October is Lead Poisoning and Antibiotic Resistance Awareness Month

County of Los Angeles Department of Health Services
Public Health

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

Volume 3 • Number 8 October 2003

The Changing Face of Lead Poisoning Prevention – Senate Bill 460

In September of 2002, Governor Gray Davis signed a piece of new legislation, SB 460, altering the future of lead poisoning prevention efforts in California. SB 460, which became effective January 1, 2003, focuses on protecting children from lead hazards in their homes before they can become poisoned. According to the bill, buildings deemed "untenantable" due to the presence of lead hazards are in violation of State Housing Laws. In addition, laboratories are required to follow universal reporting standards with regards to lead. Universal reporting will allow the Los Angeles County Childhood Lead Poisoning Prevention Program (LA CLPPP) to target areas where screening rates need to be increased, so that more lead poisoned children can be identified.

Under the provisions of SB 460, lead hazards are described as: 1) deteriorated lead-based paint, 2) lead contaminated dust, 3) lead contaminated soil, and 4) the disturbance of lead-based paint without containment. This means that any paint that is chipping or flaking is regarded as a danger. SB 460 gives state and local health and housing agencies the authority to require abatement in unsafe residential and public buildings. The new law allows health and housing officials to cite lead hazards and order a "cease and desist" on any activities that create them. A failure to halt these types of activities is likely to result in fines of up to $1,000 dollars. Also, tenants of those buildings are permitted to withhold rent if the lead hazards continue to exist.

The public can call either the Los Angeles County Department of Health Services (1-800-LA-4-LEAD) or the Housing Department (1-866-557-7368) when improper remodeling threatens a neighborhood with lead dust. Since the passage of SB 460, this call will result in actions that will stop the sanding or blasting until the dust can be contained. SB 460 enables health and housing officials to take a truly preventative approach to eradicating lead poisoning in children.

SB 460 also prohibits the violation of regulations for training, certification, and work practice regulatory requirements affecting lead professionals. Any person who is in breach of these laws can incur criminal charges and/or fines of up to $1,000 dollars. Another important piece of the new legislation requires laboratories to report all blood lead test results to the state. Furthermore, they must include

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GET SMART: Know When Antibiotics Work

Los Angeles County Department of Health Services and CDC Provide Public Service Announcements to Local Broadcast Media

The Los Angeles County Department of Health Services (DHS) is joining the Centers for Disease Control and Prevention (CDC) to help build awareness of the appropriate use of antibiotics. ***Get Smart: Know When Antibiotics Work*** is a national public education campaign, conducted by state and local health departments, to help Americans become better informed about antibiotic treatment – especially during the cold and flu season.

The campaign's key message is antibiotics do not effectively treat colds, flu and other viral illnesses – antibiotics do not kill viruses, make patients with viral infections feel better, yield a faster recovery or keep others from getting sick.

DHS has partnered with CDC in distributing television and radio public service announcements (PSAs) throughout our county. These PSAs started airing in September 2003.

THE PUBLIC'S HEALTH

is published by:

County of Los Angeles
Department of Health Services
Public Health

313 North Figueroa Street, Room 212
Los Angeles, California 90012

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Notice of correction: Hospitalized varicella reportable in Los Angeles County

The June 2003 issue of **The Public's Health*** announced the addition of hospitalized varicella cases to the list of reportable diseases and illnesses in Los Angeles County. This addition was described as mandated by the California Department of Health Services, but is actually a "suggested" changed to the existing reporting standards. The Los Angeles County Department of Health Services has implemented this reporting requirement due to the high rates of morbidity resulting from this disease and the need to better monitor this vaccine-preventable illness. Hospitalized cases should be reported within 7 days of identification using the standard Confidential Morbidity Report (CMR) available at: www.lapublichealth.org/acd/reports/Reporting%20Forms/CMR.pdf.

Fatal cases of varicella should be reported immediately by phone to Acute Communicable Disease Control: 213-240-7941.

* This issue is available at: www.lapublichealth.org/wwwfiles/ ph/ph/ph/TPH_June_2003.pdf

West Nile Virus

With the rapid increase of WNV cases occurring in areas across the U.S., LA residents are reminded that their efforts to reduce mosquito breeding is more important than ever; eliminating sources of stagnant water which foster mosquitoes can help prevent WNV and other mosquito-borne diseases. The public is also encouraged to report dead birds which may identify the presence of WNV (1-877-747-2243).

For recorded information on West Nile Virus call: 800-975-4448 (English, Spanish, Thai, Korean, Mandarin Chinese, Vietnamese)

For questions regarding the reporting of WNV cases call:
Acute Communicable Disease Control (213-240-7941)
or visit: www.lapublichealth.org/acd/VectorWestNile.htm

Lead Poisioning Prevenion Law (from page 1)

pertinent information such as name, age, and an address or phone number of the patient and the patient's primary care provider. The Department of Health Services (DHS) possesses the authority to impose fines on laboratories that fail to abide by these universal reporting mandates.

Implications

SB 460 was pioneered by State Senator Deborah Ortiz from Sacramento. Prior to this law, authorities were only permitted to investigate houses of lead-poisoned children; they were unable to take action on complaints or reports of potentially hazardous construction. Now, authorities can prevent potentially harmful situations from arising.

> *"SB 460 is a major victory in our fight to prevent lead exposure. Previously, we had no way of knowing where lead hazards existed unless we had reports of children with lead poisoning. Parents, after having been educated about the dangers of lead, would call us to report someone sanding old paint, yet we could only advise the parent to have their child's blood tested. Now, we can stop the work that is spreading lead dust and keep the children safe."*
>
> *–Eleanor Long, Health Education Manager*
> *LA CLPPP*

Childhood Lead Poisoning

Nearly half of a million U.S. children between the ages 1-5 have excessive levels of lead – defined by the CDC as blood lead levels greater than 10 micrograms of lead per deciliter of blood. Many are unaware that lead poisoning often occurs with no obvious symptoms, as such, it frequently goes unrecognized. Lead poisoning is a serious illness that can affect every system in the body. It can contribute to learning disabilities, behavioral problems, and at very high levels, seizures, coma, and even death.

Lead poisoning is entirely preventable. If you suspect lead poisoning, testing is necessary.

For additional information about lead poisoning, visit the

Los Angeles County web site: www.lapublichealth.org/lead
CDC web site: www.cdc.gov/nceh/lead/lead.htm

or call:

Los Angeles County Lead Prevention Program 1-800-LA-4LEAD(5323)
National Lead Information Center 1-800-424-LEAD (5323)

Los Angeles County Childhood Lead Poisoning Prevention Program and Southern California Health & Housing Council

The Los Angeles County Childhood Lead Poisoning Prevention Program (CLPPP) is dedicated to the elimination of lead poisoning in our county. Much of what has been accomplished to date can be directly attributed to collaborative activities, sharing of resources and common goals among the agencies, businesses, and other stakeholders that participate in lead poisoning prevention efforts.

The Southern California Health and Housing Council (SCHHC), established in 1994, is comprised of members of agencies that have a vested interest in the health and housing issues. Council members meet monthly to discuss various issues related to lead safety. The council's goals include the promotion of legislation, advocacy for healthy low-cost housing, education of parents, providers, and politicians, promotion of child lead screening, and the elimination of lead hazards. Council members were instrumental in the drafting and passage of SB 460.

CLPPP is also partnered with the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Housing and Urban Development (HUD). The CDC-funded program will contribute to enforcing the mandates of SB 460 throughout the county. In a collaborative project with the Los Angeles City Housing Department, Systematic Code Enforcement Program, CDC staff will assist with enforcement of the provisions of SB 460 by working with City inspectors as expert witnesses, and providing forensic evidence during the prosecution of non-compliant housing owners. Prior to launching the project, CDC staff will take responsibility for training all 80 inspectors on how to recognize lead-based paint hazards. The new grant also allows CDC staff to conduct periodic monitoring of contractors and laborers involved in the repair and/or renovation of pre-1978 buildings. Finally, the CDC staff will make a through assessment of all citizens' complaints and respond to those that meet the criteria for investigation.

The HUD grant serves as a resource for lead abatement in targeted low-income neighborhoods within the county. Monies from the grant are used to eliminate lead hazards in major structural components of homes such as windows and doors, which contain high levels of lead-based paint and are more prone to chipping. The implementation of SB 460 will encourage property owners in the HUD grant target area to become proactive and apply for the lead hazard reduction funds.

Enforcement

The approval of SB 460 is a significant legislative success for all health and housing agencies in the state. This approval provides a means by which to initiate elimination of potential sources of lead exposure and tends to act as a stepping-stone toward reducing the incidence of lead poisoning cases in our county.

The next step is to devise a strategy to enforce these state laws and to make certain that the laws are upheld in the future. CLPPP and SCHHC will continue to work with its collaborators in order to develop and discover creative solutions to end childhood lead poisoning and bring the State closer to realizing the national 2010 goal of eliminating Childhood Lead Poisoning as a health problem for America's children.

Antibiotic Misuse in Los Angeles County

Results from the 2002-2003 Los Angeles County Health Survey show that nearly half (46%) of adults reported that they call their doctor for antibiotics when they have a cold or the flu. Overall, only 32% of adults correctly reported that antibiotics are used for bacterial, but not viral, infections. The percentage who responded correctly increased with education level (Figure 1). Nearly half (47%) of adults reported that they do not always take their complete course of antibiotics as prescribed (Figure 2).

Results also suggest that knowledge about antibiotics leads to more appropriate antibiotic use. Adults who responded correctly that antibiotics are effective for bacterial infections were more likely to report finishing prescribed antibiotics than those responding incorrectly (63% vs. 48%). Adults who responded correctly were also less likely to obtain antibiotics from friends and family members compared to adult who responded incorrectly (84% vs. 67%).

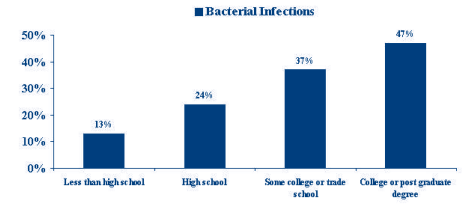
Physicians have an important role to play in educating patients about what antibiotics are effective (and ineffective) for treating and the importance of finishing all antibiotics as prescribed. Educational interventions have been shown to reduce prescription rates.[1-3] Such interventions may also change attitudes towards antibiotics, for example, among parents of young children.[4] Patients often expect to be prescribed antibiotics and this pressure can be difficult to ignore. However, studies have shown that communication by the physician influences patient satisfaction more than the receipt of an antibiotic,[5,6] particularly when patients are told to contact them if symptoms do not improve.

The Los Angeles County Acute Communicable Disease Control Program has a public education project underway and collaborates with health-care providers, schools and other community organizations. For more information on Los Angeles Antibiotic Resistance Education Advocates (LA AREA), visit: www.lapublichealth.org/acd/antibio.htm.

Health survey background: The Los Angeles County Health Survey is a periodic, population-based telephone survey that collects information on socio-demographic characteristics, health status, health behaviors and access to health services among adults and children in Los Angeles County. The 2002-03 survey collected information on a random sample of more than 8,000 adults and nearly 6,000 children with interviews offered in six languages.

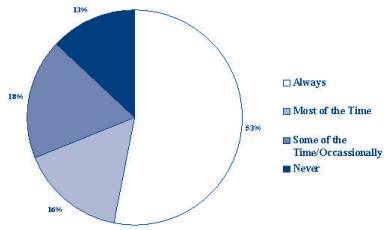
For more findings from the Los Angeles County Health Survey, including analyses on antibiotic use by ethnicity and access to healthcare visit: www.lapublichealth.org/ha/survey/hasurveyintro.htm

Figure 1. Knowledge of Appropriate Uses of Antibiotics* by Educational Level, 2002-03



* For bacterial but not for viral infections

Figure 2. Do Adults Take All of their Antibiotics as Prescribed? 2002-2003



Source: Los Angeles County Health Survey
Health Assessment and Epidemiology
Los Angeles County Department of Health Services

References:

1. Belongia EA, Sullivan BJ, Chyou P, Madagame E, Reed KD, Schwartz B. A community intervention trial to promote judicious antibiotic use and reduce penicillin-resistant *Streptococcus pneumoniae* carriage in children. Pediatrics 2001;108:575-583.
2. Hennessy TW, Petersen KM, Bruden D, Parkinson AJ, Hurlburt D, Getty M, Schwartz B, Butler JC. Changes in antibiotic-prescribing practices and carriage of penicillin-resistant *Streptococcus pneumoniae*: A controlled intervention trial in rural Alaska. Clin Infect Dis 2002;34(12):1543-50.
3. Perz JF, Craig AS, Coffey CS, Jorgensen DM, Mitchel E, Hall S, Schaffner W, Griffin MR. Changes in antibiotic prescribing for children after a community-wide campaign. JAMA 2002;287(23):3103-9.
4. Taylor JA, Kwan-Gett TC, McMahon EM. Effectiveness of an educational intervention in modifying parental attitudes about antibiotic usage in children. Pediatrics. 2003 May; 111(5 Pt 1):e548-54.
5. Mangione-Smith R, McGlynn EA, Elliott MN, McDonald L, Franz CE, Kravitz RL. Parent expectations for antibiotics, physician-parent communication, and satisfaction. Arch Pediatr Adolesc Med 2001;155(7):800-6.
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INVASIVE PNEUMOCOCCAL DISEASE:
LOS ANGELES COUNTY 2002 STATISTICS

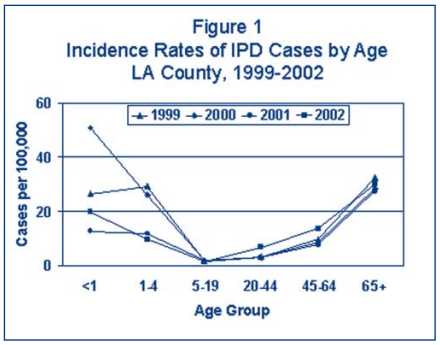
Invasive pneumococcal disease is defined as *Streptococcus pneumoniae* isolated from a sterile site such as blood, or CSF. The Los Angeles County Department of Health Services has been following IPD as a special surveillance project since late 1995. But a year ago, October 2002, IPD was added to our local list of reportable diseases to enhance surveillance of this infection (reporting instructions described below, described previously in **The Public's Health**).[1]

The following is a summary of cases reported in 2002.

Age differences – the impact of vaccination:

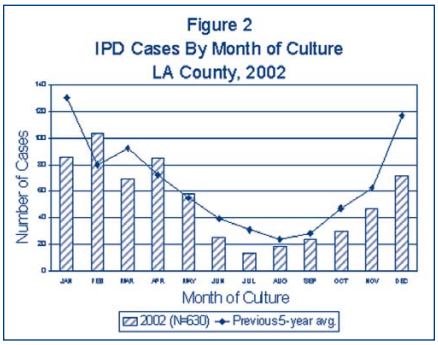
In February 2000, the pneumococcal conjugate vaccine (Prevnar®) was licensed for use. This vaccine is recommended for all children less than age 2 years, and for children up to age 5 years who are at high risk of invasive pneumococcal infections.[2] The importance of vaccination in the prevention of disease is evident in the changing epidemiology of invasive pneumococcal disease in Los Angeles County. Specifically, a decrease in incident cases among the very young is most likely due to the implementation of preventative vaccination. In 2002, there was a 33% decrease in reported cases as compared to the peak incidence which occurred in 1999 (894 cases, Figure 1). This decrease is due to the decline in cases <5 years – rates in the other age groups have remained mostly unchanged.

During 2002, cases had a reported mean age of 52 years with a range from 4 days to 99 years. The highest age-specific incidence rates occurred in adults 65 years and over. Among cases where outcome was known, the fatality rate was 16% (51/313). It is important to note that many of these deaths were among cases in age groups recommended for vaccination (one infant and 24 adults ≥65 years). Had these individuals been vaccinated, their deaths could have been prevented.



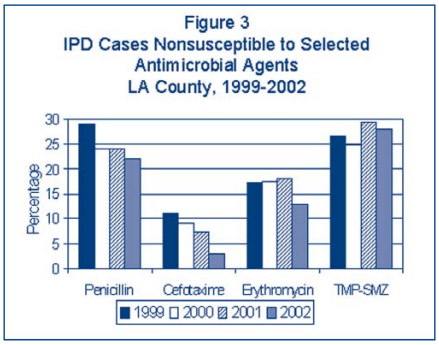
Seasonality:

Like previous years, IPD cases during 2002 followed a typical seasonal pattern – peaking in late winter then gradually declining through spring (Figure 2). Healthcare professionals should prepare for an increase in these reportable cases during the winter months.



Susceptibility to antimicrobial agents:

In 2002, the proportion of penicillin-nonsusceptible *S. pneumoniae* (PNSP) isolates decreased to a four-year low (22%, Figure 3). Nonsusceptible is defined as having intermediate or high-level resistance toward an antimicrobial agent by standard laboratory tests. Mortality was not significantly associated with penicillin nonsusceptibility. The percent of cases nonsusceptible to erythromycin, cefotaxime, and trimethoprim-sulfamethoxazole (TMP-SMZ) decreased from 2001 to 2002. Of the 281 cases reported in 2002 with testing results on levofloxacin, only one case (0.4%) was nonsusceptible which is slightly lower than 0.7% seen in



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IPD 2002 Statistics (from page 5)

2001 from a nationwide population-based surveillance system for IPD.[3] The proportion of PNSP cases fluctuated for most of the age groups. The largest increase (93%, n=26) was observed in the less than one-year age group from 14% in 2001 to 27% in 2002, although the result is unstable due to small numbers. The largest decrease of PNSP (31%, n=227) was in adults 65 years and over from 26% in 2001 to 18% in 2002.

If you have any questions, please contact Acute Communicable Disease Control (213) 240-7941.

Conclusion:

Current statistics underscore the importance of vaccination in preventing pneumococcal disease, as demonstrated by the marked decrease of IPD cases in children in 2001 and 2002 after the introduction of pneumococcal conjugate vaccine (Prevnar®). The medical community should continue vaccinating children with Prevnar® but also focus their resources on promoting better vaccination rates in the elderly. The 23-valent pneumococcal polysaccharide vaccines (Pnu-Imune®23 and Pneumovax®23) are recommended for all adults 65 years and older and those over age 2 years who are at high risk of invasive pneumococcal disease.[4] This vaccine is especially important based on 2002 data indicating that the elderly continue to be at high risk of acquiring IPD.

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3. Active Bacterial Core Surveillance Reports from 1998 to 2001 (2001 provisional) from the Centers for Disease Control and Prevention's Division of Bacterial and Mycotic Diseases. Report available at: www.cdc.gov/ncidod/dbmd/abcs/survreports.htm
4. Centers for Disease Control and Prevention. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46:1-24. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/00047135.htm

How to Report Invasive Pneumococcal Disease

Use the Invasive Pneumococcal Disease (IPD) reporting form to report cases of IPD including antibiotic susceptibility results and vaccine history. **Do not** use the Confidential Morbidity Report form (CMR). For a copy of the IPD form:

call Acute Communicable Disease Control (213) 240-7941

or download it at:

www.lapublichealth.org/acd/procs/pneumo/spfrm4.pdf

When reporting a case of IPD:

Attach a copy of antibiotic susceptibility results or you may transcribe the results to the form.

Send completed IPD forms to the Los Angeles County Department of Health Services via the Communicable Disease Reporting System toll-free faxline (1-888-397-3778) or mail to the Morbidity Central Reporting Unit, 313 N. Figueroa Street, Room #117, Los Angeles, CA, 90012.

ANTIBIOTIC RESISTANCE INFORMATION CORNER

Consumer Attitudes and Use of Antibiotics

Vanden Eng J, Marcus R, Hadler JL, Imhoff B, Vugia DJ, Cieslak P, et al. Consumer attitudes and inappropriate use of antibiotics. Emerging Infectious Diseases 2003;9(9):1128-1135.

Available at: www.cdc.gov/ncidod/eid/vol9no9/02-0591.htm

The misconception that antibiotics are useful for treating the common cold continues to persist as demonstrated in this national population-based survey. Results of this study on consumer knowledge, attitudes and use of antibiotics showed that: [1] 12% had recently taken antibiotics; [2] 27% believed that taking antibiotics when they had a cold made them better more quickly; [3] 32% believed that taking antibiotics when they had a cold prevented more serious illness and; [4] 48% expected a prescription for antibiotics when they were ill enough from a cold to seek medical attention. These erroneous beliefs and expectations were associated with ignorance about the dangers of inappropriate antibiotic use; 58% were not aware of the possible dangers. The study also found that certain demographic groups (persons of lower socioeconomic status, lower educational status, males, those in younger age groups, the elderly, and parents) were more likely to agree with these misconceptions. Educational efforts targeted to these populations are necessary to reduce inappropriate patient expectation and demand for antibiotics.

Antibiotic Use in Hispanic Households, New York City

Larson E, Lin SX, Gomez-Duarte C. Antibiotic use in Hispanic households, New York City. Emerging Infectious Diseases 2003; 9(9):1096-1102.

Available at: www.cdc.gov/ncidod/EID/vol9no9/02-htm0371.

Hispanic households in New York City were surveyed to determine prevalence and predictors of antibiotic use. Among 2,743 household members surveyed, 911 (32.2%) reported infectious disease symptoms; nearly half of these ill individuals (48.4%) sought medical attention and; and more than one-third (39%) took antibiotics to treat their symptoms. The majority of symptoms reported were respiratory (68.9%) which include sore throat, cough and runny nose. Antibiotics were significantly more likely to be taken among those with sore throat (OR 2.44; 95% CL 1.80 to 3.31; $p<0.001$), cough (OR 1.42; 95% CL 1.05 to 1.94; $p=0.03$) and runny nose (OR 1.38; 95% CL 1.01 to 1.88; $p=0.04$).

Findings also indicate that unprescribed antibiotics are not fully accounted for in measuring prevalence estimates of antibiotic use. Researchers of the study did not ask if antibiotics were obtained without a prescription to eliminate this underreporting. However, participants did informally report that antibiotics were sometimes obtained without a prescription. In fact, local bodegas (small stores) were found to sell antibiotics over-the-counter in the study neighborhood. Participants also informally reported sharing antibiotics among family and friends. The combination of overuse and misuse of unprescribed antibiotics is a significant cause for concern as a contributor to the ongoing problem of antibiotic resistance in the community. Recommendations for effective interventions to promote appropriate antibiotic use include involvement of clinicians and the public. Additionally, interventions must be culturally relevant and provided in Spanish for Hispanic populations.

Patient education materials and other resources (in English and Spanish) are available online at:

Centers for Disease Control and Prevention – www.cdc.gov/drugresistance/community/

Acute Communicable Disease Control Program –www.lapublichealth.org/acd/antibio.htm

California Medical Association (CMA) Foundation –www.aware.md/resource/index.asp

SENTINEL PHYSICIANS NEEDED FOR INFLUENZA SURVEILLANCE

Every year the CDC relies on the assistance of sentinel physicians to help monitor influenza trends by reporting weekly the percentage of patients who present with influenza-like illness. The CDC is attempting to expand the number of participating physicians in Los Angeles County in order to obtain a more accurate picture of local trends and to keep pace with the rapid growth of the population. This expansion is especially important considering the frequent international travel and arrival of international visitors to the Los Angeles area. In addition, in light of current influenza-related events, such as the rising reliance on antiviral medications, monitoring influenza trends has become more important than ever. If you are interested in becoming a sentinel physician or would like more information, please contact

Dr. Sadina Reynaldo or Dr. David Dassey at: 213-240-7941 or acdc2@dhs.co.la.ca.us

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County of Los Angeles
Department of Health Services
Public Health

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This Issue . . .

Selected Reportable Diseases (Cases)[1] - June 2003

Disease	THIS PERIOD June 2003	SAME PERIOD LAST YEAR June 2002	YEAR TO DATE 2003	YEAR TO DATE 2002	YEAR END TOTALS 2002	YEAR END TOTALS 2001	YEAR END TOTALS 2000
AIDS[1]	224	139	1280	808	1,787	1,354	1,648
Amebiasis	15	10	63	53	109	139	109
Campylobacteriosis	94	81	478	433	1,092	1,141	1,273
Chlamydial Infections	3114	2670	17427	16161	36,590	31,658	30,642
Encephalitis	3	6	28	30	63	41	49
Gonorrhea	709	560	3579	3544	7,985	7,468	7,212
Hepatitis Type A	31	27	187	276	482	542	839
Hepatitis Type B, Acute	2	2	26	15	27	44	65
Hepatitis Type C, Acute	0	1	1	1	3	1	28
Measles	0	0	0	0	0	8	5
Meningitis, viral/aseptic	63	41	280	272	669	530	491
Meningococcal Infections	0	3	16	30	46	58	53
Mumps	3	0	10	14	16	17	29
Non-gonococcal Urethritis (NGU)	86	88	652	625	1,398	1,343	1,575
Pertussis	12	8	79	72	167	103	102
Rubella	0	0	0	0	0	0	3
Salmonellosis	57	78	418	407	990	1,006	990
Shigellosis	28	43	374	279	922	684	849
Syphilis, primary & secondary	35	36	212	154	362	181	136
Syphilis, early latent (<1 yr.)	30	37	180	165	341	191	194
Tuberculosis	58	114	332	398	1,025	1,046	1,065
Typhoid fever, Acute	2	3	8	10	34	17	21

1. Case totals are interim and may vary following periodic updates of the database.

Data provided by DHS' Public Health programs: Acute Communicable Disease Control, HIV/Epidemiology, Sexually Transmitted Diseases, and Tuberculosis Control.