

Sexually Transmitted Diseases and Child Sexual Abuse

Portable Guides to Investigating Child Abuse

Foreword

Investigating allegations of sexual abuse of children is very difficult for law enforcement. Successful resolution of these cases is often hampered by victim reluctance or inability to communicate as well as the scarcity of corroborating evidence. While the consequences of all abuse of children are of great concern to us, sexual abuse can be particularly devastating, especially when a sexually transmitted disease is part of the tragic legacy of violation.

This guide is designed to present additional investigative techniques, utilizing the presence of a sexually transmitted disease, which will assist in identifying or eliminating suspects in sexual abuse cases. Successful investigations are crucial because they can be the gateway to treatment for victims and can help protect them from further victimization. The guide also seeks to sensitize investigators to the need for personal precautions when investigating these cases and helps them to recognize children in need of immediate medical attention.

OJJDP is proud of this offering and urges you to make use of it as we work to protect our children.

Original Printing June 1996
Second Printing July 1997
Third Printing March 2001
Fourth Printing December 2002
NCJ 160940

exually transmitted diseases (STD's) comprise a wide range of infections and conditions that are transmitted mainly by sexual activity. The

classic STD's, gonorrhea and syphilis, are now being overshadowed by a new set of STD's that are not only more common, but are also more difficult to diagnose and treat.

These new STD's include

infections caused by *Chlamydia*

trachomatis (chlamydia), human papilloma virus (HPV), bacterial vaginosis (BV), and human immunodeficiency virus (HIV). Rapid application of new technology to the diagnosis of STD's has led to a growing array of diagnostic laboratory tests that require critical evaluation by clinicians and a critical review by law enforcement (see table 1).

Accurate information about STD's in victims of sexual abuse has been hindered by a variety of factors:

- * The prevalence of sexually transmitted infections may vary regionally and among different populations within the same region.
- * Few studies have attempted to differentiate between infections existing prior to sexual abuse and those that result from abuse. The presence of a preexisting infection in adults is usually related to prior sexual activity. In children, however, preexisting infections may be related to prolonged colonization after perinatal acquisition (acquisition immediately before and after birth), inadvertent nonsexual spread, prior peer sexual activity, or prior sexual abuse.
- * The incubation periods for STD's range from a few days for gonorrhea to several months for HPV. The incubation periods and the timing of an examination after an episode of abuse are critically important in detecting infections (see table 1).

When presented with a child with an STD, law enforcement officials must attempt to determine absolutely if the infection was associated with sexual contact and, for the purposes of prosecution, whether appropriate diagnostic methods were used. The following facts should be kept in mind:



- * STD's may be transmitted during sexual assault.
- * Multiple episodes of abuse increase the risk of STD infection, probably by increasing the number of contacts with an infected individual, and rates of infection also vary by the type of assault. For example, vaginal or rectal penetration is more likely to lead to detectable STD infection than fondling.
- * Sexual assault is a violent crime that affects children of all ages, including infants.
- * The majority of children who are sexually abused will have no physical complaints related either to trauma or STD infection. Most sexually abused children do not indicate that they have genital pain or problems.
- * In children the isolation of a sexually transmitted organism may be the first indication that abuse has occurred.

- In most cases, the site of infection is consistent with a child's history of assault.
- * Although the presence of a sexually transmissible agent in a child over the age of 1 month is suggestive of sexual abuse, exceptions do exist. Rectal and genital chlamydia infections in young children may be due to a persistent perinatally acquired infection, which may last for up to 3 years.

The incidence and prevalence of sexual abuse in children are difficult to estimate.

- Most sexual abuse in childhood escapes detection.
- * Patterns of childhood sexual abuse appear to depend on the sex and age of the victim.
- * Between 80 and 90 percent of sexually abused children are female (average age: 7 to 8 years).
- * Between 75 and 85 percent of sexually abused children were abused by a male assailant, an adult or minor known to the child. This individual is most likely a family member such as the father, stepfather, mother's boyfriend, or an uncle or other male relative.
- * Victims of unknown assailants tend to be older than children who are sexually abused by someone they know and are usually only subjected to a single episode of abuse.
- * Sexual abuse by family members or acquaintances usually involves multiple episodes over periods ranging from 1 week to years.
- * Most victims describe a single type of sexual activity, but over 20 percent have experienced more than one type of forced sexual act. Vaginal penetration has been reported to occur in approximately one-half and anal penetration in one-third of female victims of sexual abuse.
- * Over 50 percent of male victims of sexual abuse have experienced anal penetration.
- * Other types of sexual activity, including oral-genital contact and fondling, occur in 20 to 50 percent of victims of sexual abuse.
- * Children who are sexually abused by known assailants usually experience less physical trauma, including genital trauma, than victims of assaults by strangers because such trauma might arouse suspicion that abuse is occurring.

Table 1

Diagnosis of	Diagnosis	1. Culture of <i>N. gonorrboeae</i> using selective media with confirmation by at least two different methods using different principles, e.g., sugar fermentation, enzyme substances, serological or DNA hybridization. 2. Use of DNA probes or other nonculture methods, including Gram-stained smears or vaginal or urethral discharges, <i>i.i. not recommended because</i>
ons, Transmission, and Diseases (STD's)*	Transmission	1. Through sexual contact. 2. Exception: Neonatal conjunctivitis is acquired by the infant from his/her mother at delivery. 3. No evidence of transmission by fomites (i.e., via toilet seats, "dirty" towels, etc.).
Incubation Periods, Clinical Manifestations, Transmission, and Diagnosis of Sexually Transmitted Diseases (STD's)*	Clinical Manifestations	 Vaginitis, urethritis, pharyngitis, proctitis. Rare: Arthritis, conjunctivitis. Most pharyngeal (throat) and rectal infections and as many as 50% of vaginal infections in children may be asymptomatic.
Incubation Perio	Incubation Period	3–5 days
	STD and Incubar Organism(s) Period	Gonorrhea Neisseria gonorrhoeae

other bacteria may be misidentified as <i>N. gonorrhoeae.</i>	 Isolation of the organism in tissue culture only with microscopic identification of the characteristic inclusions with fluorescent antibody staining. Nonculture methods, including enzyme immunoassays (EIA's), direct fluorescent antibody (DFA) tests, and DNA probes, are
	 Sexually, in children 3 years of age or older. Perinatally acquired infection (mother-toinfant) may last in the vagina and rectum for up to 3 years or longer. No evidence of transmission by fomites.
	Most prevalent sexually transmitted infection in the United States. In adults and adolescents: Urethritis and mucopurulent cervicitis, which can lead to pelvic inflammatory disease; however, most infections in adults and children are asymptomatic.
	5–7 days
	ydial ons y∂ia natio

Table I continued

Incubation Periods, Clinical Manifestations, Transmission, and Diagnosis of Sexually Transmitted Diseases (STD's)*

Incul	Perio
STD and	Organism(s)

oation

10-90 days, usually 3-4 infection: 1. Primary

Treponema Syphilis

pallidum

months after the primary 2. Secondary: 6 weeks-6

weeks.

Manifestations Clinical

- inoculation (penis, vulva, 1. Primary syphilis: Chancre, i.e., a painless ulcer at the site of
 - vagina, rectum, etc.). spontaneously after The chancre heals 1–2 weeks.
- enlarged lymph nodes, 2. Secondary syphilis: Diffuse rash, fever, mucous patches.
- tomatic, although positive serological findings may Latent syphilis: Asymppersist for years.

Diagnosis

Transmission

- contact. The chancre and mucous patches are very infectious. 1. Through sexual
 - 2. Infants may acquire similar to secondary congenital syphilis from their mothers. The presentation is
- T. pallidum in lesions by dark-field microscopy fluorescein-conjugated monoclonal antibody. or by staining with a 1. Identification of
- fluorescent treponemal test; Venereal Disease plasma reagin (RPR) Research Laboratory antibody-absorption 2. The most common serological: Rapid (VDRL)-reaginic antibody test; and methods used are

(FTA_ABS) test, a test for a specific anti-T. pallidum antibody.

- results will be negative after effective treatment; FTA-ABS remains elevated for the lifetime of the patient. 5. Positive results on an RPR or VDRL test in a child who does not have a history of 4. RPR and VDRL test congenital syphilis.

Table 1 continued

I	ncubation Peric	Incubation Periods, Clinical Manifestations, Transmission, and Diagnosis of Sexually Transmitted Diseases (STD's)*	ons, Transmission, and I Diseases (STD's)*	Diagnosis of
STD and Organism(s)	Incubation Period	Clinical Manifestations	Transmission	Diagnosis
Trichomoniasis Trichomonas vaginalis	5–28 days	Vaginitis. In males, infection appears to be asymptomatic, but <i>T. vaginalis</i> may cause some cases of nonspecific urethritis.	 Through sexual contact. Has not been found in children 1 year of age or older without history of sexual contact. Infants can acquire infection from mother at delivery; can cause 	1. Microscopic i of the organi vaginal fluid. 2. Culture meth be more sens not widely av 3. The finding c trichomonads collected for a sens collected for a sens in the finding collected for a sens in the sens in the finding collected for a sens in the sens in the finding collected

- identification nism in
- nsitive, but available. hods may
- purpose is not sufficient for accurate diagnosis, as the urine could be contaminated with *T. hominis*, a normal inhabitant of the bowel that is not sexually ds in urine collected for another

vaginitis.

4. Perinatally acquired infection may persist for 6–9 months after birth. transmission by 5. No evidence of fomites.

transmitted.

Bacterial	$5-28 \mathrm{days}$
vaginosis (BV))
Gardnerella	
vaginalis;	
Bacteroides	
species and	
other anaerobic	
bacteria; and	
Мусорlанта	
bominis.	

1. BV is not really an infection, but a disturbance of the normal vaginal flora, which is replaced by the organisms listed.

poor hygiene in some

young children.

nonsexual contact.

2. Probably related to

1. Through sexual and

2. Clinically presents as gray, foul-smelling vaginal discharge, but may be asymptomatic.

- 1. Microscopic identification of "clue cells," which are epithelial cells studded with bacteria in vaginal secretions; a positive "whiff" or amine test, which is the release of a very characteristic fishy odor when 10% potassium hydroxide (KOH) is added to the vaginal fluid; and a vaginal fluid; and a
- 2. The latter test should only be done in adolescents, as there are no vaginal pH standards for prepubertal children.
 - 5. Culture of *G. vaginalis* is not indicated and is not diagnostic for BV. *G. vaginalis* can be normal vaginal flora and has been isolated in 5–15% of normal children who have not been abused.

Table 1 continued

Diagnosis of	Diagnosis	1. Isolation of the virus from the lesions. 2. There are no commercially available antibody tests that will reliably differentiate between HSV-1 and HSV-2.
ns, Transmission, and iseases (STD's)*	Transmission	 Through sexual contact. Primarily HSV-2, although 10% of genital herpes in adults can be due to HSV-1. Young children with herpetic gingivostomatitis (herpetic infection of the gum tissues), a primary, nonsexually acquired infection due to HSV-1, may
Incubation Periods, Clinical Manifestations, Transmission, and Diagnosis of Sexually Transmitted Diseases (STD's)*	Clinical Manifestations	 Painful vesicular lesions that become ulcers on the vulva, vagina, penis, and perirectal area. May be associated with inguinal lymphadenopathy (disease of the lymph nodes in the groin) and fever.
ncubation Perio	Incubation Period	2–5 days
I	STD and Organism(s)	Herpes Herpes simplex virus (HSV), types 1 and 2

	Clinical. HPV DNA-typing of the lesions is not generally available.
autoinoculate (infect themselves) in the genital area. There should be a history of stomatitis (sores in the mouth) in the previous 2 weeks.	1. Sexually, perinatally, and probably, but rarely, nonsexually. 2. Major confounding variable is the long period after infection before the lesions
	Flesh- to purple-colored papillomatous growths in the anogenital region.
	4–12 weeks, but may be clinically inapparent for up to 18 months.
	Condyloma acuminata, venereal warts Human papilloma virus (HPV)

Table 1 continued

agnosis of

Diagnosis of	Diagnosis	Serological: Presence of HIV antibody, detection of p24 antigen. Child being evaluated for HIV after abuse needs to be tested for 6 months. Consider HIV testing if the child is from an area of high HIV prevalence, if the abuser is in a high-risk group (e.g., IVDA, crack user), or if another STD is present.
ns, Transmission, and iseases (STD's)*	Transmission	 Sexually, perinatally, and via blood transfusion, intravenous drug abuse (IVDA), and sharing needles. Approximately 50% of infants born to HIV-positive mothers will develop HIV infection but may not develop clinical AIDS for 5 years or longer.
Incubation Periods, Clinical Manifestations, Transmission, and Diagnosis of Sexually Transmitted Diseases (STD's)*	Clinical Manifestations	 Children who are HIV positive before developing AIDS are asymptomatic. Some individuals develop an acute retroviral syndrome, similar to influenza, with lymphadenopathy after infection. Has not been described in children with acquired HIV infection.
ncubation Perioc	Incubation Period	Seroconversion: 6 weeks after exposure; more than 90% of individuals will be HIV positive by 6 months. Development of AIDS: 5–10 years.
I	STD and Organism(s)	AIDS Human immunodeficiency virus (HIV)

5. Acquisition by sexual abuse needs to be differentiated from perinatal infection, as risk factors for maternal infection and sexual abuse are similar.

*Source: Margaret R. Hammerschlag, M.D.

Author

Margaret R. Hammerschlag, M.D. Professor of Pediatrics and Medicine Division of Pediatric Infectious Diseases State University of New York Health Science Center at Brooklyn 450 Clarkson Avenue, Box 49 Brooklyn, NY 11203–2098 718–245–4074



Supplemental Reading

Centers for Disease Control and Prevention. 1993 sexually transmitted diseases treatment guidelines. *Morbidity and Mortality Weekly Report* 42:RR–14, 1993.

Child Sexual Abuse: Report of the Twenty-Second Ross Roundtable on Critical Approaches to Common Pediatric Problems in Collaboration With the Ambulatory Pediatric Association. Ross Laboratories, 1991.

Evidence Collection Protocol. Texas Department of Health, Bureau of Emergency Management, Sexual Assault Prevention and Crisis Services Program, 1990.

Hammerschlag MR. Sexually transmitted diseases in sexually abused children. Advances in Pediatric Infectious Diseases 3:1–18, 1988.

Hammerschlag MR, Doraiswamy B, Alexander ER, et al. Are rectogenital chlamydial infections a marker of sexual abuse in children? *Pediatric Infectious Disease Journal* 3:100–104, 1984.

Hammerschlag MR, Retting PJ, Shields ME. False positive results with the use of chlamydial antigen detection tests in the evaluation of suspected sexual abuse in children. *Pediatric Infectious Disease Journal* 7:11–14, 1988.

Jenny C, Hooton TM, Bowers A, et al. Sexually transmitted diseases in victims of rape. *New England Journal of Medicine* 322:713–716, 1990.

Sexual Assault: A Hospital/Community Protocol for Forensic and Medical Examination. U.S. Department of Justice, Office of Justice Programs, Office for Victims of Crime, 1985.

Understanding the Medical Diagnosis of Child Maltreatment: A Guide for Non-Medical Professionals. The American Humane Association, American Association for Protection of Children, 1989.

Whitcomb D. When the Victim Is a Child. 2d ed. U.S. Department of Justice, National Institute of Justice, 1992.

Whittington WL, Rice RJ, Biddle JW, et al. Incorrect identification of *Neisseria gonorrhoeae* from infants and children. *Pediatric Infectious Disease Journal* 7:3–10, 1988.

Organizations

Missing and Exploited Children's Training Programs Fox Valley Technical College Criminal Justice Grants Department P.O. Box 2277 1825 North Bluemound Drive Appleton, WI 54914–2277 800–648–4966 920–735–4757 (fax) dept.fvtc.edu/ojjdp

Participants are trained in child abuse and exploitation investigative techniques, covering the following areas:

- Recognition of signs of abuse.
- * Collection and preservation of evidence.
- * Preparation of cases for prosecution.
- * Techniques for interviewing victims and offenders.
- * Liability issues.

Fox Valley also offers an intensive special training for local child investigative teams. Teams must include representatives from law enforcement, prosecution, social services, and (optionally) the medical field.

National Children's Alliance (NCA) 1612 K Street NW., Suite 500 Washington, DC 20006 800–239–9950 202–452–6001 202–452–6002 (fax) www.nncac.org

Children's Advocacy Centers (CAC's) are community-based programs that bring together representatives from law enforcement, child protective services, prosecution, mental health, and the medical community in multidisciplinary teams to address the investigation, treatment, and prosecution of child abuse cases. NCA, formerly the National Network of Children's Advocacy Centers, provides leadership and advocacy for these programs on a national level, including training and publications. The following four Regional Children's Advocacy Centers work jointly with NCA, providing information, consultation, and training and technical assistance to help communities establish child-focused programs that facilitate and support coordination among agencies responding to child abuse.

- ** Midwest Regional Children's Advocacy Center, Midwest Children's Resource Center, St. Paul, MN, 888–422–2955, 651–220–6750, www.nncac.org/mrcac/index.html.
- * Southern Regional Children's Advocacy Center, Rainbow City, Alabama, 800–747–8122, 256–413–3158, www.nncac/srcac/index.html.
- * Northeast Regional Children's Advocacy Center, Philadelphia Children's Alliance, Philadelphia, Pennsylvania, 800–662–4124, 215–387–9500, www.nncac.org/nrcac/index.html.
- * Western Regional Children's Advocacy Center, Lakewood, CO, 800–582–2203, 303–324–8953, www.nncac.org/wrcac/index.html.

Sexual Assault Nurse Examiner (SANE)/ Sexual Assault Response Team (SART) www.sane-sart.com

Other Titles in This Series

Currently there are 12 other Portable Guides to Investigating Child Abuse. To obtain a copy of any of the guides listed below (in order of publication), contact the Office of Juvenile Justice and Delinquency Prevention's Juvenile Justice Clearinghouse by telephone at 800–638–8736 or e-mail at puborder@ncjrs.org.

Recognizing When a Child's Injury or Illness Is Caused by Abuse, NCJ 160938

Photodocumentation in the Investigation of Child Abuse, NCJ 160939 Diagnostic Imaging of Child Abuse, NCJ 161235

Battered Child Syndrome: Investigating Physical Abuse and Homicide, NCJ 161406

Interviewing Child Witnesses and Victims of Sexual Abuse, NCJ 161623 Child Neglect and Munchausen Syndrome by Proxy, NCJ 161841 Criminal Investigation of Child Sexual Abuse, NCJ 162426

Burn Injuries in Child Abuse, NCJ 162424

Law Enforcement Response to Child Abuse, NCJ 162425

Understanding and Investigating Child Sexual Exploitation, NCJ 162427

Forming a Multidisciplinary Team To Investigate Child Abuse, NCJ 170020

Use of Computers in the Sexual Exploitation of Chil∂ren, NCJ 170021

Additional Resources

American Bar Association
(ABA) Center on Children
and the Law
Washington, DC
202–662–1720
www.abanet.org/child/
home.html

American Humane Association Englewood, Colorado 800–227–4645 303–792–9900 www.americanhumane.org

American Medical Association (AMA) Chicago, Illinois 312–464–5000 www.ama-assn.org

American Professional Society on the Abuse of Children (APSAC) Oklahoma City, OK 405–271–8202 www.apsac.org

Federal Bureau of Investigation (FBI) 202–324–3000 www.fbi.gov

National Center for the Analysis of Violent Crime www.fbi.gov/hq/isd/cirg/ ncavc.htm

Crimes Against Children Program www.fbi.gov/hq/cid/cac/ crimesmain.htm

Juvenile Justice Clearinghouse (JJC) Rockville, Maryland 800–638–8736 ojjdp.ncjrs.org/about/ clearh.html

Kempe Children's Center Denver, Colorado 303–864–5252 www.kempecenter.org Missing and Exploited Children's Training Program Fox Valley Technical College Appleton, Wisconsin 800–648–4966 dept.fvtc.edu/ojjdp

National Association of Medical Examiners St. Louis, Missouri 314–577–8298 www.thename.org

National Center for Missing and Exploited Children (NCMEC) Alexandria, Virginia 800-THE-LOST 703-274-3900 www.missingkids.com

National Center for Prosecution of Child Abuse Alexandria, Virginia 703–549–9222 www.ndaa-apri.org/apri/ programs/ncpca/index.html

National Children's Alliance Washington, DC 800–239–9950 202–452–6001 www.nncac.org

National Clearinghouse on Child Abuse and Neglect Information Washington, DC 800–394–3366 703–385–7565 www.calib.com/nccanch/

National SIDS Resource Center Vienna, Virginia 703–821–8955 www.sidscenter.org

Prevent Child Abuse America Chicago, Illinois 312–663–3520 www.preventchildabuse.org

U.S. Department of Justice

Office of Justice Programs

Office of Juvenile Justice and Delinquency Prevention

Washington, DC 20531

Official Business

Penalty for Private Use \$300



PRESORTED STANDARD POSTAGE & FEES PAID DOJ/OJJDP PERMIT NO. G-91