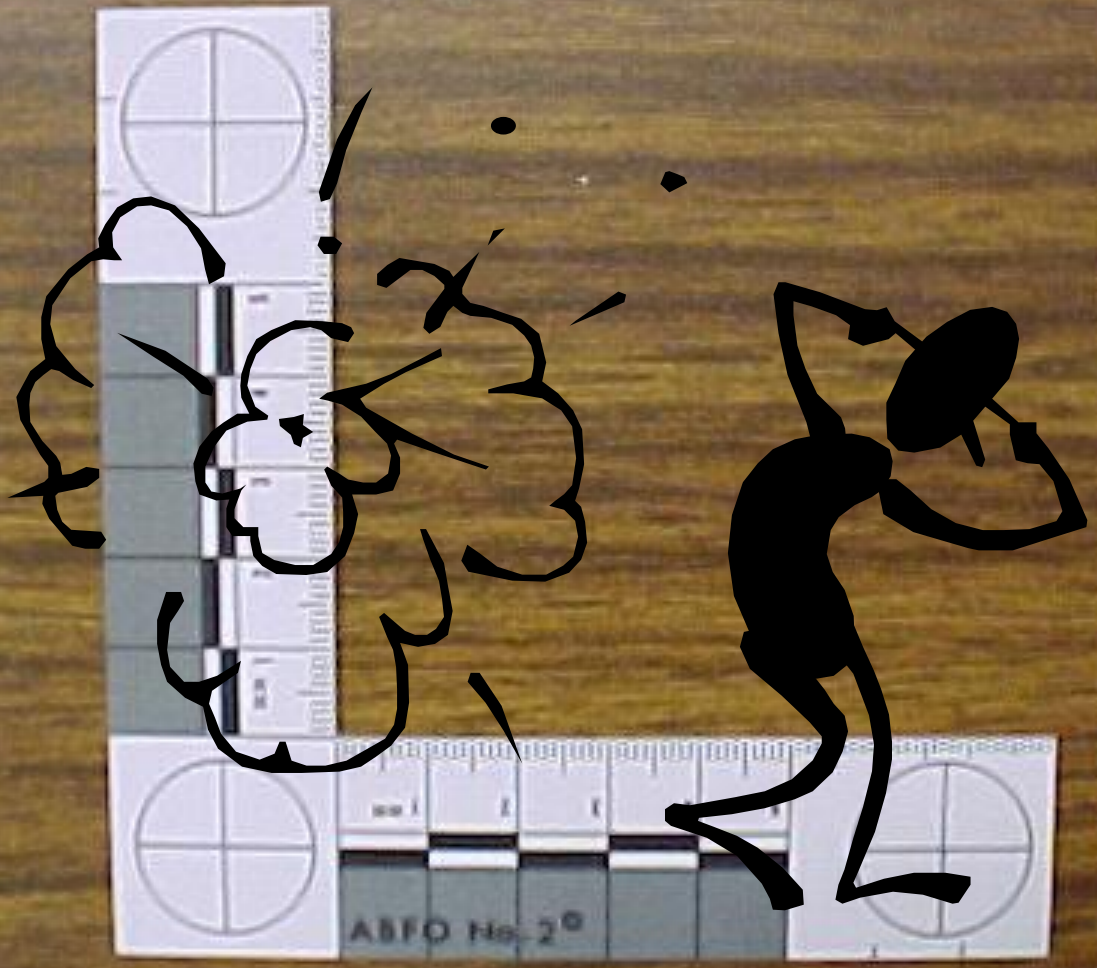


Figure 12.4. Marks From Instruments

SOURCE: Johnson (1990). Reprinted by permission of W. B. Saunders.


D
C
B
A
90°
E
H
F
G
90°



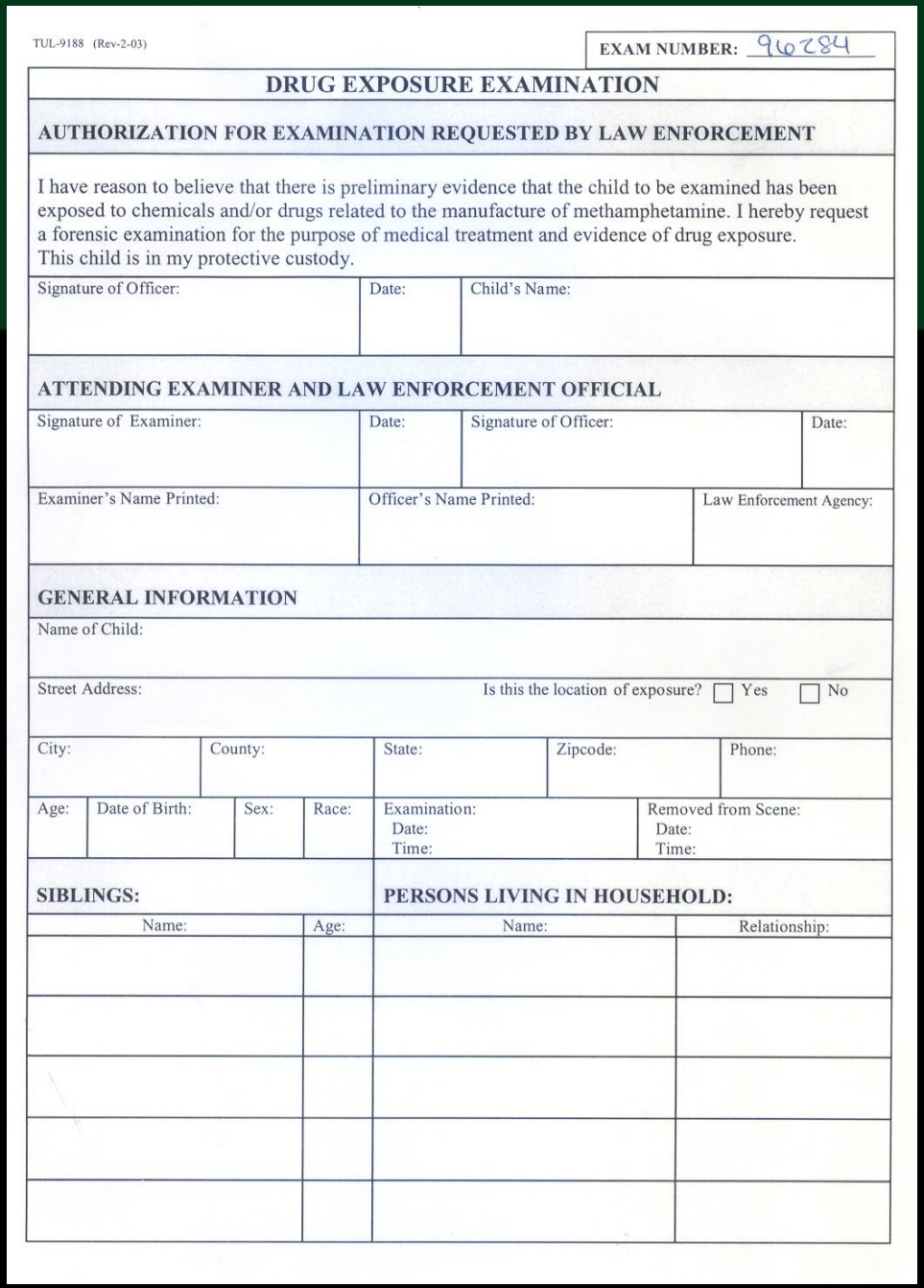
NO SCALE = NO CASE

General Observations

- Hungry
- Filthy
- Indiscriminate attachment
- Dental cavities
- Inadequate clothing

Symptomatic – Immediate

1. Head to toe exam of the children within 2 to 4 hours to ensure medical stability and document any acute findings that might need treatment or change over time. This may occur in an ED, physician's office or by EMTs on scene. This should include but not be limited to a good pulmonary exam, skin exam, neurologic exam, and affect (scared, happy, detached). May include observations by EMTs, RN on scene, or other personnel to document the affect of the children.



TUL-9188 (Rev-2-03)

EXAM NUMBER: 96284

DRUG EXPOSURE EXAMINATION

AUTHORIZATION FOR EXAMINATION REQUESTED BY LAW ENFORCEMENT

I have reason to believe that there is preliminary evidence that the child to be examined has been exposed to chemicals and/or drugs related to the manufacture of methamphetamine. I hereby request a forensic examination for the purpose of medical treatment and evidence of drug exposure. This child is in my protective custody.

Signature of Officer:	Date:	Child's Name:

ATTENDING EXAMINER AND LAW ENFORCEMENT OFFICIAL

Signature of Examiner:	Date:	Signature of Officer:	Date:

Examiner's Name Printed:	Officer's Name Printed:	Law Enforcement Agency:

GENERAL INFORMATION

Name of Child:

Street Address: Is this the location of exposure? ☐ Yes ☐ No

City:	County:	State:	Zipcode:	Phone:

Age:	Date of Birth:	Sex:	Race:	Examination: Date: Time:	Removed from Scene: Date: Time:

SIBLINGS:

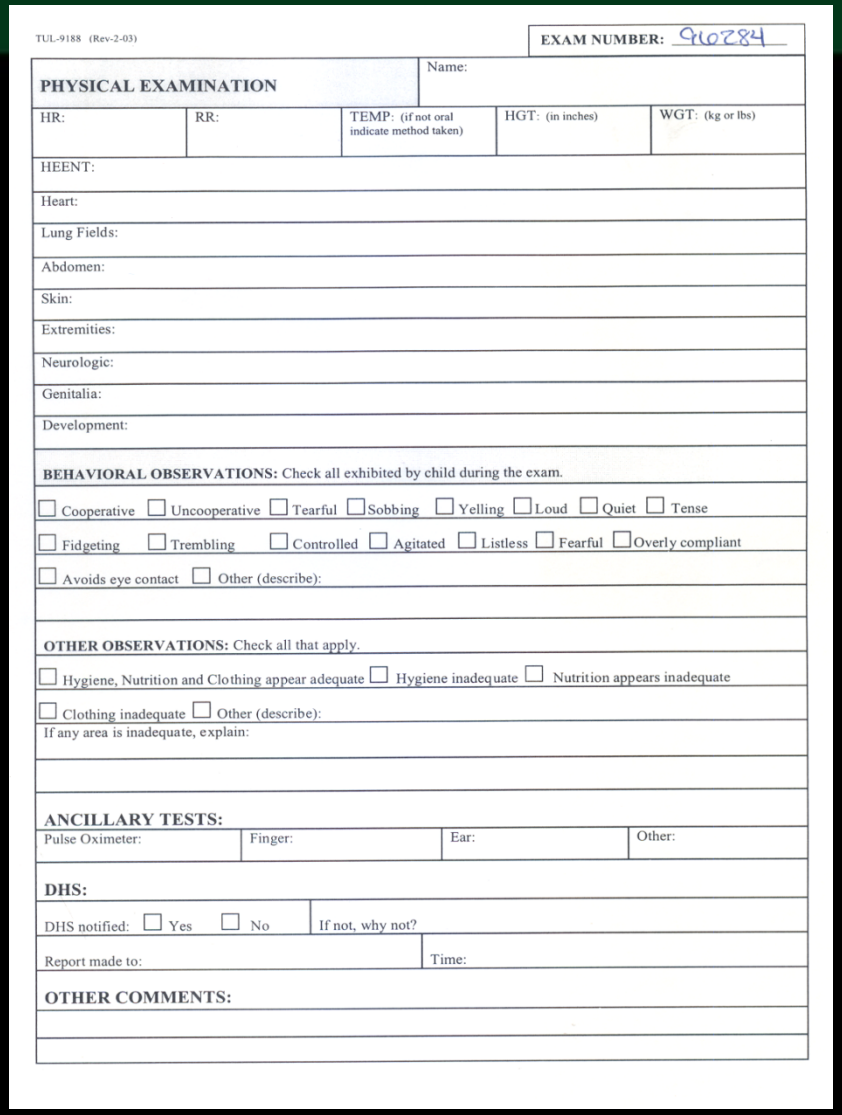
Name:	Age:

PERSONS LIVING IN HOUSEHOLD:

Name:	Relationship:

Vital Signs

resp rate, temp, heart rate



TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION | Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

DHS:

DHS notified: ☐ Yes ☐ No | If not, why not?

Report made to: | Time:

OTHER COMMENTS:

Height and Weight

TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

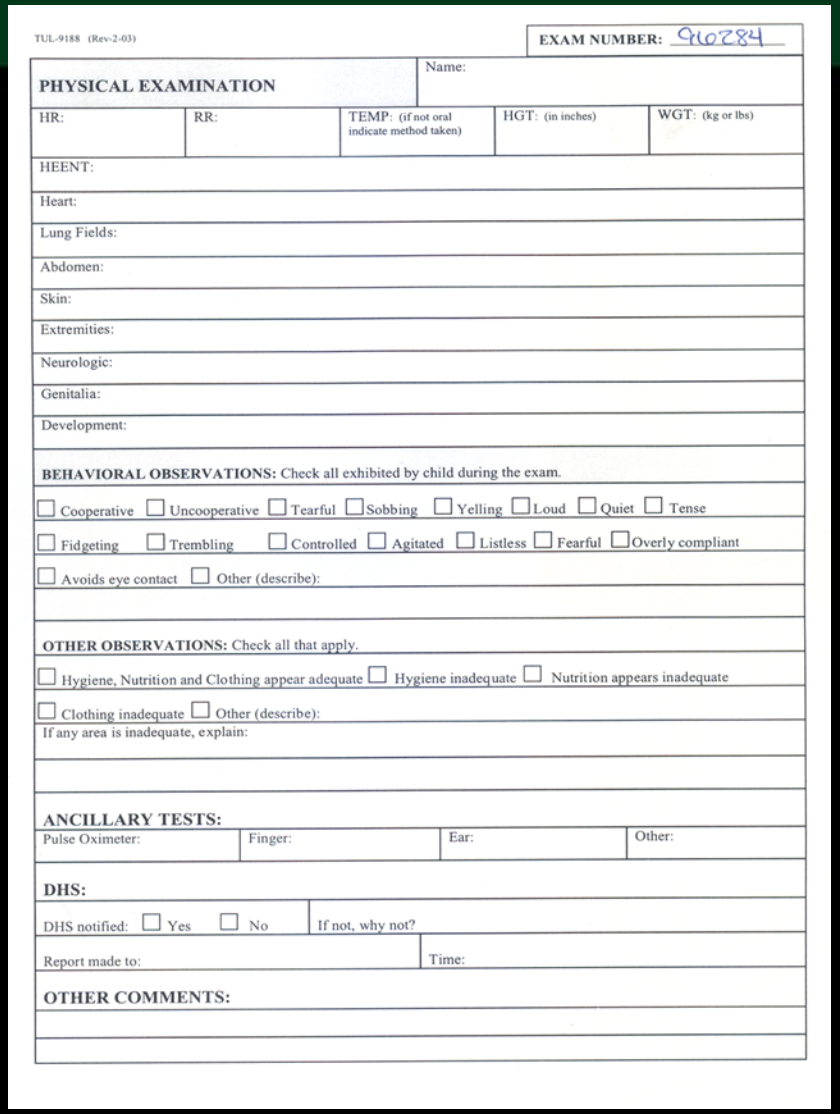
DHS:

DHS notified: ☐ Yes ☐ No If not, why not?

Report made to: Time:

OTHER COMMENTS:

HEENT



TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION

Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

DHS:

DHS notified: ☐ Yes ☐ No | If not, why not?

Report made to: | Time:

OTHER COMMENTS:

Respiratory Abnormalities

- Abnormal respiratory rate:
- Highest RR 64/min: 3 month old sent to ED dxd ARI (urine + pseudo) (unable to obtain O2 sat)
- Abnormal oxygen saturation via pulse oximetry: N=51 no child w/O2< 93%

Abdomen

Skin/Extremities

Genitalia

Sexual Abuse

- Increased libido
- Increased violence
- Pornography

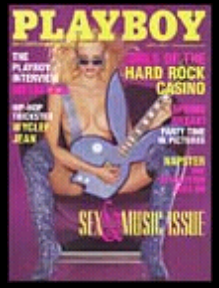

PORN STARS IN LAS VEGAS!
EROTICA
SOPHISTICATED SEX DOLL
QUINN
JULIE K. SMITH
THE BETTY PAGE
JOHN HOLMES

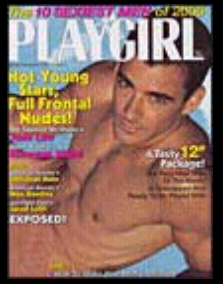

PENTHOUSE


HEAVY METAL


oui
cheri
HUSTLER

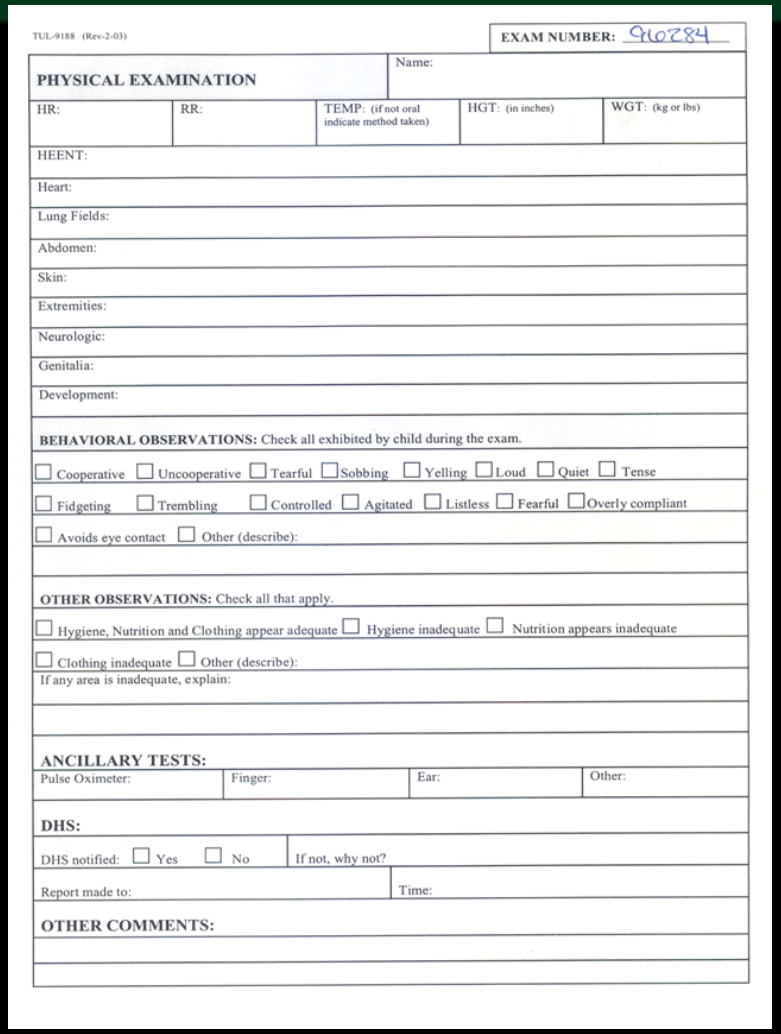

PERFECT 10
ALL NATURAL
BATTLE DOME


PLAYBOY
THE PLAYBOY INTERVIEW
HARD ROCK CASINO
SEX & MUSIC ISSUE


PLAYGIRL
Hot Young Stars, Full Frontal Nudes!
EXPOSED!

6 year old stated he “needed his privacy”

Neurologic/ Development/ Behavior



TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION | Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

DHS:

DHS notified: ☐ Yes ☐ No | If not, why not?

Report made to: | Time:

OTHER COMMENTS:

Development assessment

- Gross motor
- Fine motor
- Language
- Personal-social interaction

Development related abuse/neglect risks

- Crying
- Eating
- Sleeping
- Toilet training
- Saying no
- Crawling, walking & running

Development

- Some children have been noted to indiscriminately attach with any adult figure or are indifferent.
- Trauma of being removed from their home may cause temporary regressions in development
- Development assessment should be repeated when the child has been in a stable environment for a while so that temporary delays have had an opportunity to resolve.

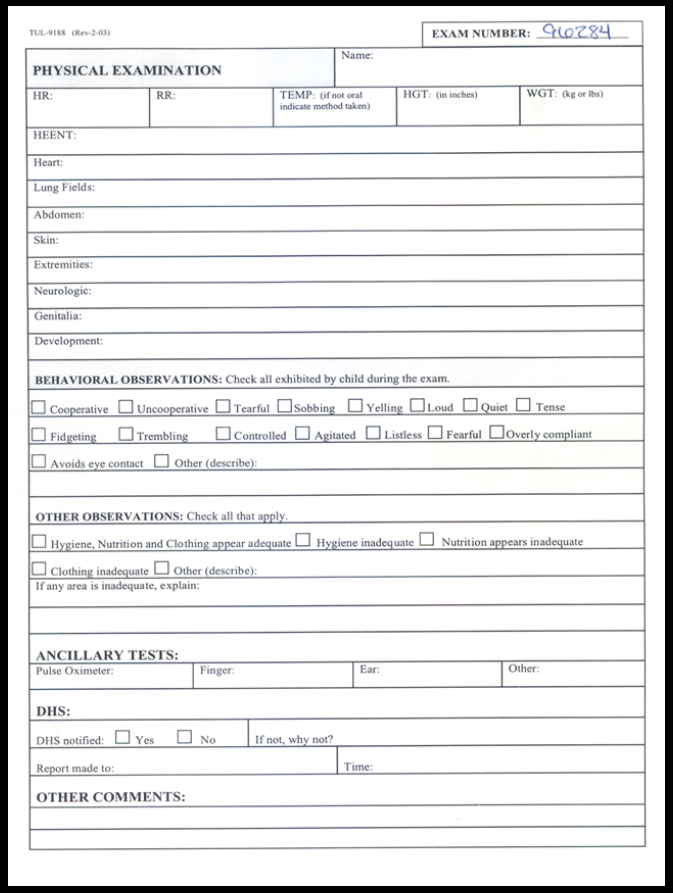
- 2 year old
  - Mine and no
- 3 year old
  - separation problems
  - cooperative
- 4 year old
  - uses language negatively
- 5 year old
  - last round of separation anxiety
- 6-7 year old
  - arrogant and flippant
  - moody and morose

Development

- N=140
- N= 38 = 27 % with developmental delay
- Speech/language most common delay identified

Penny Grant MD,
personal communication

Behavior/Demeanor



TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION | Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

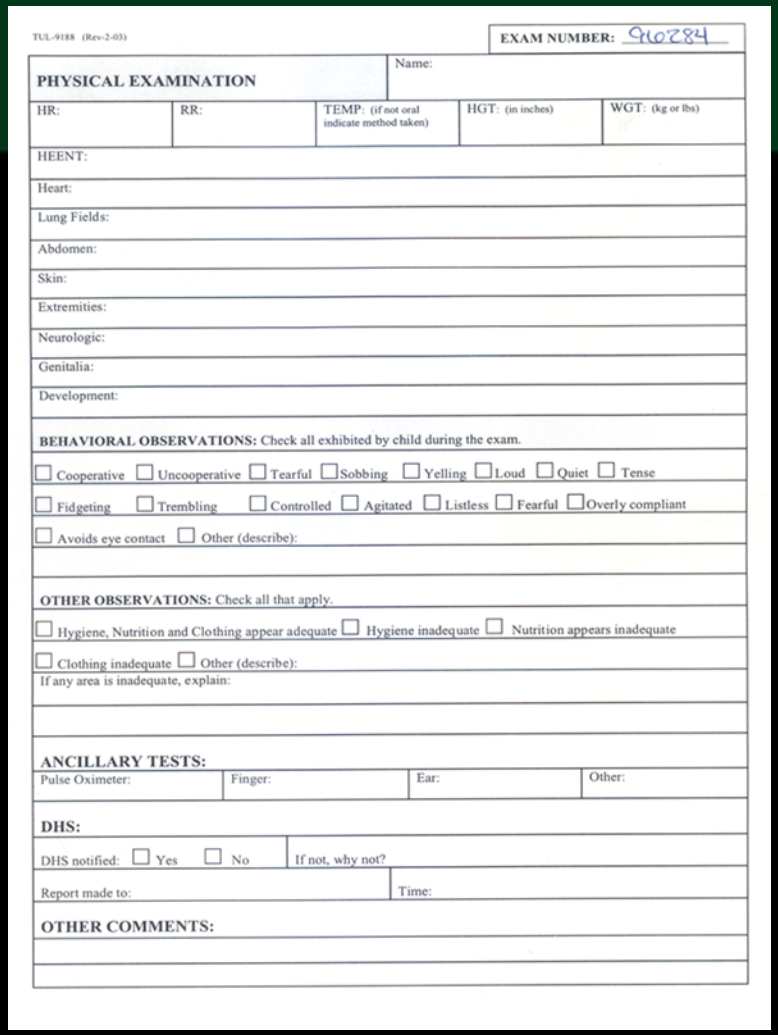
DHS:

DHS notified: ☐ Yes ☐ No | If not, why not?

Report made to: | Time:

OTHER COMMENTS:

Other Observations



TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

PHYSICAL EXAMINATION

Name:

HR:	RR:	TEMP: (if not oral indicate method taken)	HGT: (in inches)	WGT: (kg or lbs)

HEENT:

Heart:

Lung Fields:

Abdomen:

Skin:

Extremities:

Neurologic:

Genitalia:

Development:

BEHAVIORAL OBSERVATIONS: Check all exhibited by child during the exam.

☐ Cooperative ☐ Uncooperative ☐ Tearful ☐ Sobbing ☐ Yelling ☐ Loud ☐ Quiet ☐ Tense

☐ Fidgeting ☐ Trembling ☐ Controlled ☐ Agitated ☐ Listless ☐ Fearful ☐ Overly compliant

☐ Avoids eye contact ☐ Other (describe):

OTHER OBSERVATIONS: Check all that apply.

☐ Hygiene, Nutrition and Clothing appear adequate ☐ Hygiene inadequate ☐ Nutrition appears inadequate

☐ Clothing inadequate ☐ Other (describe):

If any area is inadequate, explain:

ANCILLARY TESTS:

Pulse Oximeter:	Finger:	Ear:	Other:

DHS:

DHS notified: ☐ Yes ☐ No | If not, why not?

Report made to: | Time:

OTHER COMMENTS:

TUL-9188 (Rev-2-03)

EXAM NUMBER: 960284

DRUG EXPOSURE EXAMINATION:

Child Name:

Right

Left

Left

Right

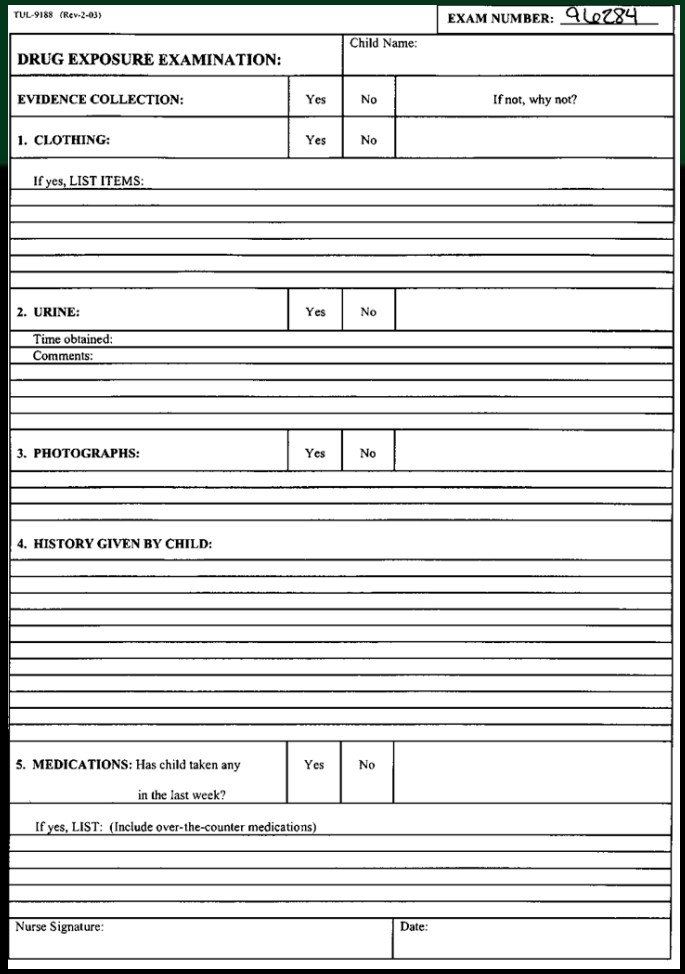
Right

Left

Left

Right

Photographs always taken



TUL-9188 (Rev-2-03)

EXAM NUMBER: 96284

DRUG EXPOSURE EXAMINATION:			Child Name:
EVIDENCE COLLECTION:	Yes	No	If not, why not?
1. CLOTHING:	Yes	No	
If yes, LIST ITEMS:			
2. URINE:	Yes	No	
Time obtained:			
Comments:			
3. PHOTOGRAPHS:	Yes	No	
4. HISTORY GIVEN BY CHILD:			
5. MEDICATIONS: Has child taken any in the last week?	Yes	No	
If yes, LIST: (Include over-the-counter medications)			
Nurse Signature:			Date:

“Film is cheap, opportunities are few”

Unknown

Photographs should have:

- Orientation shot
- Close up with scale
- Close up without scale

2. Collect urine for toxicology. This should happen as soon as possible but must occur within 12 hours for optimal results. Submit to a lab that screens and reports for the level of detection of the test, not just at NIDA standards. Chain of Evidence forms may be utilized or usual medical protocols for urine toxicology screens may be followed.

TUL-9188 (Rev-2-03)

EXAM NUMBER: 96284

DRUG EXPOSURE EXAMINATION:			Child Name:
EVIDENCE COLLECTION:	Yes	No	If not, why not?
1. CLOTHING:	Yes	No	
If yes, LIST ITEMS:			
2. URINE:	Yes	No	
Time obtained:			
Comments:			
3. PHOTOGRAPHS:	Yes	No	
4. HISTORY GIVEN BY CHILD:			
5. MEDICATIONS: Has child taken any in the last week?	Yes	No	
If yes, LIST: (Include over-the-counter medications)			
Nurse Signature:			Date:

Medical Evaluation Protocol

- Urine for methamphetamines and other drugs of abuse (*toxicology screen) should be obtained as quickly as possible; clean catch or bag.

- Do Not Cath these Kids Unless medically indicated.
  - (Convenience is not a reason)

Medical Evaluation Protocol

- Notify lab that will be performing the assay to identify ANY DETECTABLE LEVEL of drug, not to use the industrial cutoff.
  - The result in a child should be 0.

3. Blood tests.

Can be done acutely or within 24 to 72 hours:
a CBC (anemia, cancers, thrombocytopenias), Chemistry Panel to include BUN/Cr and LFT's (kidney and liver damage, electrolyte imbalances), Hepatitis B and C panels.

Asymptomatic - Within 24 to 72 hours

1. A complete medical evaluation.
2. If seen within 12 hours, collect urine for toxicology
3. Blood tests as above
4. Developmental evaluation using an age-appropriate standardized tool.
5. Mental health evaluation.
6. Dental evaluation.

Follow-Up

1. Repeat medical evaluation in 30 days, 6 mos & 1 year
2. Follow up developmental evaluations as needed based on the initial evaluations.
3. Follow up mental health interventions and assessments as needed.

Tricks of the trade

- Potty hats
- Cotton balls around the pedi bag.
- Force fluids
  - We will not cath these kids

Urine Toxicology Results

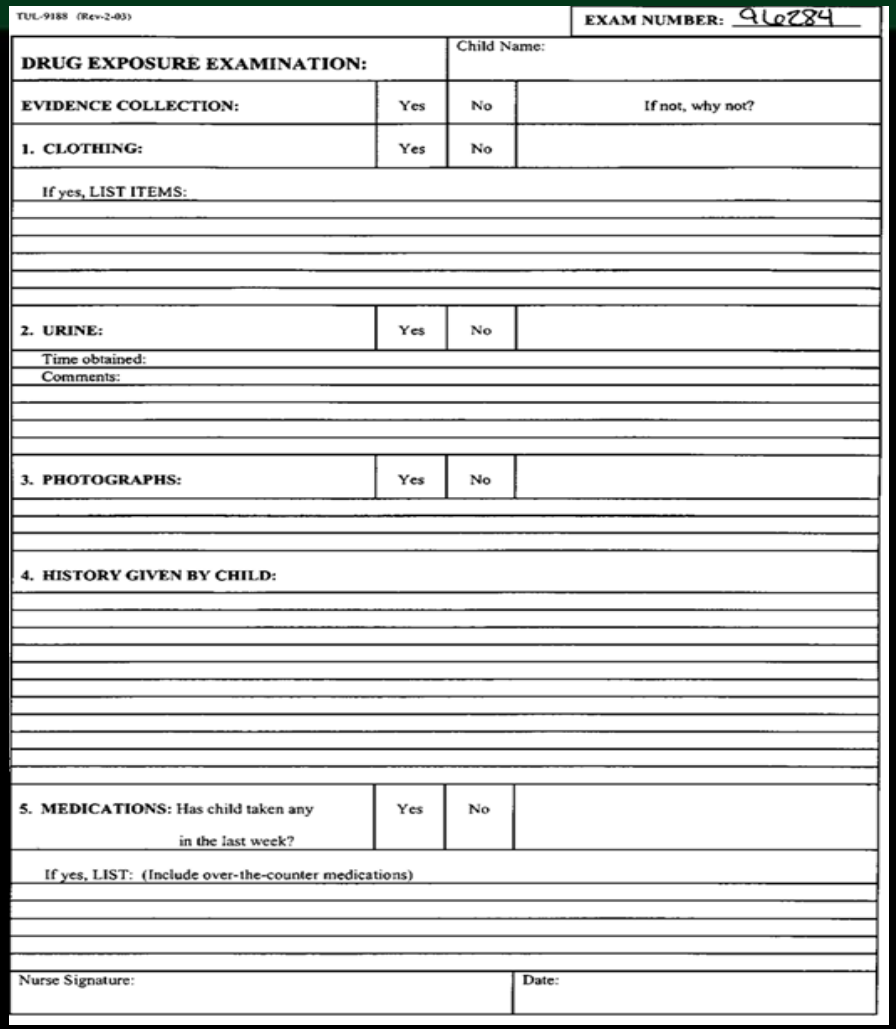
- 2000: N=21 no urine sent
- 2001: N=30: 21 samples sent: 40% + (1 pdg)
- 2002: N=50: 43 sent: 60%= 22/37 + methamphetamine, 6 + psuedo &/or ephedrine
- Jan-June 2003: N=24; (4 pdg) 89% =17/19 meth+

Oklahoma Data

- Retrospective chart review: SAS
- Children < 13 years removed from active clandestine methamphetamine laboratories
- Total children in database: 140
- Blood normative data: Harriet Lane 16th ed
- Blood work performed 34 hours mean time after removal

P. Grant

History



TUL-9188 (Rev-2-03)

EXAM NUMBER: 96284

DRUG EXPOSURE EXAMINATION:			Child Name:
EVIDENCE COLLECTION:	Yes	No	If not, why not?
1. CLOTHING:	Yes	No	
If yes, LIST ITEMS:			
2. URINE:	Yes	No	
Time obtained: Comments:			
3. PHOTOGRAPHS:	Yes	No	
4. HISTORY GIVEN BY CHILD:			
5. MEDICATIONS: Has child taken any in the last week?	Yes	No	
If yes, LIST: (Include over-the-counter medications)			
Nurse Signature:			Date:

“Top ten” list of interviewing

Preparing for Testimony

- Take good notes
- Take good notes
- Take good notes
- Take good notes
- Take good notes
- Take good notes
- Take good notes

Methamphetamine in Oklahoma: A Multi-method Study at UCO

OBNDD Lab

Lab Seizures

Oklahoma Law Enforcement Survey

Former Methamphetamine Manufacturers

Children Removed from Dwellings – Meth Manufacturing

Dimensions of the Methamphetamine Problem

Methamphetamine-related Abuse, Neglect & Death

- 2011: 3 children die when trailer catches on fire
- 2012: 5-year old burned from father's shake & bake meth lab
- 2013: Shake & bake apparatus under mattress where 2-year old sleeping

Methamphetamine as unique {DEC}

- Use
  - Highly addictive central nervous system stimulant
  - Binges / Meth psychosis
- Clandestine Manufacturing
  - Toxic & highly volatile
  - Contamination & exposure
- Methamphetamine & manufacturing at forefront of DEC movement

Emerging Literature on Methamphetamine & Children

- Prenatal exposure (Grant, 2007; Altshuler & Cleverly-Thomas, 2011)
- Health & medical risks (Arria et al., 2006)
- Poor parenting (Messina, Marinella-Casey, West & Rawson, 2006)
- Physical/sexual abuse & neglect (Hopper, 2006; Pennar et al., 2012)

Health Risks Related to Exposure

Risks of Prenatal Exposure

- Physiologic abnormalities
- Neurological damage
- Low birth weight
- Cleft lip
- Increased fetal pressure
- Cardiac abnormalities
- Fetal growth reduction

Increased Risks

- Respiratory disease
- Kidney & liver disease
- Neurological damage
- Impairment to immune system
- Cancer

Little is known about children removed from meth homes

"*Children removed from methamphetamine laboratories are a severely understudied population despite the widespread deprivation parental methamphetamine abuse has on children, particularly in homes where methamphetamine is produced*" (Pennar et al., 2012, p. 1777).

- Lack of reliable estimates of numbers exposed
- Limited comprehensive follow-up
- Short-term versus long-term effects

Present Research

- Collaborative exploratory research
  - Partially funded through UCO Regular Grant
  - Exempted IRB

- What indicators of abuse &/or neglect are evident among children removed from dwellings where manufacturing is occurring?

- What types of information can be gleaned from children's own perceptions of their situations?

Methodology

- **Data**
  - Forensic observation reports (2001-2010)
  - Children removed from dwellings where methamphetamine being manufactured

- **Preliminary Analysis**
  - Software: Excel & SPSS
  - Thematic analysis / Compare & contrast

Sample (N = 107)

Sex	• 60 Males • 47 Females
Age	• Average = 6.5 years old • 3 weeks to 16 years old
Ethnicity	• 77% Caucasian
Family	• 46% Sibling also in home • 85% Living with mother

Physical Indicators: Neglect & Poor Health

- 71% some physical marking on body
- 27% inadequate hygiene
- 14% inadequate clothing
- 6% inadequate nutrition

"What happened that you came to see me?"

4 Themes

- Neglect & Poor Health
- Knowledge: Drugs, Manufacturing – related Activities & Crime
- Antisocial or Delinquent Behaviors
- Exposure to Trauma & Violence

Increased Knowledge of Drugs & Crime

- Drug-related terminology
- Mention chemicals, needles &/or manufacturing-related activities in home (e.g., bad smell)
- Others using drugs
- Criminal activities

Antisocial & Delinquent Behavior

- Inappropriate behavior &/or language

- Admit to involvement in drugs themselves

Exposure to Trauma & Violence

- Chaotic & dangerous home environment
  - Activities in home
  - Other people in & around home
- Experiences during law enforcement encounters
- Witnessing parents &/or caregivers being handcuffed
  - Knowledge caregivers arrested &/or going to jail
  - Separation from caregivers

Limitations of Research

- Small sample size
- Single jurisdiction
- Observation at single point in time

Preliminary Conclusions

- Children provided a great deal of information about their home environment & experiences

- Special services may be required to meet the unique needs of these children
  - Risk for antisocial & delinquent behaviors

- Follow-up of children is essential & critical
- Benefits of academic-practitioner collaborations

Future Research

- Better understand the needs of these children
  - Identify short & long term impacts of exposure
- Assess needs & exposure more systematically
- How to limit potential harms to children present while maintaining public & first responder safety

Acknowledgments
Special Thanks to…

- Tulsa Police Department
- UCO Office of Research & Grants for providing funding this research
- Ms. Kathryn Letourneau for assisting with the analyses
- Research assistants Jordan Crump, Emelia Chrisco, Shannon Jackson & David Cea

References

- Altshuler, S. J., & Cleverly-Thomas, A. (2011). What do we know about drug endangered children when they are first placed into care? *Child Welfare, 90*(3), 45-68.
- Arria, A. M., Derauf, C., LaGasse, L. L., Grant, P., Shah, R., Smith, L., Lester, B. (2006). Methamphetamine and other substance use during pregnancy: Preliminary estimates from the infant development, environment, and lifestyle (ideal) study. Maternal and Child Health Journal, 10(3), 293-302.
- Bland, A. (2012, October). *Boy riding on father's bicycle handlebars burned when 'shake-and- bake' meth lab explodes*. Retrieved November 9, 2012 from http://www.tulsaworld.com/article.aspx/Boy_riding_on_fathers_bicycle_handlebars_burned_when/20121025_11_a13_cutlin419343
- Grant, P. (2007). Evaluation of children removed from a clandestine methamphetamine laboratory. *Journal of Emergency Nursing, 33*(1), 31-41.
- Hall, S. (2013, January). *Toddler found sleeping on meth lab*. Retrieved February 2, 2013 from http://www.ksdk.com/news/article/360214/28/Toddler-found-sleeping-on-meth-lab
- Harris, J. (2004). Drug-endangered children. *FBI Law Enforcement Bulletin*. 8-11. Retrieved January 21, 2013 from http://www.fbi.gov.
- Hohman, M., Oliver, R., & Wright, W. (2004). Methamphetamine abuse and manufacture: The
- child welfare response. National Association of Social Workers, Inc., 49(3), 373-381.
- Hopper, E. H. (2006). Exploring the evolution of DEC's movement and drug courts. *North Dakota Law Review, 82,* 1443-1459.

References (cont.)

- Manning, T. (1999). Drug labs and endangered children. *FBI Law Enforcement Bulletin*. 1-14.
- Messina, N., Marinelli-Casey, P., West, K., & Rawson, R. (2006). Children exposed to methamphetamine use and manufacture. *Child Abuse and Neglect*, 2007, doi: 1 0.1016/j.chiabu.2006.06.009 –
- Pennar, A. L., Shapiro, A. F., & Krysik, J. (2012). Drug endangered children: Examining children removed from methamphetamine laboratories. *Children and Youth Services Review, 34*, 1777-1785.
- Sheridan, K. (2010). *Mental health outcomes, social functioning, and the perspectives of children from methamphetamine-involved families in the rural Midwest: Challenges and strengths*. Doctoral dissertation, University of Illinois at Urbana-Champaign, 2010.
- Sprang, G., Stanton-Tindall, M., & Clark, J. 2008. Trauma exposure and the drug endangered child. *Journal of Traumatic Stress*, *21*(3), 333-339.
- Willert, T. (2012, May). *DHS worker testifies in Del City child neglect case*. Retrieved from http://newsok.com/dhs-worker-testifies-in-del-city-child-neglect-case/article/3673646
- Young, N. K. (2006). *The social and economic effects of the methamphetamine epidemic on America's child welfare system.* Testimony before the United States Senate Committee on Finance. Children and Family Futures, Inc., Irvine, CA.

Contact Information

Rashi K. Shukla, Ph.D.
Email: rshukla@uco.edu

Kathy Bell, MS, RN
Email: kbell@cityoftulsa.org