

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

Volume 5 • Number 10

November 2005

Invasive Pneumococcal Disease in Los Angeles County

Infection with the bacterium *Streptococcus pneumoniae* is a leading cause of bacterial disease, and causes significant morbidity and mortality, particularly among children and the elderly. Additionally, the specter of increasing antibiotic resistant pneumococcal disease poses a new public health threat. Despite this, a recent study showed that Los Angeles area hospitals ranked among the bottom when compared to other hospitals across the nation in providing pneumococcal vaccination to eligible patients [1].

The Los Angeles County Department of Health Services (DHS) has followed the trends of invasive pneumococcal disease (IPD) since 1995; in October 2002 IPD was added to its list of reportable diseases to enhance surveillance of this infection. IPD is defined as infection with *S. pneumoniae* cultured from a sterile site such as blood and cerebral spinal fluid. The information gained from the reporting of

IPD by physicians and laboratories enables DHS to monitor changes in morbidity and mortality trends in antibiotic resistance, and the changing epidemiology of IPD due to the introduction of new vaccines. In turn, DHS can make new policies and recommendations for the medical community regarding immunization practices and appropriate antibiotic choices to help prevent further disease. Trends and rates determined by surveillance of IPD, however, represent only the tip of the iceberg of all infections caused by *S. pneumoniae* as surveillance does not include non-invasive infections caused by *S. pneumoniae* such as pneumonia or otitis media.

Pneumococcal vaccines significantly impact IPD incidence

There are two vaccines available against infections caused by *S. pneumoniae*. Pneumovax®23, the current polysaccharide vaccine licensed in 1983,

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STD Sensitivity Trainings Launched

The STD Program's Health Education Unit has developed a specialized Sensitivity Training for unlicensed office and clinic staff; the curriculum's aim is to improve the quality of customer service provided in the county STD clinics.

The two-hour training provides basic level STD information and breaks down common STD myths. It also increases staff comfort with STDs and enhances staff awareness of patient

issues and concerns.

Trainings are provided *on-site* at county clinics - staff do not need to travel. To date, nearly 30 STD clinic staff at South, Temple, and Whittier Health Centers have been trained.

Contact Susan Perez, MPH to arrange a training for your clinic staff.
(213) 744-5981 or superez@ladhs.org

THE PUBLIC'S HEALTH



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STD Program Wins National Award for Work with Incarcerated Female Youth

Since 1996, the "STD Intervention Project for Incarcerated Female Youth in Los Angeles County Juvenile Halls" has improved public health by interrupting the spread of chlamydia and gonorrhea among thousands of female juvenile detainees.

For their innovative approach and dedicated efforts, the STD Program will be awarded the *2005 National MCH Epidemiology Award for Effective Practice at the Community Level* at the 11th Annual MCH Epidemiology Conference on December 8. These awards recognize and promote excellence in MCH epidemiology research, practice and leadership.

Led by Melinda Boudov and dedicated staff Kristen Wilson and Kimberly Coffee, the STD Intervention Project has collaborated with county Juvenile Court Health Services to develop quality control measures and a treatment surveillance system for female detainees diagnosed with chlamydia or gonorrhea. Through their seamless system of STD screening, treatment, and case management, the project has reduced rates of re-infection with chlamydia and other STDs among a population at extremely high risk for disease.

Each year, 25,000 youth between the ages of 8 to 21 are detained within the county juvenile halls. Prior to the project's inception, less than one-half of all detainees were screened for chlamydia or gonorrhea while in detention. Among those screened, 15% were released from custody without receiving any treatment. Among those who received treatment, nearly one-half were released from custody before completing their treatment. The STD Program's development of a treatment surveillance system has resulted in high rates of treatment completion among a hard-to-locate group of individuals. Among 842 female detainees diagnosed with chlamydia or gonorrhea in 2004, 750 (89%) completed treatment either while in custody or during field follow-up.

The STD Program's two-pronged approach to improving public health practice-- collaboration with corrections staff and an effective treatment monitoring system-- serves as a model for probation departments nationwide who serve populations at high risk for STDs.

Survey of TB Laboratories in Los Angeles County

Tuberculosis (TB) continues to be a significant but diminishing threat to the public's health in Los Angeles County. The critical role of the laboratory to help control and eventually eliminate the spread of TB has been elucidated by the CDC and the California Health and Safety Code. The use of rapid, more sensitive methods of diagnosing *M. tuberculosis* (MTB) resulting in fewer reporting delays to the clinician and the use of key laboratory performance indicators have been identified as essential components to secure the laboratory's role in TB control and elimination.

Benchmark objectives for the performance of mycobacterial analysis have been set by the CDC to establish uniform laboratory performance expectations and develop standardized measures of laboratory performance. The turnaround time (TAT) for MTB testing and reporting of results to the clinician is a key indicator. Objectives for the TATs for testing and reporting are as follows:

- AFB smear microscopy by fluorochrome staining (within 24 hours of laboratory receipt of specimen),
- MTB culture using a radiometric system or equivalent rapid method for culture (within 14 days of specimen receipt),
- identification of MTB isolates (within 17-21 days of specimen receipt) and,
- drug susceptibility testing (within 28 days of specimen receipt).¹

The Los Angeles County Tuberculosis Control Program surveys both private and public sector laboratories throughout the county biennially. The information collected is used to identify the methods used for diagnosing MTB, identify TATs, and follow the progress towards meeting test reporting objectives.

Results of the most recent laboratory survey

Methods

A line listing of laboratories in the county that perform mycobacterial studies including acid-fast bacilli smear microscopy, MTB culture, and/or MTB drug susceptibility testing was generated; this comprehensive listing of laboratories was compiled in coordination with the Sexually Transmitted Disease Program. The self-administered survey tool was a two-page questionnaire that assessed MTB diagnostic methodologies and services provided by private and public sector laboratories. Four hundred seventy-nine lab surveys were mailed. Laboratories that did not acknowledge receipt of the survey from the initial mailing were contacted by phone.

Results

Three hundred fifty out of 479 (73%) laboratories responded. Of the 350 respondents, 37 (11%) performed on-site testing for TB. Of the 37 laboratories that performed onsite testing for TB, 32 (86%) reported positive AFB results within 1 day; 3 (8%) reported within 1 week, and 2 (5%) reported no information. Reporting of TB results to the local health officer was done by fax for 29 (78%) of the respondents, by phone for 7 (19%), by regular mail for 4 (11%), through a specific contact person 2 (5%), and by email for 1 (3%) respondent. No laboratories reported results using a web-based interface.

Eighteen (49%) laboratories with on-site TB testing reported performing at least AFB smear microscopy and MTB culture; 8 (22%) reported performing at least AFB smear microscopy and MTB culture identification; 6 (16%) reported performing at least AFB smear microscopy, MTB culture identification, and MTB drug susceptibility testing; and 4 (11%) reported performing AFB smear microscopy only. The level of laboratory service for 1 (3%) laboratory was not reported.

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Survey of TB Laboratories...from page 3

Twenty-two (60%) reported an affiliation with a histopathology or surgical pathology laboratory. Eighteen (49%) reported submitting at least one subculture from each primary isolate of *M. tuberculosis* /*M. tuberculosis* complex to the local public health lab as legally mandated.

Thirty-one (84%) laboratories performed primary isolation on site. The three most common methods of cultivating MTB were by broth system (62%), by solid medium/slant (54%), and by solid medium/plate (38%). Twenty (54%) laboratories said they used both broth and agar system methods. Thirteen (35%) laboratories performed isolate identification on site. The method(s) used to identify *M. tuberculosis* /*M. tuberculosis* complex from culture were: DNA probe (32%), biochemical testing (19%), High Performance Liquid Chromatography (5%), Nucleic Acid Amplification (3%). Only two laboratories reported 'other types' of TB testing currently being used (e.g. nucleic acid amplification, restriction fragment length polymorphisms). Five (14%) laboratories reported performing susceptibility testing on site.

Discussion

Laboratories are a key stakeholder in the fight to eliminate TB, and play an instrumental role identifying and confirming new cases. Laboratories are responsible for the accurate and timely reporting of any and all findings that are suggestive of TB. Prompt reporting allows for rapid public health intervention. A potential survey limitation is the modest response rate (73%); however, completed surveys from laboratories that actually perform any level of mycobacterial analysis was most likely near 100%. Almost 9 out of 10 laboratories reported positive AFB results back to the physician within one working day as mandated by the California Code of Regulations, and more than 60% of surveyed laboratories are using rapid culture systems to cultivate MTB.

Conclusion

The information gathered from the Lab Survey helps the program in several ways:

- The TBC Program can update the list of laboratories that are currently conducting any studies for diagnosis TB.
- The survey results will identify the level of service performed, the methods and technologies used, and the work load of each laboratory.
- TBC can use this information to provide informative and constructive feedback to the laboratories on the timely and accurate reporting of TB to the clinician and establish a cooperative relationship between the program and laboratories in Los Angeles County.

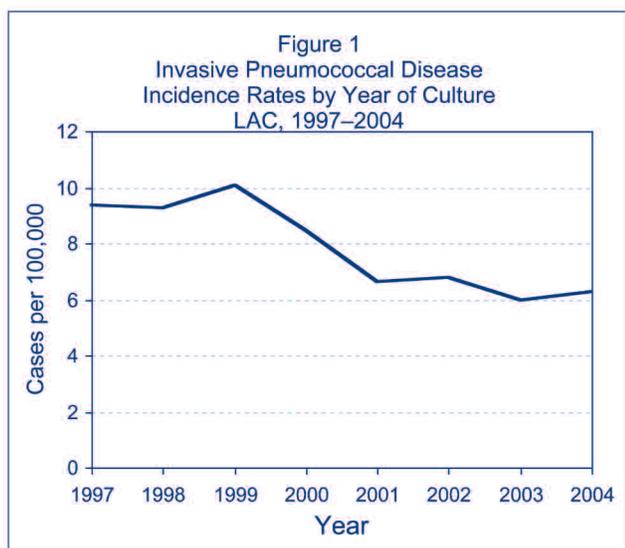
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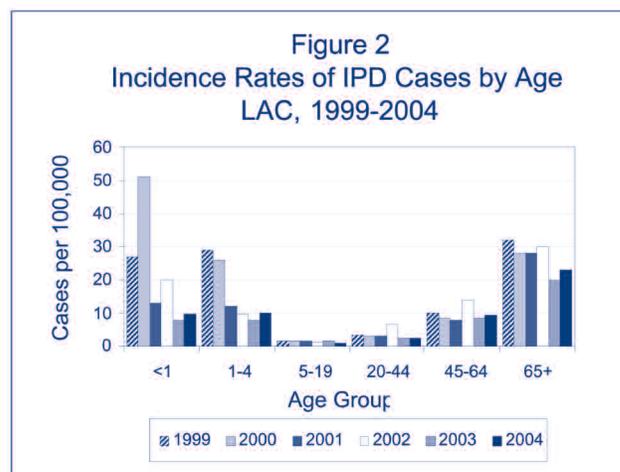
Invasive Pneumococcal Disease...from page 1

is recommended for adults ≥ 65 years and those over age 2 years who are at high risk of IPD. Prevnar[®], the conjugate vaccine licensed in early 2000, is recommended for all children less than age 2 years and for children aged 24 through 59 months who are at high risk of IPD [2]. Since the introduction of Prevnar in the year 2000, there has been a significant reduction in the rate of IPD nationwide, including Los Angeles County. [3]. In the county, there has been a 38% decline in overall incidence since the peak incidence in 1999 (Figure 1), much of that accounted for by a decrease in incidence in children <1 year old and adults > 65 years (Figure 2). The evidence is overwhelming that the introduction of Prevnar[®] has been successfully preventing IPD in young children, and, probably through interrupting transmission from children to adults, has been reducing IPD infection rates overall [3].

However, in 2004, the county saw a 7% increase in the number of IPD cases reported compared to 2003, the first increase since 1999 (Figure 1).



IPD occurred at an incidence rate of 6.3 per 100,000 in 2004. Nevertheless, the case fatality rate was 11.8%, the lowest rate recorded since DHS began surveillance for IPD. The majority of deaths occurred among adults 65 years and over (60%) and none occurred in children <18 years.



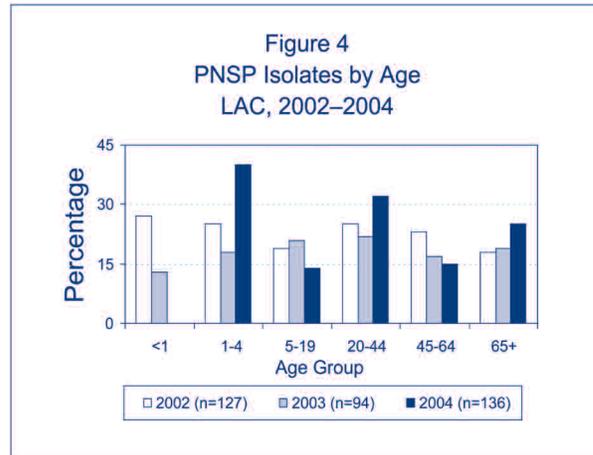
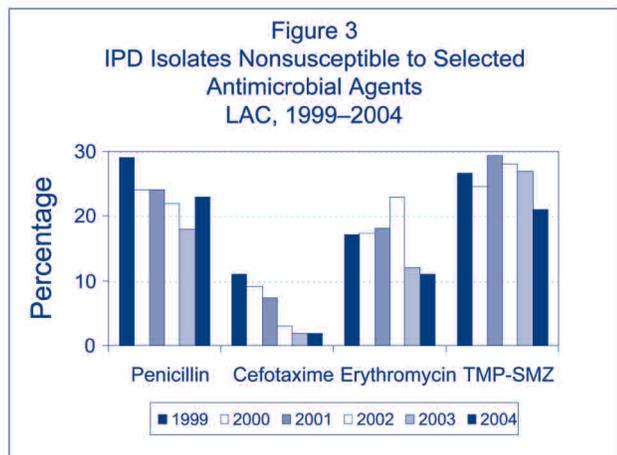
Prevnar[®] reduces penicillin resistance

An isolate of *S. pneumoniae* is considered resistant to an antibiotic if the susceptibility results indicate intermediate or high-level resistance according to national standards for minimum inhibitory concentration (MIC) breakpoints¹. Research suggests that the use of Prevnar[®] can also reduce rates of resistance in pneumococcal disease. Prevnar[®] was developed against the seven most common strains of invasive disease, which are also the strains with higher rates of resistance. The same studies that demonstrate a reduction in incidence also demonstrate a significant reduction in penicillin resistant strains of *S. pneumoniae* [3]. Similarly, in LAC, a decreasing trend has been occurring since 1999. However, in 2004, the proportion of penicillin resistant *S. pneumoniae* isolates rose to 23% from the previous year (Figure 3). This is higher than the 21.4% seen preliminarily nation-wide in 2004 [4]. The percent of isolates resistant to erythromycin, cefotaxime, and trimethoprim-sulfamethoxazole (TMP-SMZ) has continued to decrease or remain the same in 2004 in comparison to the previous few years (Figure 3). The greatest increase in the proportion of cases with resistant isolates, from 18 to 40%, was observed among those 1-4 years of age (Figure 4).

Healthcare professionals in the county can do much to help slow this increase. A simple reduction

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in antibiotic use has been shown to significantly reduce rates of penicillin-resistant pneumococci colonization in children [5]. Physicians, for example, can reduce antibiotic use by appropriately prescribing antibiotics for bacterial infections rather than viral infections.

group. Vaccination with Prevnar® can also help reduce infections in the elderly and children, by decreasing transmission from young family members in the household.

Finally, physicians should prescribe antibiotics judiciously by limiting antibiotics to bacterial infections only. Reducing antibiotic prescriptions for viral upper respiratory tract infections have been shown to reduce rates of pneumococcal resistance [4]. More information on IPD in the county or handling patient demands for antibiotics can be found in this issue of *The Public's Health* or at our website: <http://lapublichealth.org/acd/antibio.htm>

1 Clinical and Laboratory Standards Institute (formerly the National Committee for Clinical Laboratory Standards).

Vaccinate the young and the elderly in preparation for the winter season

IPD typically follows a seasonal pattern – peaking in late winter then gradually declining through spring. As healthcare professionals prepare for the winter season, they should expect not only an increase in flu, but also an increase in invasive and non-invasive pneumococcal disease, particularly as pneumococcal infections often arise as a complication of influenza.

When educating or offering patients influenza vaccination, physicians should also recommend pneumococcal vaccination as well. By improving vaccination rates, the medical community can play a substantial role in mitigating the morbidity and mortality from IPD. The Los Angeles County medical community should be more active promoting vaccination among those at highest risk: the elderly with Pneumovax®23 and young children with Prevnar®. Pneumovax®23 can help prevent the many deaths caused by IPD in the over 65 age

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HEALTH ALERT: Menactra Meningococcal Vaccine (MCV4) and Guillain-Barre Syndrome

On September 30th, the U.S. Food and Drug Administration and The U.S. Department of Health and Human Services issued a joint alert regarding the Menactra Meningococcal Vaccine (MCV4) and Guillain-Barre Syndrome (GBS). There have been five cases of GBS reported among adolescents after vaccination with MCV4. It is not known whether these cases are related to the vaccine; the situation is being investigated by the CDC.

Approximately 2.5 million doses of MCV4 have been distributed nationally since March 2005 although the actual number of doses administered is unknown.

None of the cases are from California and the number of cases is similar to the number of GBS cases that might have been expected to occur by chance.

Health care providers are urged to report any adverse event observed among recipients of any

vaccine, and especially MCV4, to the Vaccine Adverse Event Reporting System (VAERS). Reports of GBS should be submitted to VAERS at; <http://www.vaers.hhs.gov> or by telephone at 800-822-7967

As an extra measure of safety, CDC is advising that persons with a history of GBS, who are not at high risk for meningococcal disease not be vaccinated with MCV4 at this time. A new “interim” Vaccine Information Statement (VIS) has been developed to inform potential vaccine recipients about GBS related issues. The VIS can be downloaded from the web site: <http://www.cdc.gov/nip/publications/VIS/vis-mening.pdf>.

For more information about GBS and the MCV4 vaccine, contact the Los Angeles County Immunization Program (213-351-7800).

L.A. Men’s Web Survey

Web-based behavioral surveillance system to track HIV risk behaviors, testing and prevention services among men who have sex with men (MSM)

Background

In the U.S., men who have sex with men (MSM) account for the largest number of persons reported with AIDS each year and continue to represent the highest proportion (42%) of the estimated 40,000 new HIV infections annually¹. The proportion of new AIDS diagnoses among MSM in Los Angeles County is even higher at 76%². Increasingly, the Internet has become a preferred method for MSM to solicit their sexual partners. For example, web sites catering to MSM in the county boast online activity of up to 1000 men looking to “hook-up,” at any given time of the day, seven days a week. Many web sites offer free membership, which not only enhances

men’s accessibility to multiple partners but also allows these interactions to occur more efficiently compared to traditional methods of meeting men (e.g., in bars and clubs).

Some research suggests that men who meet sexual partners online report more male partners and higher rates of unprotected anal sex than men who meet partners through other means³. As part of their ongoing HIV prevention strategy, the CDC has funded the county and five other national sites to investigate risk behaviors of MSM recruited from Internet “venues.”

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Objectives

Given the continuing popularity of the Internet, especially among MSM, there is an urgent need to evaluate whether MSM sampled through Los Angeles field-based National HIV Behavioral Surveillance (NHBS) efforts include MSM who socialize and solicit male sexual partners through the World Wide Web. The Internet offers a new approach to collecting HIV behavioral risk data that may complement current national HIV behavioral surveillance methods. This new method may provide information about subgroups of MSM not currently reached through NHBS. Without a better understanding of the population of men who may be sampled solely through the Internet, as opposed to those sampled with traditional venue-based techniques, we may not be adequately describing the prevalence of HIV risk behaviors and exposure to HIV prevention programs of a representative group of MSM in the county.

Study Design

This is a two-phase study with formative research and Internet-based data collection. The formative research phase enrolled a convenience sample of 38 Internet-using MSM who participated in in-person focus groups and individual interviews. Formative research questions elicited feedback from the participants about how and where to recruit men for the Internet-based questionnaire and specifics about the design and layout of the local study web pages.

During an 8-week, Internet-based data collection phase, study staff will recruit a minimum of 500 MSM who are 18 years and older and who reside in the county. Participants will be recruited from various online MSM sites and will be directed to a secure survey web site. They will receive a unique ID code to complete a 10-15 minute anonymous, structured online survey. Participation in the survey is voluntary and anonymous--no identifying information will be collected from participants.

Eligible participants must provide online informed consent before completing the survey. The survey will collect information on Internet usage, venue attendance (Internet and non-Internet), sexual and drug-use behavior, and HIV testing history.

Participants will also receive links to HIV-related service referrals and information sources in the county. Participants can also register online to review results of the survey, which will be available in 2006.

Contact Persons

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(213) 351-8537

Trista Bingham, *Principal Investigator*,
(213) 351-8175

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Injury-related morbidity and mortality among school-aged children in Los Angeles County



Injuries are the leading cause of death for people between the ages of 1-44 in Los Angeles County. Unfortunately, many of these injuries occur to children while at school. In 2003 there were more than 2 million school-aged children in the county, and 68,457 of them experienced an injury that resulted in hospitalization or death. These children spend one fourth of their time in school, and therefore an estimated 10 to 25% of these injuries occurred during school hours.

Most school-related injuries are unintentional and occur most frequently on playgrounds, followed by athletic fields, and in gymnasiums. Falls are the most common cause of school-related-injury, accounting for 43% of injuries that occur nationally to children while at school. While schools are responsible for providing and maintaining safety equipment and policies, parents can significantly influence their children's behavior by modeling positive behaviors.

In the following sections, risk factors that predispose children in the K-12th grades to unintentional and intentional injuries are described. Such risk factors include age, peer-pressure, and the school environment.

Elementary School [Ages 5-10]

Most injuries among elementary school children in the county are unintentional. Data on hospitalizations in the county among children of this age group show that most unintentional injuries were caused by falls and resulted in fractures to an upper extremity. More specifically, in 2003 fractures accounted for 70% of injury-related hospitalizations among children ages 5 to 10, of which 71% were to the upper extremities, 19% to the lower extremities, and 8% to the brain, resulting in traumatic brain injury, or skull fracture. The most frequent cause of injury hospitalizations were falls, which accounted for 60% of hospital admissions to county residents of this age group. However, many children were admitted for injuries sustained in a collision with a motor vehicle while

a pedestrian (10%) and while an occupant in the car (10%). Finally, being struck by an object accounted for the cause of 9% of all admissions, and natural/environmental injuries accounted for 6%. It is important to note that internal injuries were present among 10% of children hospitalized for injuries. Most of these (66%) were traumatic brain injuries and 35% were to the torso.

While not every child hospitalized for an injury described above sustained the injury during school hours, school-related injuries are quite common and most frequently caused by falls or motor-vehicle incidents. Most of the motor-vehicle injuries include occupant injuries during transport to and from school, from not wearing proper restraint systems and pedestrian injuries.

An estimated 80% of school nurse visits are injury-related. Falls and being struck by an object most often occur during organized sports and playground activity. Play equipment type, quality, condition and unsupervised school playgrounds are associated with increased fall-related hospitalizations among elementary children. Most fall related injuries occur on the playground when children fall off swings, monkey bars, other climbing play equipment, or slides. A national survey of playgrounds at schools and parks by the National Program for Playground Safety (NPPS) at the University of Northern Iowa, found that 56% had insufficient depths of materials to protect children from serious head injury, 38% had failed to provide such material in use zones around the equipment, and 20% had exposed concrete footings. The NPPS has created an "Inspection Guide for Parents", which offers safety recommendations that playgrounds must have: adequate supervision, be maintained regularly, and be equipped with age-appropriate equipment and resilient surfaces.

The National Safe Kids Coalition suggests more than half of all school bus pedestrian fatalities occur between 3pm and 4pm and are among children ages 5 and 7. These incidents occur most frequently when children are boarding or unloading the school bus and when children are in the driver's blind spot, located approximately 10 feet around the bus.

Middle School [Ages 11-13]

Most injuries among middle school children in the county are also unintentional. In 2003, 65% of unintentional injuries to county residents of this age group were fractures, mostly to the upper extremities (45%), the lower extremities (40%), and the brain, resulting in traumatic brain injury (8%). Similar to elementary school-aged children, most injury hospitalizations among children in middle school were caused by falls, which accounted for 52% of injury-related hospital admissions among this age group. In addition to motor-vehicle occupant and pedestrian incidents, which both accounted for 12% of injury hospitalizations, a substantial number of children in middle school were admitted for injuries sustained in a collision with a motor vehicle while riding a bicycle (13%). Finally, 11% of injury hospitalizations were caused by being struck by an object. Internal injuries were present in 12% of these hospitalizations, of which 71% were traumatic brain injuries and 28% to the torso.

The majority of injury hospitalizations among middle school-aged children are caused by falls and being struck

by objects, which occur most often during physical education classes as opposed to organized sports and playground activity. In fact, most of these injuries occur during physical education classes while playing football, basketball, soccer, baseball, and softball. While school-related injuries sustained in occupant, pedestrian and bicyclist motor vehicle collisions are of concern, more data is needed to understand the risk factors associated with these injuries. For instance, sufficient data does not exist on the use of helmets or safety belts, or pedestrian behaviors. However, these are important risk factors for motor vehicle related injuries, which continue to account for many hospitalizations among children in middle school in the county.

Factors Contributing to Injuries Among Elementary & Middle School-Aged Children

Although the previous sections highlighted some differences in injury trends between elementary and middle school-aged children, many similarities also exist. The most common behaviors that contribute to injuries among both elementary and middle school aged children include (YRBSS 2003)¹⁰:

Motor Vehicle

- Not being properly restrained in a child safety seat, booster seat, or lap/shoulder belt. Approximately 60% of motor vehicle occupant fatalities could be prevented with appropriate and proper use of a safety seat, booster seat, or lap/shoulder belt.

Falls

- Inappropriate playground equipment type for age
- Poor quality or condition of playground equipment
- Inappropriate playground fall surface materials
- Unsupervised school playgrounds

Bicycle

- Not wearing a bicycle helmet. Approximately 65%-88% of bicycle-related brain injuries, as well as facial fractures and lacerations could be prevented with the proper use of an approved bicycle helmet.

Pedestrian

- Walking too close towards a school bus and standing too close to the curb at the bus stop. This is due to visibility issues with smaller sized children in blind spots of the bus.
- Walking between cars and school buses in school drop off zones.
- Not obeying traffic pedestrian laws when walking to school.

Homicide

- Access to a firearm is a contributing factor to 78% of homicides and 60% of suicides among middle school

aged children. It has been estimated that for every firearm-related fatality among individuals 24 years and younger, four more youth are hospitalized due to firearm incidents. Further, only 40% of homes with both children and firearms, store firearms locked and unloaded. Thus, 60% of homes where there are both children and firearms leave the firearms either unlocked or loaded.

What can Physicians do?

The U.S. Preventive Services Task Force, Guide to Clinical Preventive Services, recommends counseling for all patients, and parents of young patients, on the use of occupant restraint systems (booster seats for children ages 4-6 and lap shoulder belts for children six years of age and older); and recommends that helmets are worn and fitted properly when riding bicycles, scooters, rollerblades, and skateboards. While there is insufficient evidence to recommend for or against counseling patients to prevent pedestrian injuries among elementary school aged children, physicians can inform parents on the importance of being a good role model and teaching their children to follow pedestrian safety rules to and from school.

Physicians can also inform parents of the importance of safe storage of guns and use of trigger locks.

Regarding fall related injuries, the task force has no recommendations for prevention among school-aged children however physicians can make parents young children aware that they can call the National Program for Playground Safety to request a copy of the playground Inspection Guide for Parents by calling (800) 554-7529.

High School [Ages 14-17]

Among high school aged youths, ages 14-17 in the county, intentional injuries rank among the top five causes of injury related fatalities and hospitalizations. In 2003, the most frequent cause of injury hospitalizations were homicide/assault (28% of hospital admissions), followed by falls (24%), suicide/self-inflicted (21%), motor vehicle occupant (18%), and unintentional struck by object (10%). Upper extremity fractures accounted for 32% of injuries and were the most common of all anatomical injury hospitalizations, followed by lower extremity fractures (29%), and traumatic brain injury fractures and internal injuries (6%).

Homicides

While homicides and assault hospitalizations among youths aged 14-17 years declined by nearly 50% between 1994 and 2003 in the county, rates are still higher than in other southern California counties (Los Angeles County 80/100,000; San Diego 70/100,000; Riverside,

71/100,000; San Bernardino 41/100,000; and Orange 36/100,000). Homicide data for Los Angeles County shows that 88% of the weapons used by perpetrators among homicide victims (aged 14-17 years) were handguns. Sixty-five percent of these homicides occurred away from home or school on a street/sidewalk, highways, or parking lots. The relationship of victim to suspect in these cases were 35% undetermined, 27% stranger, 23% gang member, 11% acquaintance, 3% intimate partner, and 1% family member. The most prominent precipitating event leading to these homicides was a non-felony argument (82%), followed by undetermined at 9%, felony 5%, justifiable-police 3%, and justifiable-citizen 1%.

Alcohol has been associated with weapon carrying, assaults, fighting, and date rape. It is estimated that 17% of high school aged youths reported carrying a weapon, such as a firearm, knife, or club to school and 7% reported carrying a weapon on school property. In general, homicides occur away from school, as opposed to on school property. It is estimated that in California 5.3% of high school students feel unsafe going to school, 7.3% have been threatened or injured with a weapon on school property, and 11.9% were involved in a physical fight on school property.

Motor Vehicle Injury

While motor vehicle-occupant hospitalizations among high school aged youths in Los Angeles County have a rate lower than other southern California counties, hospitalizations between 1994 and 2003 had an 8% increase. Not wearing a seatbelt is a contributing factor to fatality and mortality among motor vehicle crashes. An estimated 7.3% of youths in the county report never wearing a seat belt while riding in a vehicle. Alcohol use is also a contributing factor to 56% of motor vehicle related fatalities among adolescents. It is estimated that every 30-days, 50% of high school aged youths consume alcohol on ≥ 1 day with 32% drinking ≥ 5 drinks on a single occasion. In addition, an estimated 13% of high school aged youths drove a motor vehicle after consuming alcohol and 33% had ridden in a vehicle with a driver who had been consuming alcohol.

Suicide/Suicide Attempts

Suicide/self-inflicted hospitalizations have declined 24% in the county among high school students between 1994 and 2003, and Los Angeles County rates are the lowest of all southern California counties. Non fatal suicide attempts are much more common than fatalities among this age group in Los Angeles County, with 15 fatalities and 344

hospitalizations. In 2003, 76% of suicide/self-inflicted hospitalizations among this age group were females and 24% were males. The rate of suicide/self-inflicted hospitalizations among females (102/100,000) is significantly greater than the rate among males (31/100,000). The most common methods of choice for both genders were poisoning (70%) and cut/pierce (11%).

Studies suggest that at least half of all adolescents who have committed suicide had made contact with mental health professional prior to a suicide. In addition, among those adolescents who had been hospitalized for a failed attempt, 40% of those made a repeated attempt and 14% succeeded. However an estimated two thirds of those who attempted suicide had changed their mind at the last minute.

While adolescent suicides are complex, studies show that loss is a significant predisposing factor. Loss can include a break-up of a boyfriend or girlfriend, parental relationship problems or divorce, death of a close friend or family member, failed grades or lowered GPA, to a loss of self-esteem from ridicule or being made fun of by other students. Adolescents who kill themselves often do so shortly following a loss, or a brief time after the disciplinary action, humiliation, or indecent that occurred from the loss. In addition to loss, personal conflict with a boyfriend or girlfriend, parent, family members or friends are also predisposing factors to suicidal behavior among adolescents. Adolescents do not have the developmental coping skills that most adults have, therefore when a stressful incident occurs adolescents often react impulsively.

Alcohol or other drugs are strongly associated with suicide attempts and hospitalizations. In addition, adolescents who have been sexually abused are also at a higher risk for attempts. Psychological autopsies suggest a high incidence of psychopathology among completed adolescent suicides. Studies suggest that nearly three-quarters of suicide victims were found to have had antisocial disorders, or unipolar and bipolar affective disorders. Similarly, among adolescent women in the county, studies show that female suicide attempters have a higher rate of psychiatric care and having major depression compared to males. While both suicide attempts and completions occur more often away from school, rather than on school property, the effects of a suicide that occurred on a school site has a long-lasting impact among other students at the school, ranging from other students and teachers having coping problems, depression, and post-traumatic stress disorders.

Falls

Falls related injuries among youths aged 14-17 years

have remained relatively constant between 1994 and 2003 in the county, with an average of 392 fall-related hospitalizations per year. According the CDC, the majority of fall-related injuries occur at home rather than on school premises. Often with teens fall-related injuries are associated with alcohol use.

Factors Contributing to Injuries Among High School-Aged Youth

The most common behaviors that contribute to injuries among high school aged children include (YRBSS 2003)³⁸:

- Alcohol consumption
- Riding in a vehicle with a driver who has consumed alcohol
- Not wearing a seatbelt every time while riding in a vehicle. Approximately 60% of motor vehicle occupant fatalities could be prevented with appropriate and proper use of a lap/shoulder belt.
- Access to and carrying a weapon.
- Bullying behaviors, such as teasing, threatening, spreading rumors, shunning or excluding, or physical violence.
- Engaging in or threatening a physical fight

What can Physicians do?

The U.S. Preventive Services Task Force, Guide to Clinical Preventive Services, recommends counseling for all adolescent patients and their parents on the importance of wearing shoulder belts; wearing helmets when riding bicycles, scooters, rollerblades, and skateboards; avoiding tobacco use, underage drinking and illicit drug use; and avoiding alcohol/drug use while driving, swimming, and boating.

Patients with the following depressive symptoms that last for more than two weeks should be evaluated further and, if diagnosed with a depressive disorder, either treated or referred for treatment.

- Sadness and hopelessness
- Feelings of being unable to satisfy ideals
- Lack of enthusiasm, energy or motivation
- Overreaction to criticism
- Withdrawal from friends and activities
- Poor self-esteem or guilt
- Changes in eating or sleeping patterns
- Poor performance in school
- Anger and rage
- Problems with authority
- Indecision, lack of concentration or forgetfulness
- Restlessness and agitation
- Substance abuse
- Suicidal thoughts or actions

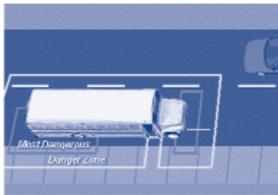
Checklist to keep your elementary or middle school aged child safe:

Pedestrian Safety

- Educate your child to obey stop signs, traffic signals and crossing guards
- Always cross at a street corner or cross-walk
- Before crossing, when safe, look left, right, and left again for cars before crossing
- Always walk with friends or adults, never alone

Bus Safety

- While at the bus stop, keep a safe distance away from traffic
- As the school bus approaches, keep at least 10-feet from the bus, until the driver signals that it is safe to approach



Graphics from National Highway Traffic Safety Administration (NHTSA)

Passenger Safety

- Ensure that your child is properly seated in the back seat in an appropriate child safety seat or booster seat for children under six years of age or weighing less than 60 pounds
- For children six years of age and older or weighing more than 60 pounds, they must be seated in a lap/shoulder belt
- Adults must always wear their seatbelt
- Never leave your child alone in a car without the supervision of person who is 12 years of age or older

Bicycle Safety

- Ensure that your child always wears a helmet that meets safety standards of the U.S. Consumer Product Safety Commission (CSPC), Snell, ANSI, or ASTM, every time they ride their bicycle
- Make sure the helmet fits snugly and flat across their head
- Walk bikes through intersection when crossing a street

Personal Safety

- Children should always know their home phone number, address, parent's work or contact number, or that of another parent-approved adult, and how to use 911 in case of an emergency at school or on their way to or from school. Ensure that the child carries a telephone card and knows how to use it.

- Plan a safe walking route to school or bus stop with your child. Use the most direct way to the school or bus stop that has the least street crossings and be sure to cross at intersections with crossing guards. Walk the route with your child and make note of vacant lots, parks, or other places where few people are around.
- If an older child is left alone at home for a short time after school, ensure that:
 - Rules are in-place for locking the doors and windows as well as answering the phone and door.
 - Have a trusted neighbor agree to have the child check in with them after they return home. Provide the neighbor with your contact number in case the child does not check-in as scheduled. Ensure the child has the neighbor's phone number to check-in in case of a delay at school.
 - Provide rules to not allow friends to visit without an adult in the home.

- Educate your child to never walk to or from school alone, always stay with a school friend, family member, or trusted neighbor.
- Educate your child to never talk to strangers or accept rides or gifts of any kind.

Sport/Physical Activity Safety

- Parents should encourage their child to check with their school to learn about age-appropriate playground equipment and improving their school playground and recreation facilities, such as soccer, football and baseball fields.
- Prior to participating in a sports program, ensure:
 - Appropriate safety equipment, safe playing environment
 - Proper conditioning
 - Adequate supervision and enforcement of rules

Bullying Prevention

- **For students, if bullied:**
 - Do not retaliate
 - Respond firmly or say nothing and walk away
 - Act confident
 - Talk with your parents. Telling is not tattling.
 - Talk with a trusted teacher, faculty, counselor, principal or have your parents talk with your school.
 - Have friends that stick up for each other
 - Take a different route, whether around school, or to and from school. Avoid unsupervised areas of your school

- Avoid taking expensive items to school
- **For parents, if your child is bullied:**
 - Encourage your child to develop new friends
 - Maintain contact with your child's school.
 - Maintain a record of bullying incidents, such as date, time, location, individuals, etc..
 - Encourage your child to share problems with you
 - Provide support for your child through positive compliments
 - Encourage your child to participate in physical activities and sports at school

Checklist to keep your high school aged child safe:

Passenger Safety

- Never ride in a vehicle with a driver who has consumed alcohol. Call a friend, parents, family member or a taxi to take you home
- Always wear a lap/shoulder belt every time you ride in a vehicle

Personal Safety

- Do not consume alcohol or take drugs
- Never carry a weapon

Suicide/Depression Prevention

- If you or a friend have the following signs, contact the California Youth Crisis Line at (800) 843-5200:
 - Signs of prolonged helplessness, sadness, and hopelessness
 - Loss of energy
 - Feeling of guilt and worthlessness
 - Becoming withdrawn and isolated from others
 - Not able to take pleasure in things once enjoyed
 - Considering suicide or making threats of suicide
 - If you feel you are suicidal, talk with a parent, family member, school faculty such as a teacher, counselor, principal, or friend

Bullying Prevention

- **For students, if bullied:**
 - Do not retaliate
 - Respond firmly or say nothing and walk away
 - Act confident
 - Talk with your parents. Telling is not tattling.
 - Talk with a trusted teacher, faculty, counselor, principal or have your parents talk with your school.
 - Have friends that stick up for each other
 - Take a different route, whether around school, or to and from school. Avoid unsupervised areas of your school

- Avoid taking expensive items to school
- **For parents, if your child is bullied:**
 - Encourage your child to develop new friends
 - Maintain contact with your child's school.
 - Maintain a record of bullying incidents, such as date, time, location, individuals, etc..
 - Encourage your child to share problems with you
 - Provide support for your child through positive compliments
 - Encourage your child to participate in physical activities and sports at school

Dating Safety

- If you or a friend are in a dating relationship and have the following characteristics, these are unhealthy and may become abusive. In this case you should call the Domestic Violence Hotline for more information 1-800-978-3600:
 - Controlling behavior
 - Extreme jealousy
 - Blames you for their anger
 - Threatens violence
 - Verbally abusive
 - Uses alcohol and drugs
 - Isolates you from your family and friends
 - Cruel to animal or children
 - Uses physical force during an argument, such as grabbing and holding tight with their hands

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SENTINEL PHYSICIANS NEEDED FOR INFLUENZA SURVEILLANCE

Every year the CDC relies on the assistance of sentinel physicians to help monitor influenza trends by reporting weekly their percentage of patients who present with influenza-like illness. The CDC is attempting to expand the number of participating physicians in Los Angeles County in order to obtain a more accurate picture of local trends and to keep pace with the rapid growth of the population. If you are interested in becoming a sentinel physician or would like more information, please contact:

Dr. Sadina Reynaldo or Dr. David Dassey at: 213-240-7941 or acdc2@ladhs.org

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THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County



COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES

Public Health

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

Selected Reportable Diseases (Cases)* - May 2005

Disease	THIS PERIOD June-July 2005	SAME PERIOD LAST YEAR June-July 2004	YEAR TO DATE -July		YEAR END TOTALS		
			2005	2004	2004	2003	2002
AIDS*	171	312	940	1,109	2,335	2,532	1,719
Amebiasis	20	13	73	53	98	121	102
Campylobacteriosis	152	198	429	557	915	1,100	1,067
Chlamydial Infections	6,576	6,551	23,366	22,216	38,464	36,555	35,688
Encephalitis	10	19	45	36	137	38	61
Gonorrhea	1,907	1,632	6,108	5,426	9,696	8,008	7,800
Hepatitis Type A	12	49	92	185	319	376	438
Hepatitis Type B, Acute	4	10	34	44	71	56	29
Hepatitis Type C, Acute	1	0	1	4	5	0	3
Measles	0	1	0	1	1	0	0
Meningitis, viral/aseptic	122	195	489	377	790	899	466
Meningococcal Infections	7	4	26	22	28	32	46
Mumps	4	2	7	2	2	10	16
Non-gonococcal Urethritis (NGU)	179	244	748	893	1,470	1,393	1,393
Pertussis	54	36	187	87	141	130	170
Rubella	0	0	0	0	0	0	0
Salmonellosis	227	139	480	528	1,185	995	956
Shigellosis	80	81	344	245	550	669	974
Syphilis, primary & secondary	86	86	313	263	459	442	364
Syphilis, early latent (<1 yr.)	66	60	277	219	381	365	353
Tuberculosis	162	159	396	404	856	949	1,025
Typhoid fever, Acute	3	6	7	10	13	16	33

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