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World AIDS Day: December 1, 2006

Twenty five years ago an article was published in the county health department's *Public Health Letter* (May 1981) alerting physicians to the distinctly unusual occurrence of Pneumocystis carinii pneumonia (PCP) in previously healthy patients. Two months later on June 4, 1981 the CDC published a report regarding PCP, an infection later linked to Acquired Immunodeficiency Syndrome (AIDS).



Since then many noteworthy markers have unfolded, nationally and globally, which have affected our collective consciousness, including:

- 1983 HIV was first isolated as the cause of AIDS;
- 1988 World AIDS Day was established;
- 1989 all 50 states reported an AIDS case;
- 1991 a red ribbon became the international symbol of HIV;
- 1995 antiretroviral therapy was introduced;
 - 1999 report that 90% of all people living with HIV are in the developing world; and,
 - 2006 report that 25 million people worldwide have died from AIDS.

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Encouraging Adults with Arthritis to be Active

Arthritis is the leading cause of disability in the United States, affecting 43 million adults, with over a third of adults with arthritis reporting activity limitations attributable to arthritis.¹ In Los Angeles County, the prevalence of arthritis among adults is estimated to be 20% (1.3 million).² Physical activity is one of the major non-pharmacologic interventions recommended for arthritis management, but despite numerous studies demonstrating these benefits, persons with arthritis have consistently worse physical activity profiles than their peers without arthritis. A recent analysis of national survey data shows that most adults with arthritis are

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not meeting recommended levels of physical activity and about 44% are physically inactive.³

The study found that among both men and women, being physically inactive was associated with older age, having less education, having functional limitations, and lacking access to a fitness/recreational facility or

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Emergency Contraception Pill Available

The emergency contraception (EC) pill Plan B is now available in pharmacies without a prescription for men and women age 18 and over. In California, women aged 17 and under and women without proof of age can obtain EC with a doctor's prescription or directly from a pharmacist participating in the pharmacy access program. As the non-prescription costs of Plan B are approximately \$40-50, provider prescription of Plan B is still important to ensure insurance coverage by Medi-Cal and Family PACT.

Plan B, or "the morning after pill," is a safe and effective oral contraceptive that prevents pregnancy after unprotected intercourse. It is more effective the sooner it is taken after unprotected intercourse. If taken within the first 24 hours, it reduces the risk of pregnancy by 95%. If taken within 72 hours, effectiveness decreases to 87 to 90%. If taken 72-120 hours after sex, effectiveness decreases to 72 to 87%. After 120 hours it is significantly less effective and not recommended.

Health care providers can help women access EC with Plan B by:

- educating women and men about emergency contraception;
- writing prescriptions for women younger than 18;
- writing prescriptions for women 18 and over for insurance coverage;
- offering prescriptions in advance of need; and
- reminding women to call and make sure EC is available before visiting a specific pharmacy or clinic.

Several county public health programs, including Maternal, Child and Adolescent Health, the Office of Health Assessment and Epidemiology, the Office of Women's Health, and the Sexually Transmitted Disease Program, are working together with partners on the CA EC Network to increase awareness of and access to EC in the county and the state.

For more information or to find a clinic or pharmacy that provides EC visit www.not-2-late.com or www.ec-help.org. For a person-toperson referral to a EC clinic or pharmacy program, call the California Family Health Council toll-free hotline at (800) 521-5211. To learn more about the CA EC Network, contact Ingrid Dries-Daffner, CA EC Network Coordinator, at (510) 272-0150 or iddaffner@phi.org.

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The National Perspective

Significant progress has been made in caring for and treating people living with HIV/AIDS. With enhanced treatment protocols, the HIV-infected are living longer and healthier lives. Due to prolonged life expectancy of HIV infected persons and continued occurrence of new HIV infections, the prevalence of HIV in the U.S. has grown markedly to nearly 1.2 million people.¹

Despite the advancements, an alarming 25.0% of persons who are HIV infected are unaware of their HIV positive status.¹ Furthermore, 54.0% of new infections can be attributed to the HIV positive population who are unaware of their HIV status.² Persons who are unaware of their HIV status lack critical health information that could motivate them to seek life-prolonging care and protect their sexual and needle-sharing partners. The individual and the community are at a disadvantage when persons are unaware of their HIV status.

New Testing Guidelines in the United States

The CDC issued revised recommendations in September 2006, expanding voluntary HIV testing in the health care settings for all persons, aged 13-64, emphasizing that testing should be a part of routine health screening and that HIV test consenting should be incorporated in the general consent procedure for medical care.³ The rationale for the revised recommendations include: HIV meets the criteria for screening protocols, because effective treatment, when started early, can result in better health outcomes; HIV-infected people already visit their medical providers but their infection can go undetected; and most people adopt behaviors that reduce HIV transmission when they are aware they are infected.⁴ The revised recommendations have been endorsed by the American Academy of HIV Medicine.

New HIV Testing Techniques under Investigation

Although successful disclosure of HIV test results are integral to prevention and treatment efforts, CDC reports that 31.0% of those who tested positive in 2000 did not return for their test results.⁵ Currently, HIV testing entails a series of laboratory-based tests, an HIV EIA followed by a Western Blot, or a rapid HIV point-of-service test followed by a laboratorybased confirmatory Western Blot. In each of the two testing scenarios, an HIV positive patient must present at two clinic visits to receive their final HIV test result.

In contrast, in the developing world where access to laboratories is limited, an HIV Rapid Testing Algorithm using a series of different pointof-service rapid HIV tests to provide preliminary and confirmatory results during one clinic visit was designed and tested. This testing strategy has been successful in disclosure of final test results to patients and linking them to care in resource limited settings. A rapid HIV testing algorithm is currently under evaluation for use in the U.S.

A rapid testing algorithm in tandem with the revised 2006 CDC recommendations for expanded HIV testing in medical settings holds promise for mitigating the 40,000 incident HIV cases each year in this country.

Global Perspective

An estimated 38 million people world-wide were living with HIV/AIDS at the end of 2005.⁶ The epicenter remains sub-Saharan Africa where it is estimated that 64.0% of the total number of HIV infected persons reside, though the region represents only 10.0% of the world's population.⁶ Among lowto middle-income countries an estimated 1.6 million HIV-infected people are receiving antire troviral therapy and an additional 6.8 million require treatment.⁷

A Perspective from Malawi

The experience of the African sub-Saharan country of Malawi illustrates a societal impact that is in stark contrast to that in the U.S. The prevalence of HIV in Malawi is 14.1%, compared to less than 0.8% in the US.⁶ The epidemic is generalized among all population segments of Malawi but disproportionately affects women. As a result of AIDS mortality, life expectancy is 41 years.⁸

In Malawi, there are approximately 250 medical doctors and 7,000 nurses in a country of 13 million.⁸

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AIDS mortality and emigration have reduced the skilled workforce; skilled professionals have not been immune to acquisition of HIV, while others leave Malawi in search of more acceptable economic opportunities. Lack of physicians, nurses and medical technicians significantly restricts the ability of Malawi's government to implement antiretroviral medication distribution and HIV prevention programs.

Global Response

In recent years, the international response to the global epidemic has led to pivotal initiatives developed to mitigate the barriers to adequate treatment, prevention, and care for child orphans. Programs include the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), UNAIDS/World Bank Multi-Country HIV/AIDS Program; the World Health Organization "3x5" Initiative, and the Global Fund to Fight AIDS. It is hoped that the combined resources of over \$22 billion will aid the ability for low- and middle-income countries to halt the global HIV pandemic.

Conclusion

With 25 years of HIV treatment and prevention advances as a legacy, there is promise for the work ahead. As we observe World AIDS Day 2006, there are national initiatives that show promise to stem the challenge posed by new infections and a changing epidemic. And, on the global theater, there is promise that the combined resources of several funded initiatives will redress the inadequate access to treatment and the systemic barriers to mounting an effective response to the epidemic.

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Quadrivalent Human Papillomavirus Vaccine

In June 2006, the Food and Drug Administration announced the approval of the first vaccine against human papillomavirus (HPV), the primary cause of cervical cancer. Gardasil[®], manufactured by Merck, protects against HPV types 16 and 18, which together are responsible for 70% of cervical cancers, and types 6, 11, which along with type 18 are responsible for 90% of genital warts.

In women who had not already been infected, the vaccine was nearly 100% effective in preventing precancerous cervical lesions, precancerous vaginal and vulvar lesions, and genital warts caused by infection with the HPV types targeted by the vaccine. While the study period was not long enough for cervical cancer to develop, the prevention of these precancerous lesions is believed highly likely to result in the prevention of cervical cancers. The vaccine appears to be both safe and well tolerated. During the studies no serious side effects were reported. The most commonly reported side effects were brief injection site soreness and low-grade fevers.

About HPV

HPV is the most common sexually transmitted infection in the U.S., with about 20 million people currently infected. The CDC estimates about 6.2 million Americans become infected with genital HPV each year. It is most common in young women and men who are in their late teens and early twenties. Over half of all sexually active men and women become infected at some time in their lives. Consistent condom use can decrease the risk of sexually transmitted infections, including HPV.

Approximately ten of the 30 identified genital HPV types can lead, in rare cases, to development of cervical cancer. There are approximately 9,700 new cases of cervical cancer and 3,700 deaths attributed to it in the U.S. each year. Worldwide, cervical cancer is the second most common cancer in women and is estimated to cause over 470,000 new cases and 233,000 deaths each year. The new quadrivalent HPV vaccine protects against the two types of HPV that cause 70% of cervical cancers.

The Advisory Committee on Immunization Practices (ACIP) voted to recommend that the quadrivalent HPV vaccine be routinely administered to girls when they are 11-12 years old.

Routine vaccination recommended

The Advisory Committee on Immunization Practices (ACIP) voted to recommend that the quadrivalent HPV vaccine be routinely administered to girls when they are 11-12 years of age. The ACIP recommendation also allows for vaccination of girls beginning at nine years of age as well as catch-up vaccination of girls and women 13-26 years of age. The vaccine should ideally be administered before onset of sexual activity when women are exposed to the viruses, but females who are already sexually active should still be vaccinated.

Gardasil[®] is a recombinant vaccine (made from non-infectious HPV-like particles [VLP]) that is given as three injections over a six-month period. The second dose is given two months after the first dose and the third dose is given six months after the first dose (at least 12 weeks after the second dose). The dose is 0.5 mL given intramuscularly. The vaccine may be administered at the same visit as other age appropriate vaccines are provided, such as tetanus-diphtheriaacellular pertussis vaccine (Tdap), meningococcal conjugate vaccine, measles-mumps-rubella vaccine (MMR) and the now recommended second dose of varicella vaccine if not previously received.

Quadrivalent HPV vaccine is contraindicated for persons with a history of immediate hypersensitivity to yeast or to any vaccine component. The vaccine is not recommended for use in pregnancy. Although the vaccine has not been causally associated with adverse outcomes of pregnancy or adverse events to the developing fetus, data on vaccination during pregnancy are limited. Breastfeeding women may be vaccinated. Immunocompromised persons also may be vaccinated; however, the immune response to the vaccine might be less than that of immunocompetent persons.

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As with other new vaccines the duration of immunity that the quadrivalent HPV vaccine will offer is not known. Current studies (with five-year follow-up) indicate that the vaccine is effective for at least five years. Since there has been no evidence of waning immunity during that time period, it is expected that the vaccine will offer long-term protection. It should be noted that data from clinical trials demonstrated a greater immune response in girl's ages ten to 15 compared to young women ages 16 to 25.

Efficacy exceptions

Although immunization with quadrivalent HPV vaccine is expected to prevent most cases of cervical cancer due to HPV types included in the vaccine (6, 11, 16, and 18), females are not protected if they have been infected with these HPV type(s) prior to vaccination, indicating the importance of immunization before potential exposure to the virus. In addition, the vaccine will not treat existing HPV infections or their complications. Also, the vaccine does not protect against less common HPV types not included in the vaccine, thus routine and regular pap screening remains critically important in detecting precancerous changes in the cervix, and allowing treatment before cervical cancer develops.

Challenges to providing vaccine

There may be challenges in reaching the target population for vaccination. Although 11-12 years of age is a recommended age for health assessments (including immunization needs) few children this age routinely see their health care providers, let alone see their provider three times as will be necessary to receive the full series of vaccine doses. Providers are encouraged to recall patients for immunization assessments and to use health care visits made for another reason as an opportunity to assess immunization needs, including HPV vaccine.

In addition to educating parents about the need to complete all three doses to be protected, providers will need to use reminder systems to remind parents when their child needs to return for the second and/ or third doses.

Studies underway

The manufacturer is conducting several studies, including additional studies to further evaluate general safety and long-term effectiveness. The manufacturer will also monitor the pregnancy outcomes of women who receive Gardasil[®] while unknowingly pregnant. In addition, the manufacturer has an ongoing study to evaluate the safety and effectiveness of Gardasil in males.

The Vaccines for Children (VFC) Program will provide free vaccine to VFC providers for use in female children and adolescents less than 19 years of age who are CHDP-eligible, uninsured, American Indian, or Alaska Native. It is anticipated the vaccine will be available to VFC providers the end of this year or early in 2007.

In the private sector, the vaccine is now available through some health plans and clinics. California requires insurers to cover vaccination for those age groups recommended by the ACIP.

For additional information visit CDC's National Immunization Program's website at: http://www. cdc.gov/nip/vaccine/hpv/default.htm, or contact the County's Immunization Program at (213) 351-7800.

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program. Among women, inactivity was also associated with being Hispanic or non-Hispanic black, having frequent anxiety or depression, being limited in social activities, and not having received physical activity counseling from a healthcare provider; among men, inactivity was also associated with having severe joint pain.

Both strength training and aerobic exercise have been shown to benefit persons with arthritis, decreasing pain while improving function and delaying disability. Older adults with arthritis who do not engage in regular vigorous activity have been shown to be twice as likely to experience functional decline as those who do. Additionally, physical activity lowers a person's risk for developing obesity, a significant risk factor for the development and progression of arthritis, and also lowers a person's risk for developing other inactivity associated conditions such as heart disease and diabetes.

However, increasing physical activity levels among persons with arthritis has been difficult. This study found that only 32% of adults were meeting the recommendation that persons with arthritis engage in at least 30 minutes of moderate physical activity a day, at least three times a week. Possible reasons for the resistance to increasing activity levels include concerns about worsened pain and causing potential harm to joints, even though studies show that pain levels improve in the long term with regular activity and that low-to-moderate activity generally does not worsen arthritis symptoms or disease activity.

Arthritis is one of the most common conditions that healthcare providers see in practice. There are a number of ways healthcare providers can encourage physical activity in patients with arthritis, including:

- 1) Providing physical activity counseling by asking patients about their level of physical activity, addressing any potential concerns about increasing activity levels, and creating an activity plan
- 2) Providing adequate pain management, especially during the initiation of an exercise program
- 3) Discussing the importance of maintaining a healthy weight for arthritis management
- 4) Providing information on evidence-based interventions such as those offered through

local Arthritis Foundation chapters, e.g. the Arthritis Self-Help Course, Exercise Program, and Aquatics Program.

Healthcare providers have an important role to play in decreasing the current and future burden of arthritis. By 2030, it is estimated that 67 million adults (25% of adults) in the U.S. will have arthritis.⁴ This number may be even greater because of the growing obesity epidemic. Among persons with arthritis, increasing physical activity levels can significantly improve quality of life by decreasing pain and helping people maintain their functional independence.

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Additional information on arthritis can be obtained from:

CDC Arthritis Program www.cdc.gov/arthritis/

Los Angeles County Department of Public Health lapublichealth.org/ha/

Arthritis Foundation www.arthritis.org

American College of Rheumatology www.rheumatology.org

Footnotes

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Risk Factors for Invasive Group A Streptococcal Disease

Strep throat is one of the most common infectious diseases requiring treatment with antibiotics. Necrotizing fasciitis, also known as "flesh eating disease," is a rare infectious disease also requiring prompt treatment to prevent devastating sequelae. Both are caused by group A beta-hemolytic Streptococcus pyogenes.

Invasive Group A Streptococcal (IGAS) disease is defined as the isolation of S. pyogenes from a normally sterile body site or from a non-sterile site if associated with streptococcal toxic shock syndrome (STSS) or necrotizing fasciitis (NF). The case-fatality of IGAS infections is 12%-13% [1] and clinical symptoms, often overlapping, may include bacteremia, cellulitis, pneumonia, NF, and STSS.

In 2005, there were an estimated 10,400 cases of IGAS disease and 1,350 deaths from IGAS infection in the U.S.[2]. Known risk factors include age, diabetes, HIV infection, cardiovascular disease, and other chronic conditions [3].

IGAS is a reportable disease in the county

Since 2004, attempts have been made to collect detailed demographic, clinical, and risk factor information for each reported case. All reported IGAS cases with disease onset from January 2004 to August 2006 were reviewed and analyzed to identify risk factors associated with IGAS infection (425 cases reported, 79% with risk factor information).

In 2005, the incidence rate (1.9 cases per 100,000) of IGAS infection in the county was lower than the rate reported in the U.S. (3.5 cases and 0.5 deaths per 100,000) [2]. The case fatality was also lower than the national average (9% vs. 13%). During this period, IGAS infection occurred more often in males (63%), adults aged 45 years and older (60%), Latinos (40%), and Whites (39%). Of note, risk factors in older adults included chronic diseases, while risk factors in younger adults included alcoholism and blunt trauma. The most common risk factors reported included diabetes (26%), chronic heart disease (14%), blunt trauma (12%), alcohol abuse (10%), and malignancy (10%) (Figure 1).

Specific Trends and Analyses

Diabetes

In 2002-2003, 7% of county adults reported being diagnosed with diabetes [4]. In contrast, the overall percentage of IGAS cases with diabetes was 3.5 times higher, as one in every four cases (26%) was also diabetic.



*2002-03 Los Angeles County Health Survey; Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health.

The greatest number of IGAS cases with diabetes occurred in older age groups (45 years and older). However, in all racial groups and for persons over 25 years, the percentage of IGAS cases with diabetes was greater than the corresponding county diabetes prevalence (Figure 2) [4]. In particular, the percentage of IGAS infections in persons aged 25-39 years with diabetes was much higher than expected based on the underlying prevalence of diabetes in this age group

Chronic Heart Disease and Malignancy

As the majority of IGAS infections occur in older adults, it is not surprising that many of the top reported risk factors include existing chronic diseases. Chronic heart disease was the second most reported risk factor (14%) and nearly one in every three IGAS cases over 65 years reported this condition (32%). In contrast, the prevalence of coronary heart disease in the U.S. is lower (6%), with 18% of adults aged 65-74 years and 26% of persons over 75 years reporting coronary heart disease [5].

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Overall, 10% of IGAS cases reported a malignancy compared to the national prevalence of 7% [5]. Interestingly, the percent of IGAS cases with malignancy in the county is higher in younger age groups and lower in older age groups when compared to the national cancer prevalence. Malignancy was reported in 6% of IGAS cases aged 20-44 years (U.S. cancer prevalence 2% in those 18-44 years) and was highest in persons aged 45-64 years (16% vs. 8% U.S. cancer prevalence), followed by 11% in persons 65 years and older (U.S. cancer prevalence 19% in persons 65-74 years and 25% in persons 75 years and older). Additionally, the percent of female IGAS cases with malignancy was double that of the national prevalence (14% vs. 7%) and the percentage of male IGAS cases with malignancy (7%).

Risk Factors in Younger Age Groups

From 2004 to 2006, there has been an increase in the number of IGAS cases reporting a history of blunt trauma or alcohol abuse. For children, a history of blunt trauma was the most reported risk factor in children aged 1 to 19 years, ranging from 27% in children aged 1-4 years to 32% in children aged 5-19 years In IGAS patients aged 20-44 years, alcohol abuse was reported more than any other risk factor (21%), more than double the percentage of Californians reporting heavy drinking in 2005 (10% in persons 18-24 years, 7% in persons 25-34 years, and 4% in persons 35-44 years) [6]. Among county adults, the percentage of males reporting alcohol abuse was 2.5 times higher than the percentage of females (17% vs. 6%). Comparatively, 8% of men and 5% of women reported heavy drinking (>2 drinks/day for men and >1 drink/day for women) in California in 2005 [6].

Diagnosis and treatment

Early diagnosis with appropriate antimicrobial therapy is critical in patient treatment. Diagnosing IGAS in persons presenting with skin complications is confounded by the recent increase in community associated MRSA and an accurate diagnosis is necessary for proper treatment since one of the most commonly prescribed antibiotics for CAMRSA is not effective in IGAS infections.

By conducting IGAS surveillance in the county, we can identify risk factors of persons presenting with IGAS infection which may assist in the timely diagnosis and treatment of these infections. In the county, diabetes was the most prevalent risk factor, especially in adults aged 45 years and older. In older adults, risk factors for IGAS included chronic heart disease and malignancy, while a history of blunt trauma and alcohol abuse are reported more often in younger age groups. Physicians should counsel their diabetic and cancer patients about their increased risk for IGAS and other infections and consider IGAS in younger patients, especially those with a history of trauma or alcoholism.

More information about IGAS in Los Angeles County may be found at:

http://lapublichealth.org/acd/reports.htm

Thanks to Van Ngo, MPH, Azita Naghdi, MPH, and Infection Control Practitioners and Medical Records staff at county hospitals.

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Preventing Influenza: What Can Doctors Do?

Almost every year there is a time when we review the past and promise to improve in the future. For some this occurs at New Year's; for public health professionals the time of reflection is often the start of the influenza (Flu) season. Influenza – one of the most common causes of death from a vaccine preventable disease – can be prevented by a simple shot. Therefore, with flu season here, we remind clinicians they can improve and prolong their patients' lives.

What doctors can do:

- All patients who present to a healthcare setting with fever and respiratory symptoms should be managed according to CDC's recommendations for respiratory hygiene and cough etiquette. This includes masking and separation of persons with respiratory symptoms, judious use of visual alerts (posters, signs), and using droplet precautions.
 - Healthcare providers can order respiratory hygiene posters by calling 213-240-7941 or at: http://www.lapublichealth.org/acd/respiratoryhygiene.htm
- Properly diagnosing flu is critical. Clinicians should consider additional laboratory testing for patients with flu-like symptoms (fever, cough, sore throat, muscle aches, headache, and malaise). Early diagnosis of influenza can guide treatment decisions, reduce the inappropriate use of antibiotics, and provide the option of using antiviral therapy. Diagnosing flu in an outbreak situation is also important because, with prompt reporting, it allows the public health department to institute control measures to prevent disease transmission.
 - Influenza causing ICU admission or death in those <18 years and all influenza outbreaks are reportable to the Los Angeles County Department of Public Health (1-888-397-3993).
- ▶ Consider antivirals for your patients with influenza who are at risk for severe complications. Antivirals should be given within 48 hours of symptom onset to be effective. Because of the demonstrated resistance to the adamantanes by recent flu strains, both amantadine and rimantadine are <u>not</u> recommended as empiric therapy at this time.

Diagnosing flu in an outbreak situation is also important because, with prompt reporting, it allows the public health department to institute control measures to prevent disease transmission.

- Annual flu vaccination remains the primary means of preventing morbidity and mortality associated with flu. As health care providers receive portions of their flu vaccine orders, they are urged to begin vaccinations, especially for their high risk patients. Additionally, infants and children 6 months through 5 years of age (8 years if high risk) receiving a flu shot for the first time will need to receive two vaccine doses at least 4 weeks apart (6 weeks if live attenuated vaccine) so they should be started on the flu vaccination series as soon as vaccine is available.
 - Information about public health department sponsored flu vaccines, clinics, and outreach can be found at: http://lapublichealth.org/acd/flu.htm.
- ➤ The elderly and infirmed are disproportionately affected by flu and outbreaks in nursing homes can be severe. Because of this, steps should be taken to prevent flu outbreaks including routine vaccination of patients and employees. Guidelines regarding the control of flu in skilled nursing facilities, including diagnosis, treatment, cohorting, and prevention, can be found at our website.

As the flu season progresses, we will post timely updates on county surveillance for flu and other respiratory diseases. For more information about flu vaccination call our Immunization Program (213-351-7800); for information on flu surveillance and reporting outbreaks, call our Acute Communicable Disease Control Program (213-240-7941).

Links to further information about each of these steps can be found on our website at http://lapublichealth. org/acd/flu.htm.

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Antibiotic Resistance Information CornerWait-and-see prescription for the treatment of acute otitis media:
a randomized controlled trial.

Spiro DM, Tay KY, Arnold DH, Dziura JD, Baker MD, Shapiro ED. JAMA. 2006 Sep 13;296(10):1235-41.

Available at: http://jama.ama-assn.org/content/vol296/issue10/index.dtl

An estimated 15 million prescriptions are written for acute otitis media (AOM) annually in the United States¹ but studies have shown that antibiotics offer little clinical benefit for children with AOM as most cases will usually resolve by themselves.^{2.4} Initial observation without antibiotics is a strategy shown to reduce unnecessary antibiotic prescriptions for AOM ^{5.7} in office practices where parents had a prior relationship with clinicians. However, it was unknown if this strategy would work in emergency departments.

This emergency department based study compared a "wait-and-see prescription" (WASP) approach in managing AOM, in which parents were instructed to fill an antibiotic prescription only if symptoms persisted or worsened after 48 hours, vs. a "standard prescription" (SP) approach, for which parents were instructed to start antibiotics on the day of the emergency department visit.



Results show that a delayed prescription approach in managing AOM reduces unnecessary use of antibiotics. Substantially more parents in the WASP group did not fill the antibiotic prescription, compared to the SP group (62% vs 13%; P<0.001). There was no significant difference between the groups with regard to fever, ear pain or return visits for medical care.

This study showed that even in settings where patients and doctors may be new to each other, a "wait-andsee" approach to using antibiotics for AOM may be safely and effectively employed. The authors note that there are some children who shouldn't be given a wait-and-see prescription. They include infants under 6 months of age, children with chronic ear infections, and children who appear seriously ill. Clinical practice guidelines for clinicians on the management of AOM are provided by the American Academy of Pediatrics (see web site below).

We encourage clinicians to educate patients about the appropriate use of antibiotics and the dangers of antibiotic resistance. Especially during this cold and flu season, patients should understand that antibiotics do not treat viral illnesses. Free education materials in English and Spanish can be ordered by calling Acute Communicable Disease Control at 213-240-7941.

- 1. McCaig LF, Besser RE, Hughes JM. Trends in antimicrobial prescribing rates for children and adolescents. JAMA. 2002;287:3096-3102.
- 2. Del Mar CB, Glasziou PP, Hayem M. Are antibiotics indicated as initial treatment for children with for children with acute otitis media? A meta-analysis. Br Med J.1997; 314 :1526 –1529.
- 3. Rosenfeld RM, Vertrees JE, Carr J, et al. Clinical efficacy of antimicrobial drugs for acute otitis media: metaanalysis of 5400 children from thirty-three randomized trials. J Pediatr. 1994; 124:355 367
- 4. Damoiseaux RAMJ, van Balen FAM, Hoes AW, Verheij TJM, de Melker RA. Primary care based randomized, double blind trial of amoxicillin versus placebo for acute otitis media in children aged under 2 years. Br Med J.2000; 320:350-354
- Little P, Gould C, Williamson I, Moore M, Warner G, Dunleavey J. Pragmatic randomised controlled trial of two prescribing strategies for childhood acute otitis media. BMJ. 2001;322:336-342.
- 6. Marchetti F, Ronfani L, Nibali SC, Tamburlini G, Italian Study Group on Acute Otitis Media. Delayed prescription may reduce the use of antibiotics for acute otitis media: a prospective observational study in primary care. Arch Pediatr Adolesc Med. 2005;159:679-684.
- 7. Siegel RM, Kiely M, Bien JP, et al. Treatment of otitis media with observation and a safety-net antibiotic prescription. Pediatrics. 2003;112:527-531.

Resources available online at:

American Academy of Pediatrics - http://www.aap.org/

Clinical Practice Guidelines Diagnosis and Management of Acute Otitis Media - http://aappolicy.aappublications.org/cgi/content/abstract/pediatrics;113/5/1451

Infectious Diseases Society of America - http://www.idsociety.org

Clinical Practice Guidelines - http://www.journals.uchicago.edu/IDSA/guidelines/

The California Medical Association (CMA) Foundation - http://www.aware.md/resource/index.asp

Clincal Practice Guidelines Compendium (Pediatric and Adult) - http://www.aware.md/clinical/clinical_guide.asp

The Centers for Disease Control and Prevention - http://www.cdc.gov/drugresistance/community/healthcare_provider.htm

Physician Registry - Become a Member of the Health Alert Network

The Los Angeles County Department of Public Health urges all local physicians to register with the Health Alert Network (HAN). By joining, you will receive periodic emailed updates alerting you to the latest significant local public health information as well as emerging threats like pandemic influenza and possible bioterrorist activity. Membership is free and all physician information will remain private and will <u>not</u> be distributed to other agencies or used for commercial purposes.

Registration can be completed online at www.lahealthalert.org or by calling (323) 890-8377 Be alert to Public Health emergencies! Enroll now!

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Selected Reportable Diseases (Cases) ¹ — June/July 2006									
	THIS PERIOD	SAME PERIOD	YEAR TO E	DATE – JULY	YE	AR END TOT	ALS		
Disease	June/July 2006	LAST YEAR June/July 2005	2006	2005	2005	2004	2003		
AIDS ¹	186	262	767	904	1,517	2,210	2,436		
Amebiasis	12	22	58	74	114	114	121		
Campylobacteriosis	131	143	399	411	725	884	1,100		
Chlamydial Infections	6,909	6,389	24,198	22,765	38,862	38,464	36,900		
Encephalitis	18	10	43	42	57	133	38		
Gonorrhea	1,743	1,839	6,364	5,898	10,494	9,696	8,078		
Hepatitis Type A	53	11	399	91	480	321	374		
Hepatitis Type B, acute	5	7	38	39	57	72	73		
Hepatitis Type C, acute	0	1	2	1	3	5	0		
Measles	1	0	1	0	0	1	0		
Meningitis, viral/aseptic	35	94	176	365	515	807	899		
Meningococcal Infect.	5	8	32	26	37	28	32		
Mumps	3	3	5	6	8	2	10		
NGU	153	196	514	753	1,101	1,470	1,410		
Pertussis	37	63	168	181	438	156	130		
Rubella	0	0	1	0	1	0	0		
Salmonellosis	175	181	507	521	1,085	1,205	995		
Shigellosis	54	55	226	316	710	625	669		
Syphilis (prim. and sec.)	89	108	363	353	646	470	468		
Syphilis latent	60	91	350	318	571	395	388		
Tuberculosis	62	95	271	329	906	930	949		
Typhoid fever, Acute	2	3	9	7	12	13	16		

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