Prevention bulletin
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Sun Protection at School – A Call for Action

By Will Humble, M.P.H.

A cross-sectional study published in the June issue of Pediatrics [www.pediatrics.org] found that only a third of more than 10,000 children surveyed said they routinely used sunscreen during the previous summer.

Eighty-three percent (83%) of children had at least one sunburn during the previous summer, and 36% had three or more sunburns. Half of those that had a sunburn last summer said it was worth it to get the tan that followed.

The study found that the preference for tanned skin, having many friends who were tanned, and belief in the worth of burning to get a tan, were associated with limited sunscreen use and more frequent sunburns.

The bottom line: Kids are still seeking tans - and not using sunscreen - despite warnings about the dangers of skin cancer.

Changing childhood attitudes and behaviors about the importance of sun protection begins with sun safety awareness in pre-school and early elementary school. Wagging your finger at teenagers and telling them, "you ought to wear sunscreen" has very little effect.

Elementary schools can play a major role in protecting children and adolescents from UV exposure by instituting shade-friendly policies, making environmental changes, and conducting educational programs that reduce skin cancer risks.

The U. S. Centers for Disease Control and Prevention (CDC) has recently published specific and detailed guidelines for school programs to prevent skin cancer. The CDC report outlines recommendations for sun policy changes, environmental changes, education programs, family involvement, professional development, and evaluation.

The full report is published on the CDC website at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5104a1.htm.

Will Humble is the Chief of the Office of Environmental Health at the Bureau of Epidemiology and Disease Control and can be reached at 602.230.5941 or whumble@hs.state.as.us.

Specific Sun Protection Recommendations For Schools

- Include sun safety in the general school health program.
- Encourage students and staff to wear hats and sun-protective clothing during recess, lunch breaks, and P.E.
- Encourage parents to apply sunscreen to children before coming to school.
- Consider the construction of shade structures and the planting of shade trees in playground areas and school common grounds.

Arizona Department of Health Services

Visit the ADHS Web site at www.hs.state.az.us

Proper Management, Physical Activity — Keys to Arthritis Pain Relief

by Patrick Mause

Arthritis and other rheumatic conditions currently affect more than a million people in Arizona at an annual cost of approximately one billion dollars. Managing chronic disease can often be frustrating for patients and physicians; however, proper management, physical activity, and medical interventions can have a tremendous effect on people's qualities of life and enable them to live healthier lives with less pain and disability.

In 2001, the Arizona Department of Health Services' Arthritis Program conducted interviews with physicians and people with arthritis, as well as four focus groups composed of people with arthritis.

One of the more significant findings from these interviews was that people with arthritis felt a strong incentive not to self-identify as having arthritis because of the fear of stigmatization by society or their friends and family. One focus group participant described the stigma by commenting, "Someone with arthritis is older, female, Anglo, weak, and dependent. She is crippled and moody." Such personal beliefs make it difficult to reach this population with public health messages.

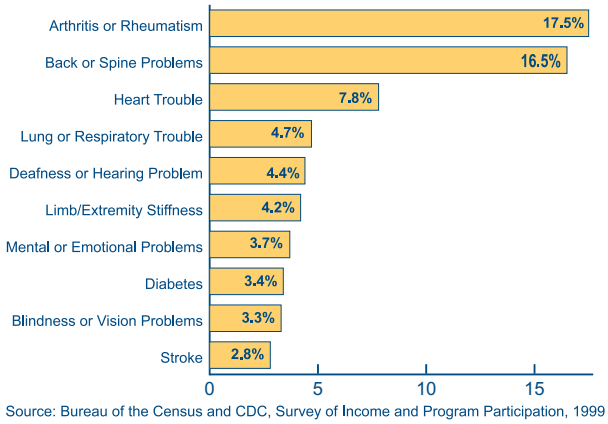
People in pain do not want to see themselves as having arthritis, so they ignore the public health messages. However, interviews also indicated that people are receptive to hearing messages about arthritis and how to manage their disease when they visit their doctor.

Recommendations by their doctor to engage in self-management of their disease are highly valued by patients. One very successful self-management program is the Arthritis Self-Help Course, available through the Arthritis Foundation. This course is clinically proven to reduce arthritis pain by 20% and to reduce arthritis related doctor visits by 40%.

One focus group participant stated "Just the fact that it [Arthritis Self-Help Course] was prescribed or recommended by my doctor, and handed to me [as a written prescription] by my doctor, I would go." Unfortunately, this resource is underutilized because of a general lack of knowledge of its existence.

Figure 1

Leading Causes of Disability Among Persons Aged 18 Years and Older, United States, 1999, in Percent



Source: Bureau of the Census and CDC, Survey of Income and Program Participation, 1999

The Arthritis Program is currently working on two initiatives aimed at improving the quality of information provided to arthritis patients. One initiative is "Physical Activity - The Arthritis Pain Reliever" that utilizes materials developed by the Centers for Disease Control and Prevention and the Arthritis Foundation to promote physical activity.

The other initiative is to aggressively promote the six week Arthritis Self-Help Course by providing physicians with brochures that describe the course and includes a gift certificate for $10 off the cost of the course that generally runs between $25-$40. The gift certificate appears on the back of the brochure and includes a space where the physician can write the patient's name. By personalizing the course brochure with the patient's name, it will hopefully link the course recommendation psychologically to that of a prescription and result in greater patient participation and compliance.

For information on these two initiatives, or to request materials, please contact the ADHS Arthritis Program at (602) 542-7200.

ARTHRITIS RESOURCES IN ARIZONA

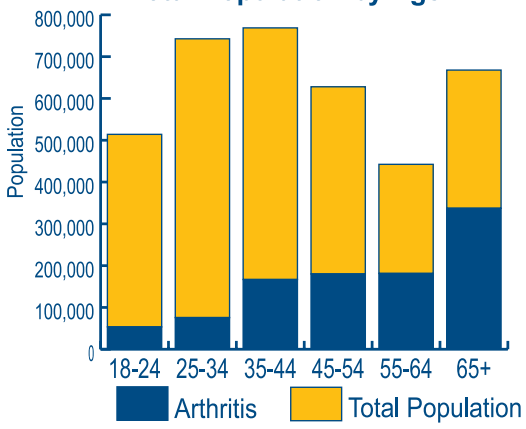
Arthritis Foundation (Phoenix)
602-264-7679
1-800-477-7679
www.arthritis.org

Arthritis Foundation (Tucson)
520-917-7070
1-800-444-5426
www.arthritis.org

ADHS Arthritis Program
602-542-7200

Figure 2

Arizonans with Arthritis Within Total Population by Age



West Nile Virus — An Emerging Public Health Threat in Arizona?

By Craig Levy and William Slanta

The West Nile virus (WNV) had not been documented in the Western Hemisphere until 1999. However, the virus survived its first winter and is rapidly spreading across the United States. WNV has been detected in humans, birds, mosquito pools, sentinel chickens and other animals. Although not yet detected in Arizona, the arrival of WNV is expected to occur this year. Because of Arizona's history of sporadic cases of arboviruses such as St. Louis encephalitis (SLE) and western equine encephalitis (WEE) it is important to now include WNV into our routine seasonal arbovirus surveillance.

The national WNV surveillance program is a cooperative effort conducted from May through October involving county and state health departments, the Centers for Disease Control and Prevention, university staff, and pest abatement districts.

The surveillance program consists of five focus areas:

(1) human surveillance for arboviral encephalitis through serologic tests,

(2) mosquito surveillance for arboviruses,

(3) sentinel chicken flock surveillance for serologic conversion through blood samples collected twice-per-month,

(4) veterinary surveillance for equines exhibiting neurologic symptoms compatible with WNV, and

(5) dead bird surveillance for pathologic changes associated with the WNV.

The objectives of the surveillance program are to detect and respond to outbreaks of arboviruses, determine incidence and monitor trends, assess human risk, and issue alerts and implement mosquito control measures as necessary.

The laboratory testing of mosquito samples, blood from sentinel chicken flocks, and human sera is performed at the Arizona State Health Laboratory. Molecular analytical procedures using polymerase chain reaction (PCR) for the identification of SLE, WEE and WNV will be used for mosquito samples.

The use of PCR allows the State Lab to phase out mouse inoculation and increase the capacity to test mosquito samples while at the same time reducing the turn around time. The sentinel chicken flock surveillance for arboviruses was initiated in Arizona in 2000 with three flocks and has now expanded to 15 flocks. In 2001, a total of 28 chickens in Maricopa and Yuma counties seroconverted: 24 for SLE and 11 for WEE.

The State Lab tested 18 patients diagnosed with viral encephalitis for arboviruses in 2001. One case of SLE was confirmed in a Maricopa County child in September and an arboviral infection was ruled out as the cause of encephalitis in 17 other cases.

Reporting of encephalitis is required in Arizona and prompt reporting of cases is necessary for a timely public health investigation and response. To report encephalitis cases, contact your local health department or the Arizona Department of Health Services' Vector-Borne and Zoonotic Diseases staff at (602) 230-5932.

Serum samples of all encephalitis cases should be submitted to the State Lab for arbovirus testing. Blood should be collected in a red top tube or serum separator and shipped to: Arizona State Health Laboratory; Attn: Serology/Arbovirus Testing; 1520 West Adams, Phoenix, Arizona 85007. Convalescent specimens collected 2-4 weeks after the acute specimens are essential to definitely confirm or rule out arbovirus infection, as early specimens are often seronegative up to eight days.

Horses with neurologic disease are tested for WNV and WEE at the National Veterinary Services Laboratory in Ames, Iowa. Dead birds meeting WNV surveillance criteria are tested at the University of Arizona Veterinary Diagnostic Laboratory in Tucson. For more information on arboviruses in Arizona, contact the ADHS staff at (602) 230-5932.

Craig Levy is the manager of the Department's Vector-Borne and Zoonotic Diseases Section and can be reached at 602.230.5918 or clevy@hs.state.az.us. William Slanta is the Health Services Assistant Bureau Chief at the State Health Laboratory. He can be reached at 602.542.6128 or wslanta@hs.state.az.us.

Increase in Invasive Group A Streptococcal Disease in 2002

By Clare Kioski, M.P.H.

A total of 154 cases of invasive Group A Streptococcal disease have been reported to the Arizona Department of Health Services through the first 5 months of 2002. This represents a 31% and 44% increase in the number of cases during the same time periods in 2000 and 2001, respectively (Figure 1).

Of 74 patients with known outcomes, thirteen (18%) died and of 82 cases with known race/ethnicity, thirteen (16%) were Native Americans. Eight cases of necrotizing fasciitis and 16 cases of Streptococcal Toxic Shock Syndrome were reported.

Eleven cases were reported in children less than 5 years of age, but no cases have been associated with varicella. None of the cases were related. The Centers for Disease Control and Prevention does not recommend antimicrobial prophylaxis of the household members of cases[1].

After early childhood, the risk of invasive Group A Streptococcal disease increases dramatically with age. The disease rate for the 70+ age group is approximately six times greater than that of the 10-19 year old group (Figure 2).

If you have any questions, please contact Clare Kioski, Epidemiology Specialist, at (602)230-5927 or ckioski@hs.state.az.us.

Clare Kioski is an infectious disease epidemiologist at the Bureau of Epidemiology and Disease Control. She can be reached at 602.230.5927 or ckioski@hs.state.az.us.

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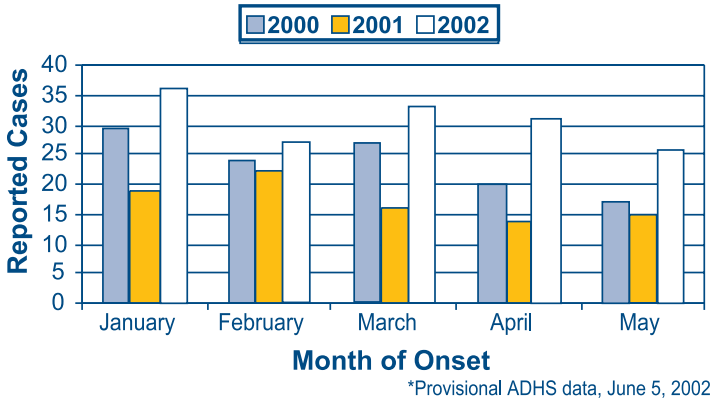
Figure 1

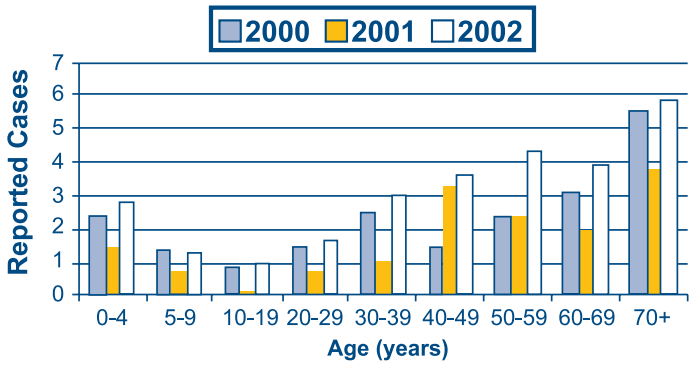
Number of Reported Cases of Invasive Group A Streptococcal Disease in Arizona by Month of Onset, 2000-2002*



*Provisional ADHS data, June 5, 2002

Figure 2

Rate of Invasive Group A Streptococcal in Arizona by Age. Jan-May, 2000-2002*



* Per 100,000 population, 2000 and 2001 population
ADHS Provisional Data, June 5, 2002

Roof Rats Negative for Hantavirus, Plague and Tularemia

The presence of roof rats *Rattus rattus* in an East Phoenix neighborhood was first identified in late December 2001. Fortunately, these rats are not native to Arizona. Following weeks of surveillance activity by the Maricopa County Vector Control staff including the monitoring of complaints, trapping of rats, and mapping roof rat sightings, the distribution of roof rats was found to span a 16 square mile area. Evidence suggests that the roof rats were thriving on the abundant citrus fruits in the area.

Recommended control efforts including the reduction/removal of the rat's food source and placement of anticoagulant baits appear to have been effective in reducing the roof rat population.

However, eradication of the roof rat population entirely may be extremely difficult. The good news is that all rats tested have been negative for fleas, plague, hantavirus and tularemia.

Report 'Em! It's the Law

By Cheryl McRill, M.D.

The ability of the public health system to recognize and respond to the occurrence of communicable diseases depends on prompt and complete reporting by all health care providers. Arizona Administrative Code specifically requires that "a physician or an administrator of a health care facility, or authorized representative, shall submit a communicable disease report of a case or a suspect case" of certain communicable diseases to the local health department. However, a recent study by the Arizona Department of Health Services showed that the actual rate of reporting of selected reportable diseases varied from 42% for invasive *Haemophilus influenza* to 100% for typhoid fever. ***Only a little over half of invasive meningococcal infections were reported!***

Failure to report required reportable diseases represents a potential threat to the public's health. Reporting is a responsibility that should not be overlooked or taken lightly despite busy and demanding physician schedules. Health care providers who would like a list of reportable diseases and a supply of communicable disease report forms should call 602.230.5932.

Questions about reporting requirements may be directed to Dr. Cheryl McRill at 602.230.5820. Physicians who fail to report will be sent a friendly reminder letter the first time this occurs. If necessary, a second reminder letter will be sent. Subsequent failure to report will be referred to the Arizona Board of Medical Examiners or the Arizona Board of Osteopathic Examiners.

Dr. Cheryl McRill is the Chief Medical Officer for the Arizona Department of Health Services. She can be reached at 602.230.5820 or cmcrill@hs.state.az.us.

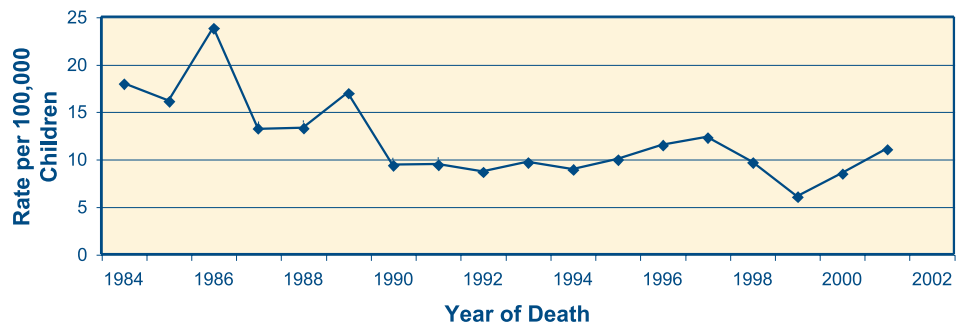
Child Drownings Persist in Central Arizona

By Tim Flood, M.D.

The latest data concerning child drownings in Maricopa County reveal that 27 children age 4 years or less drowned in 2001. Little change in the drowning rate is noted when the 2001 data are compared to 1990 because of a dramatic increase in the drowning rate during the last 3 years. Most of the drowning incidents continue to occur during the summer months in backyard swimming pools. Health care workers can continue to educate parents about the risk of drowning during this summer season, and to be aware of the need to maintain constant supervision of children if there is a pool or any body of water present.

Dr. Tim Flood is Medical Director for the Bureau of Public Health Statistics. He can be reached at 602.542.7331 or tflood@hs.state.az.us.

Figure 1



Arizona Vaccine Shortages Slowly Improving

Physicians should be receiving more supplies of vaccines that were in short supply just in time to begin back-to-school shots.

State health officials received about 50 percent of the ordered tetanus-diphtheria vaccine in June, and anticipate private health care providers will begin seeing their orders arrive throughout the summer. "We are pleased that the vaccine is coming in and that the shortage appears to be ending," said Kathy Fredrickson, chief of the ADHS immunization program. "Some children will likely be able to receive the tetanus-diphtheria booster shot deferred last fall."

However, Fredrickson said, the school entry immunization waiver for the tetanus-diphtheria booster is still in place until June 2003 in order to allow health care providers to "catch-up" their patients. "We want to make sure everyone has enough time to get their vaccine supply and for parents to get the message that this vaccine is now available. Students will not be denied entry to school if they do not have the tetanus-diphtheria booster," Fredrickson said.

Last summer, the Centers for Disease Control and Prevention recommended national deferral of routine tetanus-diphtheria booster vaccination of both children age 7 and older and adults to assure vaccine availability for wound management and other high priority indications. There is a continued shortage of Diphtheria/Tetanus/Pertussis (DTaP/DTP) vaccine given to young children. ADHS has recommended the deferral of the fourth dose, which is usually given at 12-18 months of age, until DTaP supplies increase. Child care centers have provided waivers for this required dose.

For more information about school immunization requirements, contact the immunization coordinator at your local county health department or the ADHS Immunization Program Office at (602) 230-5852.

Suicide - The 8th Leading Cause of Death in Arizona

By Sheila Sjolander, MSW

Suicide, the act of taking one's own life, ranks 8th among the leading causes of death in Arizona and accounts for 2% of all deaths. Each year an average of 800 people die from suicide in Arizona and an average of 2,600 persons are admitted to hospitals because of suicide attempts. For the past decade, the rate of death from suicide has been higher in Arizona than that of the United States.

The reasons for suicide are often unclear, making prevention of suicide especially difficult. However, research has shown that nearly all people who commit suicide have a diagnosable mental or substance abuse disorder.

Suicide rates increase with age and are highest among Arizonans aged 65 and older. In studies of older adults who committed suicide, nearly all had major depression. The suicide rate among people ages 65 and older was significantly higher in Arizona than the U.S., with a rate of 23.2 per 100,000 compared to the U.S. rate of 15.9 per 100,000 in 1999.

Although older people have higher rates of completed suicides, teenagers 15-19 have the highest rates of suicide attempts in Arizona. Depression in children and adolescents is associated with an increased risk of suicidal behaviors.

Over the past decade, the suicide rate in young people has increased dramatically nationwide and suicide is now one of the three leading causes of death among youth 19 and younger in Arizona. There is evidence that depression emerging early in life often persists, recurs, and continues into adulthood. Early onset of depression may predict more severe illness in adult life.

Over the past decade, the suicide rate in young people has increased dramatically nationwide and suicide is now one of the three leading causes of death among youth 19 and younger in Arizona.

More women (12 percent) than men (7 percent) are affected by a depressive illness each year and approximately 20 percent of women have at least one episode of depression that should be treated sometime during their life. The childbearing years are marked by the highest rates of depression, followed by the years prior to menopause.

Although Arizona men have much higher rates of suicide than women, women have higher rates of suicide attempts. Factors that may contribute to depression are not well understood but are believed to include genetics, brain biochemistry, stressors, and other psychological and social factors.

For both women and men, rates of major depression are highest among the separated or divorced and lowest among the married. Suicide rates are also highest among separated, divorced, and widowed people.

Improved recognition, treatment, and prevention of depression are critical to improving the quality of life for thousands of Arizonans and preventing needless death.

Sheila Sjolander is Manager of the Planning, Education, and Partnerships Section, Office of Women and Children's Health. She can be reached at 602.364.1469 or ssjolan@hs.state.us.az.

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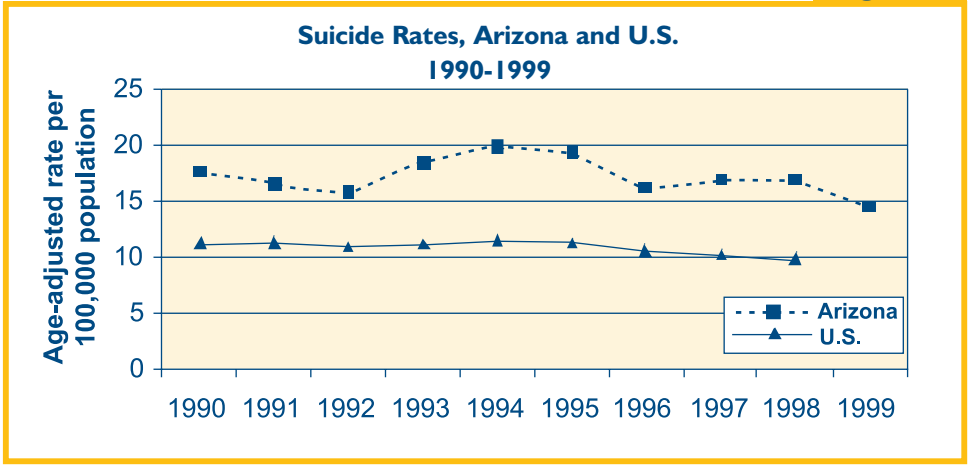
National Institute of Mental Health, Department of Health and Human Services. Depression: What Every Woman Should Know, 2000.

Figure 1



SUMMARY OF SELECTED REPORTABLE DISEASES

(January - May, 2002)[1]

	Jan - May 2002	Jan - May 2001	5 Year Median Jan - May
VACCINE PREVENTABLE DISEASES:			
Haemophilus influenzae, serotype b invasive disease (<5 years of age)	2 (1)	5 (1)	4 (1)
Measles	0	0	0
Mumps	0	1	3
Pertussis (<12 years of age)	33 (22)	265 (100)	29 (20)
Rubella (Congenital Rubella Syndrome)	0 (0)	0 (0)	1 (0)
FOODBORNE DISEASES:			
Campylobacteriosis	237	196	168
E.coli O157:H7	5	10	10
Listeriosis	8	5	5
Salmonellosis	245	223	220
Shigellosis	107	149	149
VIRAL HEPATITIDES:			
Hepatitis A	160	193	371
Hepatitis B	82	75	75
Hepatitis B: non-acute[2]	411	481	*
Hepatitis C	2	8	11
Hepatitis C: non-acute[3]	1437	1264	*
INVASIVE DISEASES:			
Streptococcus pneumoniae	480	503	405
Streptococcus Group A	166	86	86
Streptococcus Group B in infants <30 days of age	10	21	14
Meningococcal Infection	18	12	26
SEXUALLY TRANSMITTED DISEASES:			
Chlamydia	6138	5944	5297
Gonorrhea	1459	1662	1662
P/S Syphilis (Congenital Syphilis)	93 (6)	51 (11)	71 (11)
DRUG-RESISTANT BACTERIA:			
TB isolates resistant to at least INH (resistant to at least INH & Rifampin)	N/A	3 (0)	1 (0)
Vancomycin resistant *Enterococci* isolates	374	308	324
VECTOR-BORNE & ZOONOTIC DISEASES:			
Hantavirus Pulmonary Syndrome	1	1	1
Plague	0	0	0
Animals with Rabies	72	68	18
ALSO OF INTEREST IN ARIZONA:			
Coccidioidomycosis	1441	601	601
Tuberculosis	20	29	25
HIV	51	147	345
AIDS	40	166	404
Lead Poisoning (<16 years of age)	109 (96)	103 (81)	206 (104)
Pesticide Poisoning[4]	15	7	5

1 Data are provisional and reflect case reports during this period except HIV, AIDS, and Lead Poisoning which are by date of diagnosis.
2 These counts reflect the year reported or tested and not the date infected.
** Case counts for non-acute Hepatitis B and C are not available before 1998.*
4 Not all reports will be confirmed as meeting the case definition for pesticide poisoning upon further investigation.

Noteworthy...

Women's Health

The National Women's Health Information Center (NWHIC) is the country's largest noncommercial information center on women's health and provides a gateway to all of the other federal health agencies and to a variety of other online women's health information resources. NWHIC can be found at www.4woman.gov.

Another valuable resource is the Regional Women's Health Coordinators (RWHCs) in each of the 10 regions of the Department of Health and Human Services. The RWHCs support and coordinate women's health efforts such as research, education of public and health professionals and programs in health care service delivery. They are a great source of information about women's health issues nationally and specific to their region. The Region IX (Arizona, California, Hawaii, Nevada, and six jurisdictions in the Pacific Basin) Coordinator is Kay A. Strawder, J.D., M.S.W. For more information, go to http://www.4woman.gov/owh/reg/9/index.htm.

Locally, the Department's Office of Women's and Children's Health provides information on specific health topics and support for innovative programs addressing the health needs of women across different ages, cultures, and races/ethnicities. The Office can be reached at 602.364.1419 or on the Web at www.hs.state.az.us.

Prevention bulletin

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