Prevention bulletin
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West Nile Virus Season is Upon Us Again

Victorio Vaz

Another season of West Nile Virus (WNV) and other mosquito-borne diseases is soon approaching. At this point it is difficult to predict how serious the 2005 season will be. However, of concern is the excessive rainfall from December 2004 through February 2005 and the anticipated precipitation in early spring. Additionally, 2004 was extremely dry and characterized by below normal vector mosquito numbers in most areas. Thus, health officials throughout Arizona are gearing-up for an earlier and possibly serious WNV season. To that end, surveillance efforts will be initiated in March to guide vector control efforts, especially through the use of larvicide agents.

In 2004, 391 WNV cases were reported in Arizona; of these, 15 were fatal. Eleven of the 15 counties reported human cases, with Maricopa County accounting for 91% of the cases. Patients' ages ranged from 1 month to 99 years with a median of 52 years. The male to female ratio was 1.08: 1. Case clinical presentations included: encephalitis (109), meningitis (105), West Nile fever (160), acute flaccid paralysis (2) and unknown (15). The earliest onset of symptoms was in late April, and the last case had onset in November. The outbreak peaked in June and July with 99 and 150 cases, respectively. In addition to WNV, four cases of St. Louis Encephalitis (SLE) were also reported, three in Maricopa County and one in Mohave County. The very dry summer and the late/weak monsoon season may have lessened the potential impact of WNV in 2004.

Surveillance efforts are conducted each year from March through October to monitor and respond to mosquito-borne virus activity. Surveillance includes (1) mosquito trapping and testing, (2) dead bird testing, (3) sick horse testing, (4) sentinel chicken flocks and (5) human case follow-up and testing. In 2004, over 4,500 mosquito samples were tested, of which 250 were WNV positive in 12 counties. Also positive were 109 horses in 11 counties, 98 dead birds (out of 750 tested) in 12 counties, and 55 chickens from nine sentinel flocks in 3 counties. WNV activity was documented throughout the state and will likely become a problem yearly for Arizona.

WNV is a reportable condition in Arizona by both physicians and laboratories. Ordering appropriate diagnostic tests and reporting cases of arboviral disease is a vital part of the surveillance program. Surveillance data helps health officials to identify areas/communities at higher risk for disease and helps them to prioritize and target vector control efforts. Laboratory testing is available through commercial laboratories or through the Arizona State Health Laboratory (ASHL). The ASHL currently performs an IgM capture ELISA for WNV and SLE. Testing can be performed on serum or CSF. Specimens can be sent to: Arizona State Health Laboratory, Attn: Serology, 250 North 17th Avenue, Phoenix, Arizona 85007

The following information must accompany specimens: patient name, age or date of birth, onset of symptoms, specimen collection date, primary symptoms/clinical picture and contact information for submitting physician.

Clinical Suspicion

Diagnosis of WNV infection is based on a high index of clinical suspicion and specific laboratory tests.

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Arizona Department of Health Services

Visit the ADHS Web site at www.azdhs.gov

West Nile Virus Season continued from page 1

- WNV, or other arboviral diseases such as SLE, should be strongly considered in persons who develop unexplained encephalitis or meningitis in summer or early fall.
- The local presence of WNV enzootic activity or other human cases should further raise suspicion.
- Travel and exposure history is also important.
- Contact your local health department to report suspect cases and inquire about laboratory testing.

Clinical Features of WNV infections

- Approximately 70-80% of WNV infections are clinically inapparent.
- Approximately 20% of those infected develop West Nile fever. West Nile fever can range from mild to severe. West Nile fever can be characterized by sudden onset of fever often accompanied by one or more of the following: malaise, headache, anorexia, nausea, vomiting, eye pain, myalgia, maculopapular rash or lymphadenopathy. Some symptoms may persist from days to months.
- Approximately 1 percent of infections will result in neurological disease such as meningitis and/or encephalitis.
- The incubation period is thought to range from 3 to 14 days in immunocompetent individuals, and up to 21 days after organ transplantation.
- The most significant risk factor for developing severe neurological disease is advanced age.
- In recent outbreaks, symptoms occurring among patients hospitalized with severe disease included fever, weakness, gastrointestinal symptoms and change in mental status; also reported were severe muscle weakness and flaccid paralysis, maculopapular or morbilliform rash involving neck, trunk, arms or legs, ataxia and extrapyramidal signs, cranial nerve abnormalities, myelitis, optic neuritis, polyradiculitis and seizures.

Laboratory Findings Among Patients in Recent Outbreaks

- Total leukocyte counts in peripheral blood were mostly normal or elevated, with lymphocytopenia and anemia also occurring.
- Examination of the cerebrospinal fluid (CSF) showed pleocytosis, usually with a predominance of lymphocytes.
- Protein was universally elevated.
- Glucose was normal.
- Computed tomographic scans of the brain mostly did not show evidence of acute disease, but in about one-third of patients, magnetic resonance imaging showed enhancement of the leptomeninges, the periventricular areas, or both.

For more information on WNV surveillance in Arizona, contact your local health department, or the ADHS Vector-Borne Diseases Program staff at 602.364.4562.

For more information on West Nile Virus (WNV) Infection Information for Clinicians visit the CDC web site at *www.cdc.gov/ncidod/dvbid/westnile/resources/fact_sheet_clinician.htm*

Animal Bites & Rabies: To Prophy or Not to Prophy?

While rabies in dogs and cats is uncommon in the United States, animal bites are not. Since rabies is nearly 100% fatal, but exposure to rabies is rare, the decision of whether or not to provide rabies post exposure prophylaxis (PEP) is not always straight forward. The inserted algorithm can be used as a guide to help you decide on the best course of action. The most important factors in the decision process are the type of animal involved, whether the animal is available for testing or quarantine, and how the exposure occurred (provoked versus unprovoked).

In the United States, immunization of dogs and cats, effective prophylaxis and good animal control measures have dramatically reduced the number of rabies cases in humans and companion animals. However, rabies in reservoir wild animals (e.g., bats, skunks, foxes) is not as easy to control. Wildlife account for more than 90% of the 7,000+ animals reported each year with rabies nationwide. Exposure to rabid animals and other animals not available for testing results in an estimated 40,000 people receiving rabies PEP each year.

Bats, skunks, and foxes are the three reservoir species for rabies in Arizona. Bats are the most important source of rabies exposure to both humans and domestic mammals in the United States and often pose the greatest challenges in assessing exposure. Since 1985, only five dogs and eight cats in Arizona, most in rural areas, have been laboratory confirmed as infected with rabies.

For statistics of animal rabies in Arizona, references on human rabies prevention, and other information, please visit the Arizona Department of Health Services (ADHS) rabies home page at *www.azdhs.gov/phs/oids/vector/rabies*. If you need assistance on risk assessment or established recommendations on rabies PEP for a patient, please call your county health department or ADHS at 602.364.4562. Additionally, presentations on rabies exposure risk assessment can be provided to your staff upon request. **SEE INSERT**

PEP for Nonoccupational Exposures (nPEP) to HIV

by Karen Lewis, MD

New Recommendations

Guidelines for postexposure prophylaxis (PEP) to HIV exposure in occupational settings have been previously published[1]. The Center for Disease Control and Prevention (CDC) has now published recommendations for postexposure prophylaxis in nonoccupational exposures to HIV (nPEP)[2].

Nonoccupational exposure is any direct mucosal, percutaneous, or intravenous contact with potentially infectious body fluids that occurs outside of perinatal or occupational situations. Potentially infectious body fluids are blood, semen, vaginal secretions, rectal secretions, breast milk, or other body fluid that is contaminated with visible blood. Therefore, nPEP would be in response to HIV exposure through situations such as sexual assault, consensual sexual activity, or sharing injection drug needles.

CDC Recommendations (See Figure 1.)

CDC recommends the following approach in dealing with a person with nonoccupational exposure to blood or body fluids:

- If the source of blood or body fluid is known to be HIV infected, start the exposed person on nPEP within 72 hours of exposure, and continue nPEP for 28 days.
- If there is no substantial risk of HIV infection in the source person, or where an exposed person presents > 72 hours after exposure, nPEP is not recommended in most cases.
- If the source person's HIV status is not known, CDC has no recommendations. Decisions regarding nPEP in such circumstances should be assessed on a case-by-case basis.

Evaluation

Prior to deciding on nPEP, ask the potentially exposed person about their own HIV status, the timing and characteristics of the most recent exposure, the frequency of past exposures to HIV, the HIV status of the source, and the likelihood of concomitant infection with other pathogens.

Obtain HIV serology at baseline, at 4-6 weeks, at 3 months, and at 6 months. Other bloodborne diseases (hepatitis B, hepatitis C, other sexually transmitted diseases) and pregnancy also need to be considered.

Treatment

Start antiretroviral nPEP promptly for best chance of success. Consider consulting specialists in HIV, obstetrics, or pediatrics where appropriate. However, if these consultations are not immediately available, do not delay starting nPEP. The nPEP medications can always be modified later.

The preferred regimens for nPEP are combinations of three drugs. These are either:

1) [Efavirenz] + [lamivudine or emtricitabine] + [abacavir or didanosine or stavudine], or,
2) [Lopinavir/ritonavir (Kaletra®)] + [lamivudine or emtricitabine] + [zidovudine]. Multiple alternate regimens are also suggested in the new recommendations[2].

Counsel patients

Side effects of antiretrovirals should be discussed with patients. Adherence to 28 days of therapy can be challenging. Nausea (57%) and fatigue (38%) are common. Antiemetics may be needed.

nPEP is not 100% effective. Patients need to be aware of symptoms of acute retroviral syndrome, including fever and rash. Patients should practice protective behaviors with sex partners or drug-use partners during and after nPEP.

Management pearls

Do not use nevirapine (Viramune®) for nPEP. The risk of severe or fatal hepatitis is unacceptable for prophylactic use.

Record HIV test results separate from the sexual assault examination to protect the patient's confidentiality, in the event that medical records are later released for legal proceedings.

Additional details on nPEP is available in the January 21, 2005 Morbidity and Mortality Weekly Report[2].

1. CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. MMWR 2001;50 (No. RR-11). *www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm*

2. CDC. Antiretroviral Postexposure Prophylaxis After Sexual, Injection-Drug Use, or Other Nonoccupational Exposure to HIV in the United States. MMWR 2005; 54 (No. RR02); 1-20. *www.cdc.gov/mmwr/preview/mmwrhtml/rr5402a1.htm*

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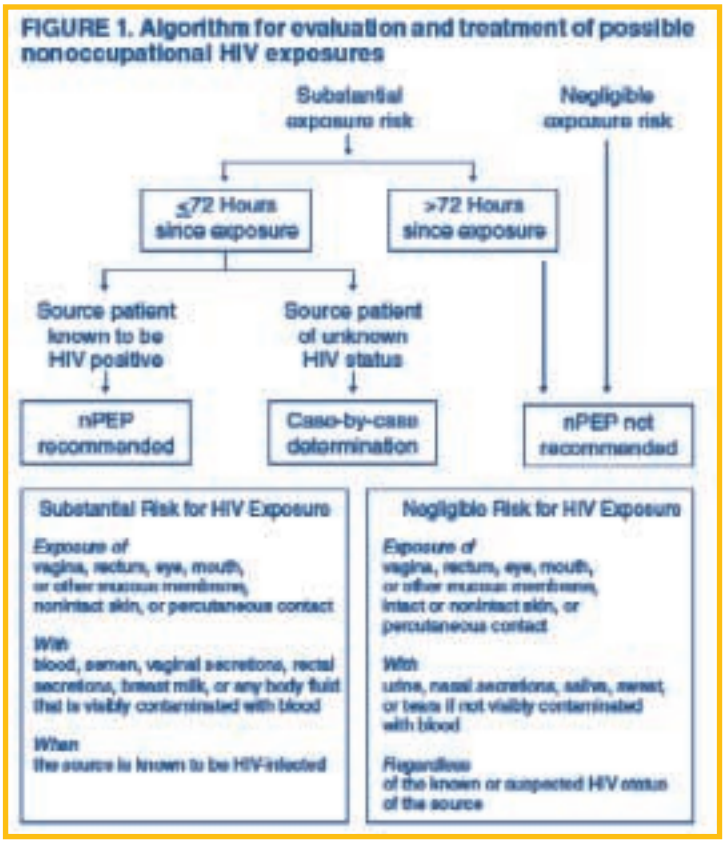

Reference 2 is the source of Figure 1 algorithm.

Hantavirus Pulmonary Syndrome in 2005

Increased precipitation levels in Arizona this winter are likely to increase the risk for hantavirus pulmonary syndrome (HPS) in 2005. In 1993, winter precipitation associated with El Nino and subsequent increases in wild mice populations were associated with the first recognized HPS outbreak in the United States in the Four Corners region. Since then, HPS has been identified throughout the country with more than 380 cases reported to date. In Arizona, 39 cases were reported during the same period of time; these, include two cases in 2004. Contrary to common belief, HPS cases in Arizona are not limited to northern Arizona. HPS cases have been reported in southern Arizona counties too; but more importantly, evidence of Sin Nombre Virus, the causative agent of HPS in Arizona, infection in mice has been documented throughout the state.

Although rare, HPS continues to be potentially deadly, as attested by a 36% case-fatality rate among all cases reported to date in the United States. People get infected with HPS by inhaling aerosolized virus excreted from rodents in their urine, feces and saliva. Deer mice and other related species appear to be the major reservoir. Given the aerosol transmission of the virus it is warranted to assess potential exposure of suspect cases to rodents or their nests or dropping.

The incubation period for HPS ranges from a few days to six weeks. Prodromal symptoms commonly include fever, myalgias, abdominal pain, nausea and vomiting. Respiratory tract symptoms or signs are absent for the first few days. The prodrome is then followed in 4-5 days (range 1-10 days) by cough and dyspnea, which can progress to pulmonary edema and severe hypoxemia within a few hours.

Initially, chest X-rays may reveal signs of interstitial edema, similar to those seen with cardiogenic pulmonary edema. These findings include Kerley B lines, hilar indistinctness and peribronchial cuffing. However, there are no other radiographic stigmata of pulmonary venous hypertension such as LA, LV, or RV enlargement. As HPS progresses, alveolar flooding occurs in the basilar or perihilar areas rather than the peripheral pattern typically seen with ARDS. Pleural effusions are also seen as the disease progresses. Patients with HPS usually require admission to the ICU along with hemodynamic monitoring. Laboratory findings commonly include an elevated hematocrit, thrombocytopenia, and leukocytosis with a left shift. At least 10% of lymphocytes are either immunoblasts or plasma cells.

Other possible etiologies should also be considered in persons presenting with unexplained respiratory distress. If a patient has unexplained high fever or painful adenopathy and has a history of travel to northern or eastern Arizona, plague should be suspected and reported to the state health department immediately. Blood for bacterial culture should be obtained prior to administration of antibiotics. Blood will also be used for plague serology.

Depending on the clinical presentation, lymph node aspirate and sputum samples for culture may be warranted as well. Since 1993, at least three plague cases with respiratory involvement were admitted to hospitals in Arizona with an initial suspicion/diagnosis of HPS.

Other etiologies that have been identified in patients initially suspected of having HPS, include bacterial pneumonia, necrotizing herpes pneumonia, meningococcal sepsis, and coccidiodomycosis. HPS prodromal symptoms are indistinguishable from influenza. The best way to differentiate HPS from influenza is to obtain a viral culture. Other common respiratory viruses (e.g., parainfluenza, respiratory syncytial virus) may also mimic HPS prodromal symptoms.

Serologic testing for HPS is available at the Arizona State Health Laboratory (ASHL). Collect blood specimens in a plain red top 10 ml tube. Do not use a tube with serum separator. The State Health Laboratory will centrifuge the blood to separate serum and clot. Contact Vector-Borne & Zoonotic Diseases (VBZD) Section staff at 602.364.4562 for HPS consultation and to arrange for laboratory testing. Specimens should be sent to: Arizona State Health Laboratory, Attn: Serology, 250 North 17th Avenue, Phoenix, Arizona 85007

For more information, contact Vector-Borne & Zoonotic Diseases (VBZD) Section staff at 602.364.4562.

Hispanic Newborns Now Lead All Races in Arizona

by Timothy Flood, M.D.

Jose became the most popular name for boys born in Arizona last year, toppling the long-standing number one, Michael. The nomenclature upset is indicative of a shift in the ethnicity of newborns that occurred in 2003. Arizona's 2003 vital statistics report shows that births to Hispanic women now lead the other race/ethnic groups.

In the Arizona data, births are classified according to one of six categories of the mother's race/ethnicity: White non-Hispanic, Hispanic or Latino, Black or African American, American Indian or Alaska Native, Asian or Pacific Islander, and Other/Unknown.

As noted in the 2003 Report, and for the first time in Arizona, the number of Hispanic newborns has exceeded the number of White Non-Hispanic newborns. This finding extends the trends of mothers' race/ethnicity that have been present during the past decade (see Figure 1 on Page 8). It is likely this pattern will become an established trend in Arizona for the foreseeable future.

Review of the underlying counts and rates shows that the increase in proportion of Hispanics is due to an

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Clusters of "24-Hour Stomach Flu" Now Reportable in Arizona

Graham Briggs

It has been called stomach flu, calicivirus, a small round structured virus, Norwalk, Norwalk-like virus, and most recently norovirus. It has been suggested that as many as 50% of cases of gastroenteritis in the United States are caused by it. It can be easily transmitted through the fecal-oral route, through food, water, or through person-to-person contact. A low infectious dose and ability to survive in the environment for at least 30 days contribute to the ease of transmission and high attack rate seen during outbreaks. Norovirus is actually the genus name for a large group of closely related single-stranded positive-sense RNA viruses of the family *Caliciviridae* first recognized in 1968 in Norwalk, Ohio during an outbreak among schoolchildren. Most importantly for Arizona residents, it is the most common lab confirmed organism associated with clusters of gastrointestinal illness in the state.

Norovirus continues to solidify its place at the top of the list as the most commonly reported pathogen associated with outbreaks in Arizona. At least 26 of the 49 investigations of gastrointestinal clusters conducted statewide in 2004 were laboratory confirmed or suspected as being caused by norovirus. Person-to-person transmission was the most common identified mode of transmission, however, numerous foodborne outbreaks were also identified, often with secondary person-to-person spread.

Individuals afflicted with this "24 hour stomach flu" present to emergency departments with varying symptoms including nausea, vomiting, diarrhea, dehydration, low grade fever, sudden onset of acute symptoms, and often contact with an individual with similar symptoms in the preceding 24-48 hours. While a single, sporadic case of norovirus is not

a reportable condition in Arizona, clusters of nausea, vomiting, and/or diarrhea are now reportable to your local health department.

The Arizona State Public Health Laboratory has the ability to test stool and emesis specimens for norovirus to identify outbreaks. Genetic sequencing is also being performed on specimens that test positive to determine epidemiological links and chains of infection. A variety of strains or subtypes, which are identified using sequencing, were circulating in Arizona in 2004. The dominant strain in Arizona in 2004 was first isolated in Great Britain in 2002 and accounted for over half of the laboratory confirmed norovirus outbreaks reported in 2004. We also saw the introduction of a new strain to Arizona, originally identified in Japan. The first documented outbreak involving this strain was traced back to an outbreak of the same strain in Las Vegas. We have since identified this strain numerous times circulating in the Phoenix area.

Education concerning transmission of norovirus is an important part of preventing spread of this organism in the community. We encourage physicians to discuss routes of transmission, proper handwashing, good hygiene, and decontamination of potentially contaminated surfaces and clothing with individuals suspected of having viral gastroenteritis, particularly if there are young children in the household.

We would also encourage physicians to ask patients about ill contacts when sporadic cases of gastrointestinal illness present for treatment. Norovirus typically spreads very easily from person to person and a history of contact with individuals displaying similar symptoms may be suggestive of norovirus. Stool and/or vomitus specimens should be collected from symptomatic individuals and may be forwarded to the Arizona State Health Laboratory for testing if the patient is suspected of being part of a cluster. While testing cannot be performed for single cases, please contact your local health department or Graham Briggs in the infectious disease epidemiology section at ADHS to discuss testing and investigation when a cluster of gastrointestinal illness is suspected.

Graham Briggs is an Epidemiologist for Infectious Disease Epidemiology Section, Office of Infectious Disease Services, Arizona Dept of Health Services. He can be reached at 602.364.3669 or briggsg@azdhs.gov

May 8-14, 2005 is National Women's Health Week.

In Arizona we will offer Women's Check-up Day, May 9. If you would like to provide a free screening on Check-up Day or throughout Women's Health Week, ADHS will publish your organization's contact information on the ADHS web site and will submit your information to the U.S. Department of Health and Human Services for publication on their web site. Please contact Catherine Hannen, Program Manager Office of Women's and Children's Health by Friday, April 15, 2005 at *channen@azdhs.gov* or telephone: 602.364.1474 if you or your organization would like to participate.

Chlamydia Screening and Morbidity in Arizona, 1999-2004

by Asraf Lasee, MBBS, MPH, DRPPH

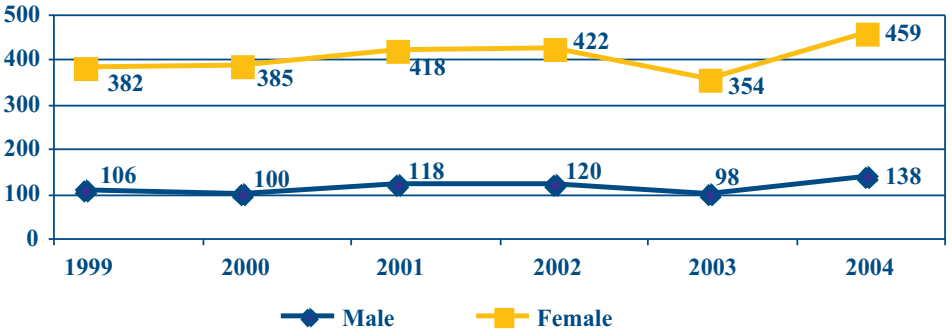
Chlamydia is the most common cause of preventable infertility[1]. Most of the infections are asymptomatic and may persist for months without being noticed, particularly in women. The primary risk factors for chlamydia are age (under 25 years), unprotected sex and history of multiple sex partners.

Due to its impact on the public's health it is critical to have effective prevention and control strategies to reduce morbidity and subsequent complications associated with *Chlamydia trachomatis* infections, such as salpingitis, infertility an increased risk for HIV infection. To that end, the Arizona Department of Health Services' Sexually Transmitted Disease (STD) Control Program in close collaboration with the Arizona Family Planning Council has expanded chlamydia screening efforts in family planning clinics, STD clinics, correctional health facilities, and the Indian Health Service through the Infertility Prevention Project (IPP). As a result of the of these chlamydia screening activities, the number of cases identified in Arizona has increased from 12,021 cases reported in 1999 to 16,825 cases in 2004. However, the increasing trend is more a reflection of better case finding rather than true increases in morbidity. More importantly, this has resulted in early detection and treatment of young females, particularly in family planning clinics and juvenile detention centers.

Chlamydia case rates in general are 3 to 4 times higher in females than males (Figure 1). This is due in part to the increased chlamydia screening in females consistent with the Infertility Prevention Project's (IPP) recommended screening guidelines *(www.centerforhealthtraining.org)*. Similarly, differences in case rates by race/ethnicity could reflect screening practices rather than differences in morbidity (Figure 2).

Figure 1

Chlamydia Case Rates per 100,000 Population by Gender, Arizona, 1999-2004
(2004 rates are prelimnary, based on the 2003 population estimates)



IPP data for 2003 shows that 20% of all tested females in juvenile detention centers were positive compared to 7.2% positive tests in males. This indicates significant chlamydia morbidity in young juvenile female and male detainees. Moreover, chlamydia positivity rates are very high in adult detainees as well (13%). Over 94% of all tests in family planning clinics in 2003 were conducted on females and 5.4% of them were positive, and about 15 percent of the male tests were positive.

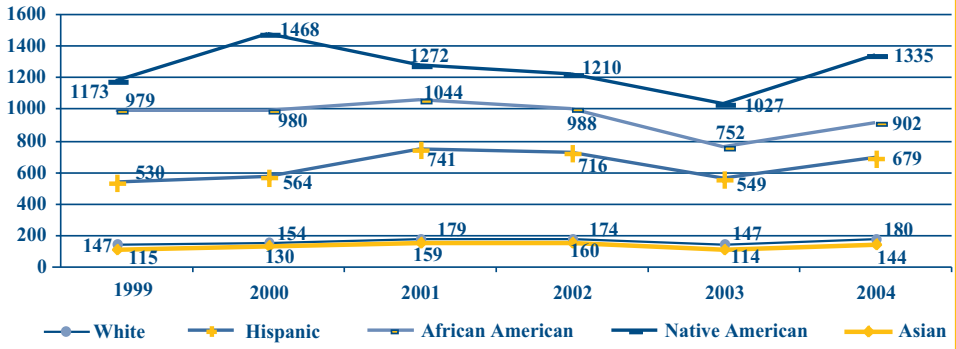
Given its widespread prevalence it is important to routinely screen sexually active adolescent girls and women under age 25 years who have multiple or new partners, and/or use barriers contraceptives inconsistently. Please continue to report chlamydia, syphilis, gonorrhea, and genital herpes to your local health department within five business days of diagnosis. To receive communicable disease report forms, please contact ADHS STD Control program at 602.364.4666.

(1) Chlamydia accounts for one-quarter to one-half of the 1 million recognized cases of PID in the United States each year. Approximately 20% women treated for PID will be infertile; another 18% will experience chronic pelvic pain resulting from infection, and 6% will have an ectopic pregnancy. The increased availability of more affordable, cost-effective, laboratory diagnostic test for chlamydia has resulted in improved detection of this serious communicable disease.

Asraf Lasee, MBBS, MPH, DrPH, is the STD Program Manager at the Arizona Department of Health Services and can be reached at 602 364.3661 or laseea@azdhs.gov

Figure 2

Race specific Case Rates for Chlamydia in female, Arizona, 1999-2004
(2004 rates are prelimnary, based on the 2003 population estimates)



SUMMARY OF SELECTED REPORTABLE DISEASES

Year to Date (January, 2005)[1, 2]

	January 2005	January 2004	5 Year Median January
VACCINE PREVENTABLE DISEASES:			
Haemophilus influenzae, serotype b invasive disease (<5 years of age)	0 (0)	0 (0)	1 (0)
Measles	1	0	0
Mumps	0	0	0
Pertussis (<12 years of age)	14 (5)	8 (5)	8 (5)
Rubella (Congenital Rubella Syndrome)	0 (0)	0 (0)	0 (0)
FOODBORNE DISEASES:			
Campylobacteriosis	70	36	36
E.coli O157:H7	0	2	2
Listeriosis	1	0	1
Salmonellosis	56	56	48
Shigellosis	32	30	32
VIRAL HEPATITIDES:			
Hepatitis A	21	24	25
Hepatitis B: acute	33	10	14
Hepatitis B: non-acute	114	64	63
Hepatitis C: acute	0	0	1
Hepatitis C: non-acute (confirmed to date)	744 (202)	813 (266)	632 (270)
INVASIVE DISEASES:			
Streptococcus pneumoniae	76	77	91
Streptococcus Group A	36	13	13
Streptococcus Group B in infants <30 days of age	7	2	2
Methicillin-resistant *Staphylococcus aureus*[3]	81	N/A	N/A
Meningococcal Infection	1	1	5
SEXUALLY TRANSMITTED DISEASES:			
Chlamydia[5]	1,612	1,788	1,083
Gonorrhea	356	514	305
P/S Syphilis (Congenital Syphilis)	11 (1)	12 (0)	13 (1)
DRUG-RESISTANT BACTERIA:			
TB isolates resistant to at least INH (resistant to at least INH & Rifampin)	N/A	0 (0)	0 (0)
Vancomycin resistant *Enterococci* isolates	171	86	70
VECTOR-BORNE & ZOONOTIC DISEASES:			
West Nile virus	0	0	0
Hantavirus Pulmonary Syndrome	0	0	0
Plague	0	0	0
Animals with Rabies[5]	13	7	7
ALSO OF INTEREST IN ARIZONA:			
Coccidioidomycosis	222	295	294
Tuberculosis	2	1	5
HIV	83	32	32
AIDS	45	37	28

1 Data are provisional and reflect case reports during this period.
2 These counts reflect the year reported or tested and not the date infected.
3 MRSA was not reportable before October 2004.
4 The observed increase in Chlamydia morbidity in 2004 is due to data entry of reports from previous months.
5 Based on animals submitted for rabies testing.

Data compiled by Office of Infectious Disease and Office of HIV/AIDS Services

Prevention bulletin

Arizona Department of Health Services

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Hispanic Newborns Now Lead All Races in Arizona

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increase in urban compared to rural Hispanic births, and relatively minimal increase in the number of White non-Hispanic births statewide. In addition, the fertility rate among Hispanics leads that of all races.[1]

These trends have important implications for the practice of medicine and public health. Hispanic culture will play an increasingly important role in the delivery of health care. In the short term, practitioners serving the pediatric and maternal population ought to increasingly recognize this Hispanic shift. As many of these families speak Spanish as their primary language, communication in Spanish will become a valuable component of medical practice.

In the long term, medical and nursing practitioners will need to become more prepared and attentive to the diseases (e.g., diabetes) that are more common among the Hispanic population. It will be essential to understand how pregnancy and disease are viewed within the Hispanic culture. Customized public health messages should be targeted in areas where Hispanics are concentrated.

1 ADHS. Health Status and Vital Statistics, 2003. Chapter 1B: Natality *www.azdhs.gov/plan*

Figure 1

Resident live births by mother's race/ethnic group, Arizona.