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CME ACTIVITY

Preventing Falls Among Adults Aged 65 Years and Older

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Introduction

Falls among older adults (age 65 years and older) are common.¹⁻³ Approximately 35% to 40% of community-dwelling, generally healthy, older Americans fall annually, with rates rising steadily after age 75.^{3,4} In nursing homes and hospitals, these rates are even higher (1.5 falls per bed annually).^{2,3} Nationally¹ and in Los Angeles County,^{4,5} falls are the leading cause of injury death among older adults and the most common cause of nonfatal injury hospitalization in this age group. In 2000, the total costs of treating fall-related injuries among older adults exceeded \$19 billion in the U.S.⁶; by 2020, these numbers are expected to climb to \$59 billion (adjusted to 2009 dollars),⁷ largely as a consequence of the number of aging baby boomers who will turn 65+ years beginning in 2011.¹⁻⁸ Collectively, falls and fall-related injuries (e.g., hip fractures) represent a growing public health problem that is frequently under-recognized and under-treated.²⁻⁴

Although an increased risk for falling is often perceived as an inevitable part of aging, this is not so—most falls are preventable regardless of age.^{3,9,10} Effective strategies (e.g., community-based self-care programs) are available to help individuals, physicians, and community agencies prevent falls in the aging population (see Fall Prevention Resources, page 5).^{3,4}

This article reviews the current evidence on fall detection and prevention, focusing on practical, evidence-based strategies that can be incorporated into daily practice.

Consequences of Falling

Falls can be life-altering. Older Americans who have fallen typically report suffering from moderate to severe injuries, including deep bruises, head trauma, and hip fractures—about 5% of all falls result in fractures and hospitalization.^{1,3} Fall-related injuries often alter mobility and limit independent living, requiring both formal and informal caregiving.^{3,4} Many of these injuries, such as hip fractures, increase the risk of premature death.^{1,3,12} For example, a recent survival analysis of men and women aged 50+ years who had a hip fracture concluded that hip fractures increased all-cause mortality

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Key Facts about Falls

- Falls are the leading cause of injury hospitalization and death among Americans aged 65 years and older.^{1,3,4}
- In 2007, 29,000 Angelenos aged 65 and older were hospitalized, and 400 died from fall-related injuries.^{5,11}
- The impact of fall-related morbidity and mortality will increase as the number of older adults continues to grow.^{1,8,9}
- The total costs of treating fall-related injuries among older Americans exceed \$19 billion per year.⁶



Table 1. Common Risk Factors for Falls

Muscle weakness
Poor vision
Stroke/arthritis/Parkinson's disease
Prior history of falling
Anxiety
Gait and balance problems
Dementia or Alzheimer's disease
Depression
Having more than one chronic condition with impaired activities of daily living
Polypharmacy
Age > 80 years

5- to 8-fold during the first 3 months after the injury, compared to control groups.¹² Excess annual mortality for these study cohorts persists over time.¹²

Although under-recognized, a potential adverse outcome of falls is the fear of falling or the development of post-fall anxiety syndrome.^{3,13} Self-imposed activity limitations from the fear of falling can affect up to 55% of all community-dwelling older adults, leading to increased risks for further falls, depression, social isolation, and a drastic decline in quality of life.^{3,13} In a cross-sectional study of 540 community-living adults aged 70 years and older, van Haastregt and colleagues reported that more than half of all study participants said they fell at least once in the previous 6 months; 22% described pronounced feelings of anxiety; more than 28% said they had severe fear of falling; and 28% reported severe avoidance of activity.¹³ Post-fall anxiety can also interfere with fall rehabilitation and lead to additional costs from prolonged skilled nursing home placement and/or increased need for longer term caregiving

services.^{3,13} For the clinician, assessing modifiable risk factors for falls as well as for health conditions that may lead to severe complications from falls (see Osteoporosis, page 3) is a good practice and should be included in routine visits for patients with a history of falls and/or for those who exhibit signs and symptoms of fall anxiety syndrome.³

Risk Factors for Falling

Table 1 lists common risk factors for falling.^{3,14,15} Although sometimes time-consuming to address, many of these risk factors are manageable and potentially correctable. For example, several studies have shown that gait and balance problems are strong predictors of falls^{14,15} and are highly amenable to targeted interventions such as the use of assistive devices (e.g., walkers, canes, etc.) and control of underlying conditions (e.g., rehabilitation for stroke patients, treatment of inner ear problems, medications that control the symptoms of Parkinson's, etc.).¹⁶

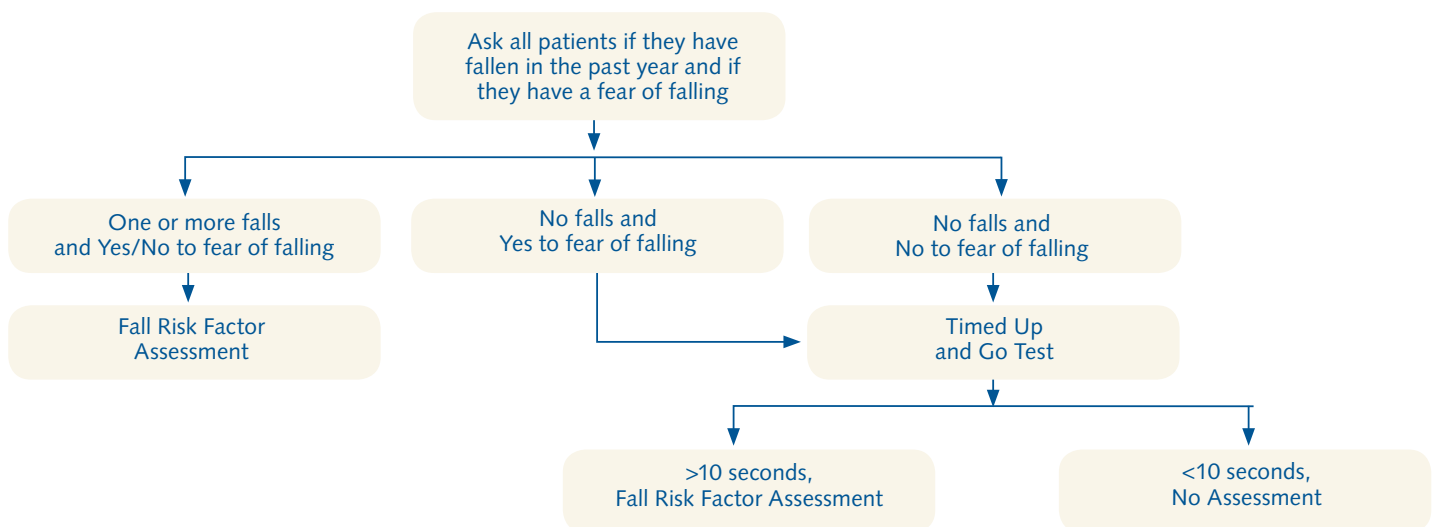
Polypharmacy, sensory or perception deficits (e.g., low vision), and diabetes-related foot or footwear problems can be attenuated or controlled by appropriate chronic disease self-management strategies.^{17,18}

Mental health and the risk of falling

Anxiety and depression are both consequences of and risk factors for falls; however, both conditions can be managed medically or via social support strategies such as participation in support groups that discuss ways to prevent and manage falls at home.^{3,13} Diminished cognitive functioning is another important risk factor for falls; but unlike anxiety and depression, cognitive decline is often difficult to manage and may not be modifiable.^{13,14,16}

Fear of falling represents a key risk factor, especially among older adults who have a history of falling. This fear or post-fall anxiety syndrome is often incapacitating and may actually

Figure 1. Algorithm for Fall Risk Assessment



increase a patient's risk of falling.³ In a number of observational studies, fear of falling is independently correlated with the ability to perform activities of daily living (ADLs).¹³ That is, as fearful adults limit their activities, they frequently experience a debilitating cycle of decreased physical fitness and loss of independence and confidence, resulting in symptoms of depression, feelings of helplessness, and social isolation.^{3,13} While a patient's apprehension and activity limitation may appear to be a protective instinct, these actions are counter-productive as they usually lead to further frailty, with further deterioration of gait, balance, and muscle strength. Because most older adults are not likely to report their fear of falling (due to perceived embarrassment and a secondary fear of nursing home placement),³ this condition may require indirect approaches to screening (e.g., by asking patients about their confidence in performing ADLs rather than directly asking the patient about their anxiety or about how frequently they fall).¹⁶

Clinical Assessment of Fall Risk

In spite of expert consensus that fall risk should be assessed in the clinic,^{3,16,19} falls remain largely under-managed in the primary care setting. Assessments of risk factors for falls, for example, are typically not a part of older adults' routine health maintenance exams even when patients indicate they have a history of falling or fall injury.²⁻⁴

The American Geriatrics Society (AGS) currently recommends that all older persons be asked at least once a year about falls.³ Ancillary clinical staff can easily accomplish this by querying patients about their recent fall history. AGS also recommends that all older persons reporting a single fall be assessed for other risk factors³ (Table 1). Completing a fall risk assessment during each patient's annual exam would provide continuity for assessing any changes in fall risk over time.³ In spite of common misperceptions, quality fall risk assessments can be completed quickly, in as little time as 1 minute (see Figure 1 for sample algorithm).³

Timed Up and Go Test

The Timed Up and Go Test is a short test that can take as little as 1 minute to administer.²¹ The screening test looks for unsteadiness as the patient gets up from a seated position, walks 10 feet, turns around and returns to a seated position. Its sensitivity and specificity of predicting a fall are both approximately 87 percent.²¹ A patient's functional mobility is strongly related to the test completion time.²¹



Osteoporosis

Screening for other health conditions that might lead to severe medical complications after a fall is good practice. One such condition is osteoporosis. This disease can lead to increased risks for bone fractures¹⁷ in the event of a fall.

The United States Preventive Task Force recommends that all women above the age of 65 should regularly be screened for osteoporosis.¹⁹

Like falls, osteoporosis is potentially preventable or it can be treated.¹⁷

Practical Gait and Balance Tests for Physician Use

A number of reliable fall risk assessment tools to assess strength, gait, flexibility and balance of older adults have been developed. The choice of instrument to use (if any), however, should reflect the clinical judgment of a trained physician,¹⁶ the needs of the patient, and the availability of community resources to help the patient address these risk factors.^{14,16,18} Two such tools with adequate levels of sensitivity and specificity are the Berg Balance Scale and the Timed Up and Go Test; both tests focus on assessing the various dimensions of functional mobility.^{14,16,21} For office practice, the latter is a potentially good option in light of time constraints.

Please consult Scott et al.¹⁶ for a review of these and other useful fall risk assessment instruments.

Best Practices for Preventing Falls

Although there are a number of established interventions for preventing falls among community-dwelling older adults, only a few have demonstrated effectiveness for reducing the number and rate of falls.²¹⁻²⁷ The following section highlights some of these.

Tai Chi

Tai Chi Chuan (TCC) is a form of martial arts that has been used as an exercise for improving balance and flexibility. This low-impact and low-velocity activity is quite appropriate for older adults with varying levels of physical fitness. Exercises are mainly isometric with several very slow isotonic movements. TCC can improve balance, flexibility and even manage anxiety related to the fear of falling.²³ Data from a recent study suggests that at least 35 to 40 hours of TCC training are required to yield changes in balance and flexibility.²³

A Matter of Balance

A Matter of Balance is an 8-session program designed to reduce the fear of falling and to increase physical activity levels among community-dwelling older adults.²⁰ Each 2-hour session is led by lay leaders and consists of lectures, group discussions, problem-solving activities, exercises, assertiveness training, home assessments, and use of behavioral (social) contracting. Additionally, participants are taught and encouraged to do strength training with resistance bands, both at home and after the entire program has ended. While this program has demonstrated an 11% increase in the levels of intended activity ($p < .05$) immediately after participation

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(i.e., effects in participants versus nonparticipants²⁰), the intervention effect may wane 6 months after initial exposure to the program content. A booster session at 3 months post-intervention has been recommended to counter this potential problem.²⁰

Stepping On

Stepping On is a multifaceted community-based 7-week fall prevention program.²⁴ Using small groups, it is designed to improve fall self-efficacy, facilitate behavioral change, and reduce the number of falls. Sessions are typically 2 hours and include exercises, didactic lessons on home hazards, medication management, footwear, and vision. One particular session addresses community safety by practicing discrete skills (e.g., transitioning to grass or stepping off curbs) in the community. To encourage lasting effects, this program contains a 3-month booster session. During prior intervention studies, use of this program has shown a 31% reduction in falls among intervention groups as compared to controls.²⁴

Physical Therapy and Other Fitness Training

As the most accessible interventions, multiple types of exercise and physical therapy have been shown to significantly reduce the risk (pooled risk ratio: 0.83, 95% CI 0.72, 0.97) and rate (pooled rate ratio: 0.78, 95% CI 0.71, 0.86) of falls among older adults in comparison to controls.²⁵ Based on this evidence, expert consensus generally supports the overall inclusion of balance, strength, flexibility and endurance training in fall prevention programs.^{24,25} Intervention programs that contain two or more of these exercises are highly recommended for reducing falls among vulnerable older adults.^{25,27}

Home Hazard Assessment

Home hazard assessment and environment evaluation can be done by a variety of individuals, including the patient, with follow-up modifications by trained staff. Home

Sample of the Home Fall Prevention Checklist for Older Adults

Floors

1. When you walk through a room, do you have to walk around furniture?
2. Do you have throw rugs on the floor?
3. Are there papers, books, towels, shoes, magazines, boxes, blankets, or other objects on the floor?
4. Do you have to walk over or around wires or cords (like lamp, telephone, or extension cords)?

For the full brochure, go to www.cdc.gov/HomeandRecreationalSafety/pubs/English/booklet_Eng_desktop-a.pdf

evaluation and modification have been shown to reduce the risk of falls.^{25,27} This intervention is highly recommended for patients with a history of recurrent falls.²⁵ Included are examples of home hazard assessment and environment evaluation (see Sample of the Home Fall Prevention Checklist and Fall Prevention Resources). The checklist is available on the CDC website in English, Spanish and Chinese.²⁸

Summary

Falls are common and are a significant source of morbidity and mortality for older adults. Evidence-based screening tools and interventions are available for physicians to use. Many of these interventions or programs are readily available free of charge or at a low cost through local community centers and social services providers. Physicians and other health care providers can refer patients to many of these programs and are encouraged to use their clinical judgment in determining the appropriate resources for their patients (see Fall Prevention Resources).

Best Practices for Preventing Falls

Strength of Recommendations

Key clinical intervention ²⁵	RaR	RR	Level
Review of medications with the patient by the physician	NS	.61	B
Home hazard assessment and modifications for patients with a history of falls	.66	NS	A
Exercise classes containing multiple components	.78	.83	A
Home-based exercises containing multiple components	.66	.77	A
“Multi-factorial” (individually tailored) interventions that address multiple risk factors	.75	NS	A

RaR = Pooled rate ratio; RR = Pooled risk ratio; Level = Levels of evidence: A = Data from high-quality, randomized, controlled trials or meta-analysis, B = Data from well-designed, nonrandomized clinical trials or nonquantitative systematic reviews

In an effort to promote greater awareness of falls and more frequent fall risk assessments in the outpatient clinic setting, recent fall prevention research has targeted key processes and barriers to appropriate physician management of this growing public health problem.^{10,25} Some examples of these processes and barriers include misconception that falls are not preventable, competing time demands during the clinic encounter, and insufficient reimbursement for managing fall risks in the

outpatient care setting.¹⁸ With greater attention by clinicians to fall prevention in elderly patients, morbidity and mortality can be substantially reduced. **R**

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Fall Prevention Resources

Los Angeles County Department of Public Health:

Injury & Violence Prevention Program: (213) 351-7888, <http://publichealth.lacounty.gov/ivpp>

Office of Senior Health: (213) 351-7825, <http://publichealth.lacounty.gov/aging>

Los Angeles County Community and Senior Services

(CSS), an Area Agency on Aging (AAA): Nutrition, care-management, and home-based care services. (800) 510-2020, <http://css.lacounty.gov/aaa.aspx>

Fall Prevention Center of Excellence: A public-private interdisciplinary partnership for fall prevention. Links to fall prevention research, best practices, and other resources. www.stopfalls.org

Video instruction on how to complete the Berg Balance Test: www.stopfalls.org/service_providers/sp_bm.shtml

The American Geriatrics Society (AGS), Foundation for Health in Aging: Fall prevention resources and guidelines for individuals and health care providers. (800) 563-4916

CarePathways: Resource directory for adult day care, long-term care, home modification, and additional services for older adults and their caregivers. www.carepathways.com/

National Osteoporosis Foundation: Mission is to prevent osteoporosis and related fractures, to promote lifelong bone health, to help improve the lives of those affected by osteoporosis and to find a cure through programs of awareness, advocacy, public and health professional education and research. www.nof.org/

The City and County of Los Angeles Network of Care: Fall prevention information and resource directory for older adults and their families. <http://losangeles.networkofcare.org/aging/home/index.cfm>

City of Los Angeles Department of Aging, an Area Agency on Aging (AAA): Multipurpose senior centers throughout the city provide services to seniors and their caregivers. Handyworker and Home Secure programs provide home repair and modification services for low-income seniors. (800) 510-2020, <http://aging.lacity.org/>

Los Angeles Caregiver Resource Center (LACRC): Free or low-cost services and resources for adult caregivers. (800) 540-4442, www.losangelescrc.org

Centers for Disease Control and Prevention (CDC): Provides free fall-related research articles, fact sheets, brochures, posters, checklists, and resource guides. (800) CDC-INFO, www.cdc.gov/homeandrecreationalafety/falls/index.html

Berg Balance Test
www.fallpreventiontaskforce.org/pdf/BergBalanceScale.pdf

Timed Up and Go Test
www.fallpreventiontaskforce.org/pdf/TimedUpandGoTest.pdf

Home Fall Prevention Checklist for Older Adults
www.cdc.gov/HomeandRecreationalSafety/pubs/English/booklet_Eng_desktop-a.pdf

Free Continuing Medical Education Credit

To obtain CME credit, complete the eLearning module on “Preventing Falls Among Adults Aged 65 Years and Older” at <https://publichealth.lacounty.gov/elearning>

This educational activity is offered by the LA County Department of Public Health (LAC-DPH). The LAC-DPH is accredited by the Institute for Medical Quality and the California Medical Association to provide continuing medical education (CME) for physicians licensed in California and contiguous states. The LAC-DPH takes responsibility for the content, quality and scientific integrity of this CME activity. The LAC-DPH designates this educational activity for a maximum of 1.0 AMA PRA Category 1 Credit toward the California Medical Association's Certification in Continuing Medical Education and the American Medical Association Physician's Recognition Award. Each physician should only claim those hours of credit he/she actually spent in the educational activity.

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Back-to-School Immunization Checklist

As children return to school, they will be visiting medical offices for vaccines required for school entry. The following checklist will help identify steps that physicians can take to improve immunization delivery systems and help parents understand why it's important to keep their children up-to-date with vaccines now and throughout the year.

Do you have sufficient supplies of pediatric and adolescent vaccines?

- Have you ordered your flu vaccine? Flu vaccine manufacturers and distributors are posted at www.preventinfluenza.org/profs_production.asp.
- Stock up with DTaP and Tdap vaccine to meet increasing demand due to the pertussis epidemic.
- Check your supply for expired vaccine.

Are staff up-to-date on vaccine recommendations and practices?

- Review the “Skills Checklist for Pediatric Immunizations” (www.eziz.org/PDF/IMM-694.pdf) with staff to assess immunization skills, techniques, and procedures.
- Take advantage of online or in-person immunization training sessions listed at www.ph.lacounty.gov/ip/trainconf.htm and www.eziz.org.
- Post staff educational materials (www.eziz.org) and Immunization Schedules (www.cdc.gov/vaccines/recs/schedules/default.htm).

Do you have systems in place to improve vaccine delivery?

- Use the California Immunization Registry (CAIR) to identify vaccines that are due/overdue and generate reminder/recall lists and postcards. For more information, visit www.immunizelink.org.
- Consider walk-in, evening, or weekend vaccination clinics.

Are you ready to respond to parents' questions and concerns about vaccines?

- A physician recommendation is the most influential vaccination motivator. Let parents know why you



believe in vaccines and help them understand that skipping or delaying vaccines leaves their children at risk for serious diseases. Respond non-judgmentally to parents' concerns. Review “Vaccine Safety: Responding to Parents' Top 10 Concerns” at www.eziz.org/PDF/IMM-917.pdf.

- Post and distribute immunization educational materials. Download at www.eziz.org.

For more information and resources, visit www.publichealth.lacounty.gov/ip.

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Cal/OSHA Aerosol-Transmissible Diseases Standard Created to Protect Health Care Workers

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In December 2009, Oakland Police and Fire Departments and an ambulance service responded to the home of a patient, who was transported to a local medical center and later confirmed to have bacterial meningitis. Exposures to this patient resulted in the hospitalization of a medical center employee and an Oakland police officer for bacterial meningitis.

Four months later, the medical center was issued \$101,485 in citations by Cal/OSHA for employer violations of the state safety and health standards in connection to this exposure of bacterial meningitis. Additionally, this incident resulted in citations to the Oakland Police Department (\$31,520) and Fire Department (\$2,710). Citations to all three entities involved violations of the new Aerosol-Transmissible Diseases (ATD) standard (Title 8 CCR Section 5199).

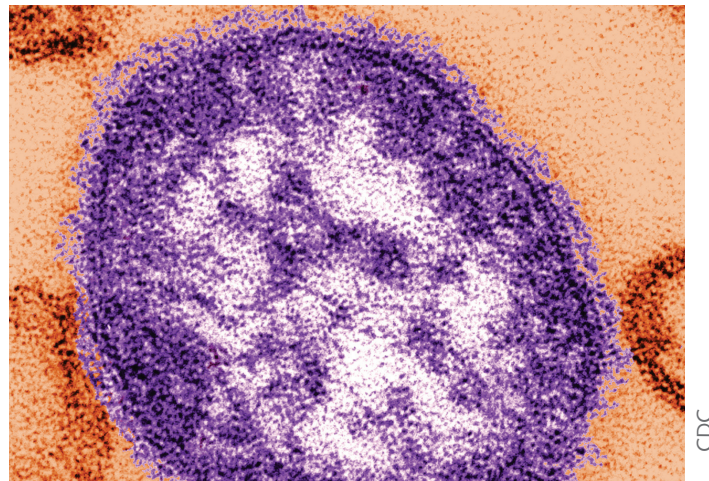
This landmark standard by the California Division of Occupational Safety and Health (Cal/OSHA), which went into effect on August 5, 2009, represents the nation's first specific regulatory response to comprehensive worker health and safety regarding respiratory diseases such as SARS, H1N1, and tuberculosis. A 1997 federal OSHA proposed standard on Occupational Exposure to Tuberculosis was withdrawn in 2003.

ATDs are epidemiologically important diseases or pathogens that are transmitted via the airborne or droplet route (Table 1). Of note, novel pathogens such as the H1N1 influenza virus that emerged in 2009 are considered reportable airborne-transmissible disease and need to be treated as such.

Who Is Affected by the Standard?

The standard applies to a variety of covered employers whose staff may have or may cause occupational ATD exposure to others, such as hospitals, nursing facilities, clinics, medical offices, home health care, public health services, medical laboratories, police services, medical transport, correctional facilities, homeless shelters, medical outreach services, drug treatment programs, mortuaries, coroners, firefighter and paramedic emergency medical responders, and maintenance or repair operations involving potentially contaminated areas or equipment.

Included in the standard are measures to prevent worker ATD exposures and procedures to follow if an exposure occurs. Many covered employers have most or many of these processes already in place. For example, the standard includes training requirements, TB screening, and the use of personal protective equipment. It also restates requirements of Cal/OSHA's preexisting Respiratory Protection Standard (8CCR5144) to fit test respirators and to ensure confidential medical evaluation before initial fit testing. Additionally, employers must have written ATD exposure control plans, which include notification to everyone involved in a timely



This transmission electron micrograph reveals the ultrastructural appearance of a single virus particle, or virion, of measles virus.

CDC

manner, such as the local health officer and other employers.


Employers with staff members who may be exposed to ATDs must establish a written respiratory protection program or incorporate it into their ATD Exposure Control plan. They also must maintain records of employee training and exposure incidents, and require their designated health care professional to confidentially maintain employee medical records.

New ATD Standards Take Effect

Effective September 1, 2010, health care employers must offer vaccine for measles, mumps, rubella, varicella zoster, and Tdap (tetanus, diphtheria, acellular pertussis), as well as annual influenza vaccinations to employees at no cost. If an employee elects not to be vaccinated, a written declination is required as part of the confidential employee medical record.

Also effective as of this date, the employer shall provide a powered air-purifying respirator with a high-efficiency particulate air (HEPA) filter(s), or a respirator providing equivalent or greater protection to employees who perform high-hazard procedures on airborne infectious disease cases or suspected cases.

The Cal/OSHA standard can be found at www.dir.ca.gov/Title8/5199.html.

A California Department of Public Health presentation on Immunization Recommendations for Employees Covered under the standard can be found at www.cdph.ca.gov/programs/immunize/Documents/HCW%20Immunization_ATD.ppt#502.2 

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Table 1. List of Aerosol-Transmissible Diseases

AIRBORNE INFECTION ISOLATION

- Aerosolizable spore-containing powder or other substance that is capable of causing serious human disease; for example: *Bacillus anthracis*
- Avian influenza viruses
- Measles virus
- Monkeypox virus
- Novel or unknown pathogens
- Severe acute respiratory syndrome (SARS)
- Smallpox (variola)/Variola virus
- Tuberculosis (TB)/*Mycobacterium tuberculosis*
- Varicella disease

Any other disease for which public health guidelines recommend airborne infection isolation

DROPLET PRECAUTIONS

- Diphtheria/*Corynebacterium diphtheriae*
- Epiglottitis, due to *Haemophilus influenzae* serotype b
- Group A Streptococcal disease
- *Haemophilus influenzae* serotype b (Hib) disease
- Influenza, human
- Meningitis
 - *Haemophilus influenzae*, serotype b known or suspected
 - *Neisseria meningitidis* (meningococcal) known or suspected
- Meningococcal disease
- Mumps (infectious parotitis)

DROPLET PRECAUTIONS (continued)

- Mycoplasmal pneumonia
- Parvovirus B19 infection
- Pertussis (whooping cough)
- Pharyngitis in infants and young children/Adenovirus, Orthomyxoviridae, Epstein-Barr virus, Herpes simplex virus
- Pneumonia
 - Adenovirus
 - Group A *Streptococcus*
 - *Haemophilus influenzae* serotype b in infants and children
 - Meningococcal
 - Mycoplasma, primary or atypical
- Pneumonic plague/*Yersinia pestis*
- Rubella virus infection (German measles)
- Scarlet fever in infants and young children
- Streptococcal disease (group A *Streptococcus*)
 - Skin, wound or burn, major
 - Pharyngitis in infants and young children
 - Pneumonia
 - Serious invasive disease
- Viral hemorrhagic fevers due to Lassa, Ebola, Marburg, Crimean-Congo fever viruses (airborne infection isolation and respirator use may be required for aerosol-generating procedures)

Any other disease for which public health guidelines recommend airborne infection isolation

**It's Time to
Order Vaccine for
the 2010-2011
Flu Season**

For the 2010-2011 flu season, the U.S. Advisory Committee on Immunization Practices recommends universal influenza vaccination for all persons 6 months of age and older who do not have a contraindication to vaccination, such as an egg allergy.

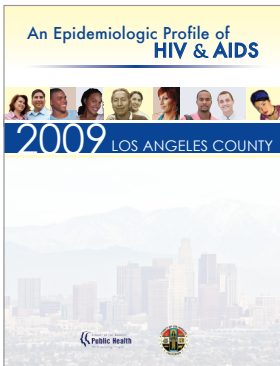
A trivalent vaccine will protect your patients from the flu virus strains that are most likely to circulate in the fall: A/California/7/2009, A/Perth/16/2009, and B/Brisbane/60/2008. Since the pandemic H1N1 strain is included in this year's seasonal vaccine, there will be no need for a separate pandemic H1N1 flu vaccination.

Trivalent seasonal flu vaccine will not be provided through the national centralized flu vaccine distribution program that was in place to support pandemic H1N1 flu vaccination.

Providers who usually purchase flu vaccine and have not yet placed a flu vaccine order with a manufacturer or distributor should do so immediately. Lists of manufacturers and distributors are posted at www.flusupplynews.com/resources.cfm and www.preventinfluenza.org/profs_production.asp.

Stay up-to-date with the latest flu vaccination information by visiting the following websites:

- Los Angeles County Department of Public Health: www.publichealth.lacounty.gov
- California Department of Public Health: www.getimmunizedca.org
- California Immunization Coalition: www.immunizeca.org



New Report on HIV/AIDS in LA County

A new report, “An Epidemiologic Profile of HIV and AIDS in Los Angeles County, 2009” provides a comprehensive and up-to-date picture of the HIV/AIDS epidemic in Los Angeles County, focusing on the sociodemographic groups most affected by HIV, behaviors that increase the risk of contracting HIV, and information on

co-infection and care services for persons living with HIV.

The Profile synthesizes current surveillance and research data to highlight changing patterns and emerging trends in the epidemic, in order to assist planning bodies and service organizations target their HIV prevention and care efforts. The 2009 Profile focuses on the period 2004-2009 and provides an update to the 2004 Profile.

Highlights from the Profile include the following:

- 2009 was the first year since the implementation of pediatric HIV surveillance reporting in 1999 that no transmissions from HIV-infected pregnant women to their infants were reported in LA County. This success was due to the routine testing of pregnant women for HIV and a subsequently high proportion (98%) of HIV-infected pregnant women receiving HIV drug therapy during pregnancy and/or during labor and delivery.
- The number of LA County residents living with HIV continues to increase. It is now estimated that more than 62,000 people are infected with HIV, with over 1 in 5 (21%) unaware that they are infected.
- The number of persons diagnosed with severe HIV disease (AIDS) each year continues to drop, from nearly 2,800 in 1996 to fewer than 1,400 in 2006. Similarly, the number of deaths from AIDS has dropped, from 1,800 in 1996 to approximately 540 in 2006. This is largely due to the availability and use of highly active antiretroviral therapy (HAART).
- Angelenos are living longer with HIV before developing AIDS, but they still need to balance HAART drug side effects on their organs, and HAART drug interactions with their medicines for the other health conditions that come with age.
- Of study participants diagnosed with AIDS, nearly 3 in 4 Latinos said they did not know they were infected until very late in the course of the disease—that is, within 12 months of their AIDS diagnosis—often getting tested after falling ill or being hospitalized.
- At 39%, Latinos represent the largest proportion of persons living with HIV in the county. Though African Americans

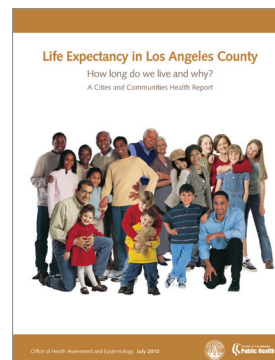
make up only 9% of the county’s population, they are the race/ethnic group most impacted by HIV, accounting for 22% of Angelenos living with HIV.

What is the Department of Public Health doing to combat HIV/AIDS in LA County?

The Department’s Office of AIDS Programs and Policy provides

- Free rapid HIV testing.
- Free treatment and care for individuals living with HIV, if they cannot afford it.
- Health education and risk-reduction counseling to those at risk for, or already living with, HIV.
- Public awareness campaigns, such as Erase Doubt (www.erasedoubt.org), and community events, such as health fairs, in an effort to normalize HIV testing. Efforts are also underway to make HIV testing a routine part of any adult or adolescent’s medical checkup.

Copies of the Profile are available from the HIV Epidemiology Program by calling (213) 351-8196, or can be accessed online at www.publichealth.lacounty.gov/hiv/ (click on “HIV Statistics and Reports”).



Report Shows Life Expectancy in LA County Exceeds 80 Years

Overall life expectancy in Los Angeles County is increasing and, for the first time, has reached a high of 80.3 years, according to a July 2010 report from the LA County Department of Public Health titled, “Life Expectancy in Los Angeles County: How long do we live and why?”

“Average life expectancy is one of the most fundamental measures of the health of a population and community. We are pleased to see that there have been substantial gains over the past couple of decades,” said Jonathan E. Fielding, MD, MPH, Director of Public Health and Health Officer.

The report examines both the reasons for this overall gain and why residents in some neighborhoods may not live as long as residents in others. At the extremes, there is a nearly 18-year difference in life expectancy between black males and Asian/Pacific Islander females (69.4 years of age versus 86.9 years, respectively), and a 12-year difference in life expectancy between the residents of Compton and La Cañada/Flintridge (75.7 years versus 87.8 years).

For the first time, the department also analyzed life expectancy at birth in 103 cities and communities across the county, and the report highlights the relationship between how long people live and the social and economic circumstances within their communities.

Among the report's findings:

- In 2006, the estimated overall life expectancy of LA County residents was approximately 2.5 years higher than the national average (80.3 years versus 77.7 years, respectively).
- Life expectancy in LA County has been steadily improving for all racial/ethnic groups, but the discrepancies are not declining. In general, neighborhoods with the lowest life expectancy had the highest levels of economic hardship.
- Communities with the greatest life expectancy include: Agoura Hills (83.4), Arcadia (84.7), Beverly Hills (85.6), East San Gabriel (85.0), Rowland Heights (85.3), and Walnut (86.6).
- Communities with the lowest life expectancy include Florence-Graham (76.7), Inglewood (77.0), Lancaster (76.0), Lynwood (77.7), Westmont (72.4), and Willowbrook (75.6).
- Men experienced higher rates of death due to homicide, suicide, motor vehicle crashes and drug overdose, which helped contribute to an overall lower life expectancy compared to women.
- Coronary heart disease remains the leading cause of premature death for all genders, geographic locations and racial/ethnic groups.

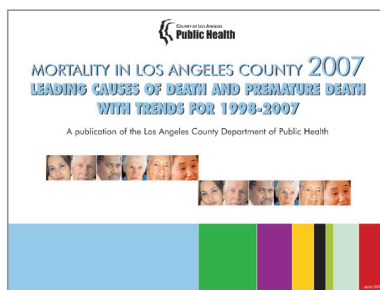
“There is a strong and consistent relationship between a person’s health and what social and economic resources are available to that person,” said Dr. Fielding. “People living in impoverished neighborhoods may have less opportunity to obtain a good education and be fully employed, have less social support, and have less opportunity to participate in activities that promote health. These factors affect how long a person lives.”

A full copy of the report can be accessed at www.publichealth.lacounty.gov/epi.

Mortality Report Shows Death on the Decline

The number and rate of deaths in Los Angeles County is on the decline, with progress made against some of the county’s top killers, according to “Mortality in Los Angeles County, 2007: Leading causes of death and premature death with trends form 1998-2007,” a June 2010 report from the LA County Department of Public Health.

In the last decade, the county has experienced remarkable declines in mortality for many causes of death, including a 38% drop in the death rate from coronary heart disease, a 23% decline from lung cancer, and a 35% decrease from



stroke. While 24% of deaths are still due to coronary heart disease, the leading cause of death, the county has now achieved the overall national Healthy People 2010 target for that disease. Unfortunately, these favorable trends mask marked geographic, gender, and racial/ethnic disparities in patterns of death. For example, the coronary heart disease mortality rate among blacks was still well above the Healthy People 2010 goal.

The report also showed that injuries (homicides, motor vehicle crashes, drug overdoses, and suicide) are leading causes of premature deaths among males and far exceed premature deaths among females. (Premature death is defined as death before the age of 75, a standard cut-off used in public health.)

Data highlights for 2007 (rates are age-adjusted)

- In 2007, there were 58,316 deaths, a 2% decrease from 2006. The death rate was 624 deaths per 100,000 population, a 6% decrease from 2006.
- On an average day in LA County, 160 died, including 38 from coronary heart disease, 37 from cancer, 11 from injuries (homicide, suicide, and unintentional), and 9 from stroke. There were 6 deaths among children and young adults less than 25 years.
- Twenty-three of every 100 deaths were caused by cancer (13,599 deaths). Among those who died of cancer, lung cancer was the most common (2,950 deaths), followed by colorectal cancer (1,323 deaths), and breast cancer (1,139 deaths).
- Death rates were higher for men than women for every leading cause of death and premature death, except Alzheimer’s disease and breast cancer.

Data highlights for 1998-2007 (rates are age-adjusted)

- For the decade, the overall death rate decreased 22%, from 797 to 624 deaths per 100,000 population.
- Coronary heart disease, homicide, and motor vehicle crashes have been the three leading causes of premature death since 1998.
- The number of deaths from Alzheimer’s disease increased 311%, from 433 in 1998, to 1,780 in 2007. Alzheimer’s disease has been the 7th-leading cause of death since 2005. Prior to 2003, it was not among the overall leading causes of death.

For a printed copy of the report, call (213) 240-7785. Or view the report online at www.publichealth.lacounty.gov/dca/dcareports.htm. 

Rx for Prevention is published 10 times a year by the Los Angeles County Department of Public Health. If you would like to receive this newsletter by e-mail, go to www.publichealth.lacounty.gov and subscribe to the ListServ for *Rx for Prevention*.

Rx for Prevention

Promoting health through prevention in Los Angeles County

Upcoming Training

Healthy Aging for Women + Women & Health Care Reform

Physicians and other health care providers and leaders are invited to two free community dialogues on women's health. *Healthy Aging for Women* will focus on preparing our communities for the upcoming increase in the population of aging women in LA. *Women & Health Care Reform* will look at prioritizing and protecting women's health as Los Angeles begins to implement health care reform.

Hosted by the Office of Women's Health, LA County Department of Public Health, and 30 collaborating organizations

- October 5, 2010 | 8:30 am-5 pm
- The California Endowment

For a registration form, e-mail cortal@ph.lacounty.gov.

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Index of Disease Reporting Forms

All case reporting forms from the LA County Department of Public Health are available by telephone or Internet.

Animal Bite Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/biteintro.htm

Animal Diseases and Syndrome Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/disintro.htm

Adult HIV/AIDS Case Report Form
For patients over 13 years of age at time of diagnosis
HIV Epidemiology Program
(213) 351-8196
www.publichealth.lacounty.gov/HIV/hivreporting.htm

Pediatric HIV/AIDS Case Report Form
For patients less than 13 years of age at time of diagnosis
Pediatric AIDS Surveillance Program
(213) 351-8153
Must first call program before reporting
www.publichealth.lacounty.gov/HIV/hivreporting.htm

Confidential Morbidity Report of Tuberculosis (TB) Suspects & Cases
Tuberculosis Control (213) 744-6160
www.publichealth.lacounty.gov/tb/forms/cmr.pdf

Lead Reporting
No reporting form. Reports are taken over the phone.
Lead Program (323) 869-7195

Reportable Diseases & Conditions Confidential Morbidity Report
Morbidity Unit (888) 397-3993
Acute Communicable Disease Control
(213) 240-7941
www.publichealth.lacounty.gov/acd/reports/CMR-H-794.pdf

Sexually Transmitted Disease Confidential Morbidity Report
(213) 744-3070
www.publichealth.lacounty.gov/std/providers.htm (web page)
www.publichealth.lacounty.gov/std/docs/H1911A.pdf (form)

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