Rx for Prevention

Promoting health through prevention in Los Angeles County

Volume 3, Number 9

November-December 2012

This Issue

1 Preventing Prescription Opioid Abuse

3 Risks Associated with Prescription Opioids

3 Assessing for Opioid Dependence

8 HBV Infection Control During Foot and Nail Care Procedures

9 Flu Season: *Influenza Watch* Released

10 Vital Signs

- Report Examines Communicable Disease Surveillance and Trends
- LA County Department of Public Health Releases New Book
- Report Shows Smoking Rates Down in LA County
- Publication Offers Terrorism Agent Information and Treatment Guidelines
- Diabetes on the Rise as LA County Obesity Rates Grow

12 Index of Disease Reporting Forms

Preventing Prescription Opioid Abuse

Tina Kim, PhD

Ben Lee, PhD

John Viernes, MEd

This is Part 2 of a 3-part series on prescription drug abuse in LA County. Part 1 was featured in the June-July 2012 issue of *Rx for Prevention*.

Prescribing of opioid medications (e.g., oxycodone, hydrocodone, and methadone) has increased substantially over the past 20 years.[1] The National Institute on Drug Abuse (NIDA) estimates that opioid prescriptions totaled 210 million in 2010, up from 76 million in 1991. In Los Angeles County, more than 14 million prescriptions for opioids were issued in the last five years, with hydrocodone being the number one prescribed opioid (Figure 1). Concomitantly, prescription opioid overdose deaths, addiction, and diversion have increased markedly.[2] For instance, national overdose deaths involving prescription opioids rose from 2,901 in 1999 to 11,499 in 2007, almost a 300% increase, exceeding the combined number of deaths involving heroin and cocaine.[3] Between 2005 and 2009, there were an average of 400 drug-related deaths with positive toxicology for opioid pain relievers among county residents. Furthermore, between 2005 and 2010, the number of admissions to publicly funded substance abuse treatment programs in LA County for opioid abuse almost doubled, from 674 to 1,022 (Figure 2).

The misuse and abuse of prescription opioids are serious public health problems in the United States and Los Angeles County. By using a careful approach to opioid prescribing, physicians can minimize prescription opioid-related harms, particularly fatal overdose.

This article provides basic guidance for safely prescribing opioids, including indications for opioid use, screening for patients at risk, dosing and titration, monitoring, and communicating with patients. It also offers prescribing resources.

Indications for Use of Opioids

Opioid-containing medications can be an effective therapy for carefully selected and monitored patients with acute or chronic pain. However, there are many methods of managing pain. In general, because opioids are associated with potentially serious harms, they should only be considered if other physical, behavioral, and non-opioid medication regimens have failed and if pain has a significant adverse impact on function or quality of life.[4] The decision for opioid treatment should be based on a comprehensive assessment of a patient's overall health status, medical history, mental disorders, patient preference and values, benefits and risks of opioids, and the severity of pain.[5]

Clinicians who prescribe opioids should register with the California Prescription Drug Monitoring Program (PDMP)/Controlled Substance Utilization Review and Evaluation System (CURES). Registered users can verify whether patients have received controlled substance prescriptions from 2 or more prescribers, and/or filled them at 2 or more pharmacies during the previous calendar month.[6]

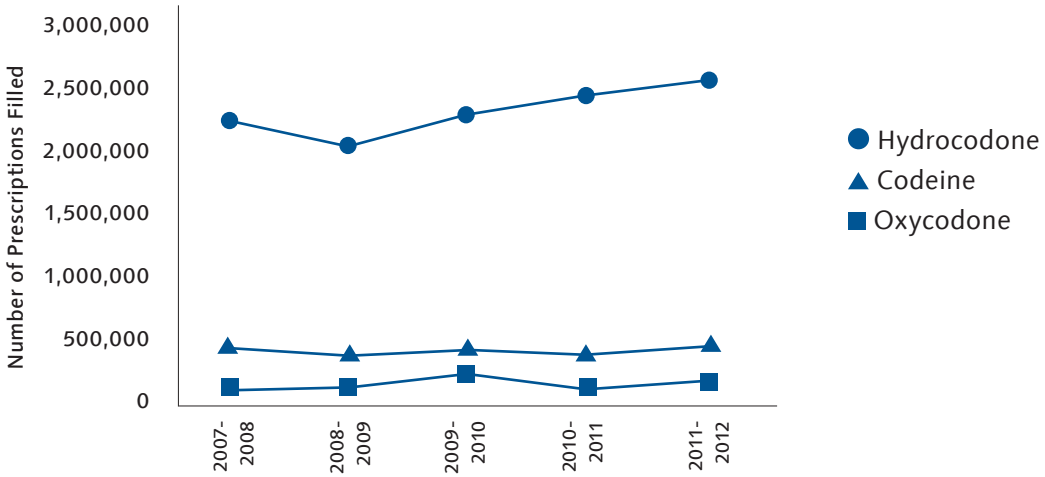
Opioid Treatment for Acute Pain

Most acute pain can be treated adequately with non-opioid medications

continued on page 3 >

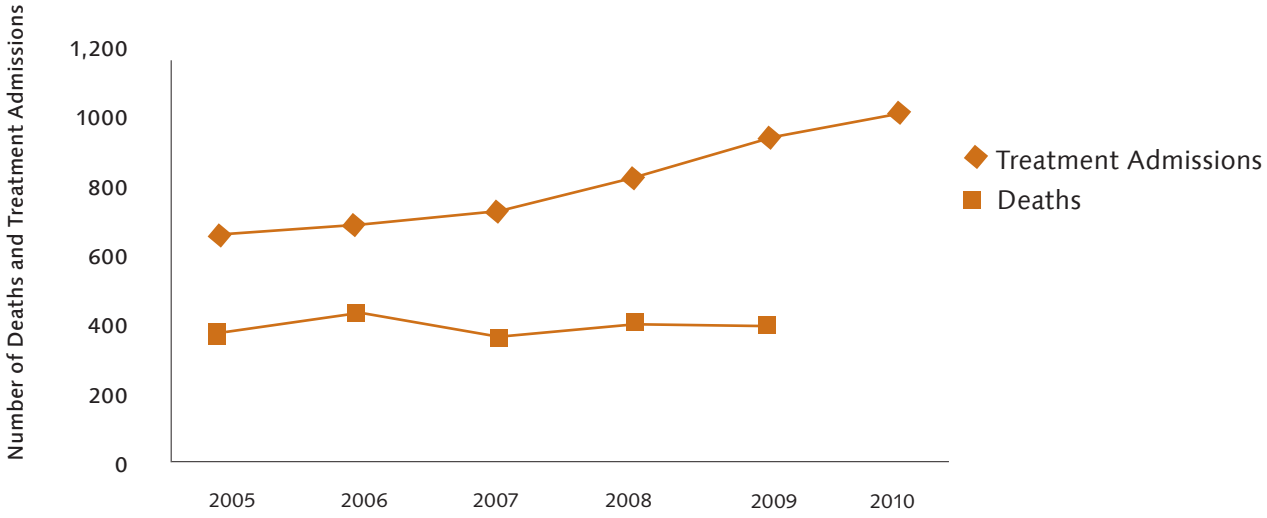
County of Los Angeles Public Health

Figure 1. Opioid Analgesic Prescriptions Filled by Fiscal Year, Los Angeles County



Source: Department of Justice, California Prescription Drug Monitoring Program/ Controlled Substance Utilization Review and Evaluation System data.

Figure 2. Drug-Related Deaths with Positive Toxicology for Opioid Pain Relievers and Treatment Admissions for Opioid Abuse, Los Angeles County



Source: Los Angeles County Participant Reporting System data, Los Angeles County Department of Public Health, Substance Abuse Prevention and Control; Los Angeles County Department of Public Health, Injury & Violence Prevention Program, "Drug-Related Deaths in Los Angeles County, 2000-2009." http://www.publichealth.lacounty.gov/ivpp/pdf_reports/reports_home.htm.

(e.g., acetaminophen, nonsteroidal anti-inflammatory drugs) or therapies such as exercise or specific stretching. They are preferred because they have fewer adverse effects.[7] However, if non-opioid therapies do not provide adequate relief, short-acting opioids (codeine, hydrocodone, oxycodone, hydromorphone, or oxymorphone) can be used to relieve acute pain.[6] Since respiratory depression is more likely to occur in opioid-naive patients, always start with the lowest possible effective dose. A 3-day supply is sufficient for most episodes of acute pain (e.g., post-trauma or surgery). Do not prescribe more than a 7-day supply since physical dependence can develop after 7 to 10 days of opioid administration. Long-acting opioids (methadone, fentanyl patches, or extended-release opioids such as morphine, oxycodone, and oxymorphone) should not be used for treatment of acute pain.[6,8]

Opioid Treatment for Chronic Pain

Chronic non-cancer pain (CNCP) can have a significant negative impact on social and physical function and quality of life.[9] Nonetheless, opioids should not be the first line of treatment for most patients with CNCP. A trial of opioid therapy should only be considered when CNCP is moderate or severe and has an adverse impact on function and quality of life; when the potential benefits are likely to outweigh potential risks; and if the patient is willing to commit to continued monitoring of the effects of treatment, including a plan to discontinue opioid treatment, if necessary.[6,7]

Consider opioid prescription as a test.[4] An initial opioid treatment for CNCP should consist of a short-term trial to assess the effects of opioid treatment on pain intensity, function, and quality of life. Long-term opioid treatment decisions should be based on the balance between the benefits (e.g., function, quality of life) and adverse side effects (e.g., respiratory depression) experienced during the initial trial.[6,10]

When opioid treatment is started for CNCP, it is critical to inform patients about the risk of adverse events, including health risks (Box 1), physical dependence and withdrawal, opioid addiction (Box 2), and the potential interaction risks of alcohol and medication (e.g., benzodiazepines). Consider using a written opioid treatment agreement to document patient and clinician responsibilities and expectations. Before initiating an opioid-containing treatment program, important aspects of this agreement should be discussed, including:

- Obtaining opioids from one prescriber
- Filling opioid prescriptions at one designated pharmacy
- Conducting random urine testing
- Scheduling regular office visits
- Using pill counts
- Limiting the number of prescriptions.

Develop treatment plans jointly with patients. This consent process will assist them in making appropriate medical decisions that are consistent with their preferences and values.[6,10]

continued on page 4 >

Box 1

Risks Associated with Prescription Opioids[6,8]

Psychiatric Risks

- Apathy
- Dysphoria
- Psychomotor agitation
- Psychomotor retardation
- Impaired judgment

Physical Risks

- Respiratory depression—sleep apnea
- Drowsiness
- Increased pain sensitivity (hyperalgesia, withdrawal mediated pain)
- Sexual dysfunction and other endocrine effects
- Constipation
- Nausea/vomiting
- Chronic dry mouth
- Dry skin/itching/pruritus
- Coma
- Muscle twitching

Box 2

Assessing for Opioid Dependence

Determine whether in the past 12 months your patient has

- ☐ Shown tolerance (need to take increased doses to get the same effect)
- ☐ Shown signs of withdrawal/physical dependence (agitation, insomnia, diarrhea, sweating, rapid heartbeat, and runny nose)
- ☐ Taken in larger amounts or over longer periods
- ☐ Not been able to cut down or control (repeated failed attempts)
- ☐ Spent a great deal of time to obtain substance
- ☐ Given up or reduced important activities
- ☐ Kept using opioid despite harm (recurrent physical or psychological problems)

If **3 or more boxes are checked**, your patient has **opioid dependence**.

Adapted from the American Psychiatric Association. DSM IV-TR, 2000

Screen for Patients At Risk

Opioid misuse or dependence is preventable. It is important to screen all patients for the risk of opioid misuse and adverse events before starting long-term opioid therapy for CNCP. Risk factors for opioid misuse include a history of substance abuse, mental disorder, younger age (<45), history of legal problems, use of tobacco, and childhood sexual abuse.[8,11] Among these risk factors, a personal or family history of substance abuse appears to be the strongest predictor of drug abuse, misuse, or other aberrant drug-related behaviors.[10] However, history alone is usually insufficient to predict risk accurately, and should be combined with other tools or information from significant others and previous health care providers.[4]

Screening tools have been developed to help prescribers determine which patients are likely to require more intense monitoring while taking long-term opioids for chronic pain (see Resources).[10] Tools with good scientific validation include the Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R),[12] the Opioid Risk Tool (Figure 3), and the Diagnosis, Intractability, Risk, Efficacy (DIRE) instrument.[13] Screen patients for harmful or hazardous alcohol use, and provide brief intervention and referral to treatment if necessary before initiating opioid treatment.[6]

Screening will help identify patients with a higher level of risk for opioid misuse and predict potential future problems with opioid pain management. For patients with multiple serious risk factors (e.g., history of substance abuse or psychiatric comorbidity), it may be preferable to avoid opioids or to defer opioid prescribing until the risk factor or comorbid condition has been adequately addressed.[4,10] Because screening tools are not completely accurate, screening results should not be used as a basis to deny care to patients at high risk, but rather to indicate a need for extreme caution when deciding to prescribe long-term opioids.[8]

Dosing and Titration

Prescribers can mitigate the risk of opioid overdose in patients by careful dose adjustments, as higher doses increase the risk of opioid overdose. When initiating a new opioid, the dosage should be titrated to an effective level of analgesia that minimizes side effects.[8,14] In addition, dosing and titration of opioids for CNCP should be tailored to the patient's age, health status, previous response to opioid therapy, response to treatment, potential or observed adverse events, and/or severity of pain. Short-acting opioids can be safer for initial therapy since they have a shorter half-life with a lower risk of inadvertent overdose.[7,10] For opioid-naive patients and patients with a high risk of opioid misuse, opioids should be started at the lowest possible effective dose and titrated one drug at a time.[6] During titration, follow-up face-to-face visits should occur at least every 2-4 weeks until dosing requirements have stabilized.[10]

In general, all conversions between opioids are estimates based on equianalgesic dosing (ED). When patients take more than one opioid, the cumulative dose is determined by adding the morphine-equivalent doses (MED) of the different opioids (Box 3). An opioid dose calculator that assists in calculating MEDs is available at www.agencymeddirectors.wa.gov/Files/DosingCalc.xls. Of note, this calculator should not be used for converting a patient from one opioid to another.[6] When changing to a different opioid, it is best to start with two-thirds of the calculated equianalgesic dosage to prevent accidental overdose.[8] Conversion to methadone requires additional caution due to its high potency and long and variable half-life.[6]

Use the lowest possible effective dose of opioids as the risk-benefit ratio is less favorable at higher doses.[5] Although progressively higher doses may improve pain and function in some patients, repeated dose escalations can also be a marker for misuse or diversion.[10]

Since risks substantially increase at doses at or above 100 mg MED, carefully reassess the patient's pain status and treatment plan, and provide more frequent and intense monitoring when dosing reaches 100 mg MED per day.[6] Limit the total daily dose to 120 mg oral MED unless the patient

Box 3

Calculating Cumulative Morphine-Equivalent Doses

Approximate equivalent doses for 30 mg morphine

Hydrocodone: 30 mg **or** Oxycodone: 20 mg

If a patient takes 6 tablets of hydrocodone 5 mg and 2 tablets of oxycodone 20 mg extended-release per day, the cumulative dose is calculated as:

Hydrocodone 5 mg x 6 tablets/day = 30 mg hydrocodone/day = 30 mg MED/day
Oxycodone 20 mg x 2 tablets/day = 40 mg oxycodone/day = 60 mg MED/day

Cumulative dose = 30 mg MED/day + 60 mg MED/day= 90 mg MED/day

Source: The New York City Department of Health and Mental Hygiene, City Health Information: Preventing misuse of prescription opioid drugs, December 2011

Figure 3. Opioid Risk Tool

		Mark each box that applies	Item score if female	Item score if male
1. Family history of substance abuse	• Alcohol	☐	1	3
	• Illegal drugs	☐	2	3
	• Prescription drugs	☐	4	4
2. Personal history of substance abuse	• Alcohol	☐	3	3
	• Illegal drugs	☐	4	4
	• Prescription drugs	☐	5	5
3. Age (mark box if 16-45)		☐	1	1
4. History of preadolescent sexual abuse		☐	3	0
5. Psychological disease	• Attention-deficit/ hyperactivity disorder, obsessive-compulsive disorder, bipolar disorder, schizophrenia	☐	2	2
	• Depression	☐	1	1

Total Score ☐ **Risk Category** ☐

Low Risk: 0 to 3 Moderate Risk: 4 to 7 High Risk: 8 and above

Reproduced with permission from Lynn R. Webster, MD, FACPM, FASAM, LifeSource Foundation (www.yourlifesource.org).
Source: Webster LR, Webster R. Predicting aberrant behaviors in opioid-treated patients: Preliminary validation of the opioid risk tool. *Pain Med*. 2005;6(6):432

demonstrates improvement in function and pain or has obtained a consultation from a practitioner qualified in chronic pain management.[15]

Monitoring

Regular face-to-face patient contact is critical when prescribing opioids. This allows for close observation of the patient and provides an opportunity to ask about adverse side effects.[8] It is especially important to see patients more often when initiating and titrating opioids, including opioid rotation.[4] Basic monitoring efforts involve assessing and documenting pain severity and functional ability, noting the presence of adverse affects, obtaining pharmacy records on a routine basis or sending regular inquiries to the California PDMP, keeping track of time elapsed between clinic visits, counting medication units prescribed, and conducting random urine testing.[10] More frequent patient contact can help prevent unintentional opioid overdose through monitoring for unexpected effects (e.g., over-sedation, impaired judgment, initial respiratory distress), dependence, or potential problem behaviors (Box 2).[8]

Communicating with Patients

It is vital to communicate clearly with patients about the following: the appropriate use of opioid medication; possible adverse effects; the potential interactive risks of alcohol and medication (e.g., benzodiazepines); the risks of developing tolerance, physical dependence and withdrawal symptoms; and addiction.[6] Inform patients with CNCP to not expect complete relief from pain. Without careful guidance, patients may seek excessive dosing of opioids and/or

Resources

Assessment and Monitoring Tools[6]

- Roland Morris Disability Questionnaire
  www.chirogeek.com/001_Roland-Morris-Questionnaire.htm
- Pain, Enjoyment and General Activity (PEG)
  www.ncbi.nlm.nih.gov/pmc/articles/PMC2686775
- Graded Chronic Pain Scale (Washington State)
  www.agencymeddirectors.wa.gov/Files/OpioidGdline.pdf
- Brief Pain Inventory
  www.medicine.iupui.edu/RHEU/Physicians/bpisf.pdf
- Physical Functional Ability Questionnaire
  www.cdc.gov/nchs/data/nhanes/nhanes_09_10/pfq_f.pdf
- Bieri Pain Scale
  www.healthcare.uiowa.edu/igec/tools/pain/faces.pdf
- The Current Opioid Misuse Measure
  http://www.painedu.org/soapp.asp
- AUDIT Alcohol Consumption Questions
  www.ewashtenaw.org/government/departments/wcho/ch_auditc.pdf
- CRAFFT Adolescent Substance Abuse Screening Tool
  www.childrenshospital.org/views/february09/images/CRAFFT.pdf
- Patient Health Questionnaire-2 for Depression Assessment
  – www.cqaimh.org/pdf/tool_phq2.pdf
  – http://depressionscreening.org

Patient Education

- American Chronic Pain Association
  www.theacpa.org/
- Pain Action
  www.painaction.com
- The Addiction Technology Transfer Center Network
  www.nattc.org/topics/RxAbuse/docs/safemeds.pdf
- Sample Pain Treatment Agreements
  – www.lni.wa.gov/ClaimsIns/Files/OMD/LIOpioidTreatmentAgreement0708.pdf
  – www.painmed.org/Workarea/DownloadAsset.aspx?id=3225
  – www.dopl.utah.gov/licensing/forms/OpioidGuidlines_summary.pdf

Other Resources

- Emergency Department Care Coordination. Provides guidelines for patients with chronic pain who recurrently use the emergency department, www.consistentcare.com
- Office of National Drug Control Policy, www.whitehousedrugpolicy.gov/drugfact/prescr_drg_abuse.html
- U.S. Department of Justice Drug Enforcement Agency. Questions and Answers: State Prescription Drug Monitoring Programs, www.deadiversion.usdoj.gov/faq/rx_monitor.htm
- U.S. Food and Drug Administration. Disposal by Flushing of Certain Unused Medications—What You Should Know, www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm
- Physicians for Responsible Opioid Prescribing, www.responsibleopioidprescribing.org
- State of California Department of Justice, PDMP Registration, https://pmp.doj.ca.gov/pmpreg/RegistrationType_input.action
- LA County Department of Public Health, Substance Abuse Prevention and Control, www.publichealth.lacounty.gov/sapc/

become disappointed.[7] Explain dosing and titration of opioids for CNCP, and the importance of taking their opioids in the manner they were prescribed.[4] Communicate with patients about the importance of obtaining opioids from one prescriber, filling opioid prescriptions at one designated pharmacy, conducting random urine testing, and attendingregular office visits. Patients should also be informed that they must do the following: not share their prescription opioids with anyone, keep the opioids in a safe and locked cabinet, and properly dispose of unused opioids.[6] (See *Rx for Prevention*, June-July 2012, "Guidelines for Drug Disposal.")

Summary

Opioids can play an important role in the management of acute and chronic pain for select patients. However, their use must be balanced against significant and potential harms and the awareness of the growing misuse of opioids.[9] While opioids have been shown to reduce certain types of pain, overdose deaths and opioid misuse have also increased with increasing doses of prescription opioids.

Physicians and dentists can play a critical role in reducing risks associated with prescription opioids (e.g., misuse, overdose, diversion, dependence) by paying special attention to safe opioid prescribing principles, including initiating opioid therapy, screening, dosing, monitoring, and communicating with patients.

The principles for safely prescribing opioids for chronic non-cancer pain[16] are as follows:

- Encourage patients to have a single prescriber.
- Encourage patients to use a single pharmacy.
- Sign an opioid agreement with patients.
- Screen all patients for the risk of opioid misuse and adverse events before starting long-term opioid therapy for CNCP.
- Use the lowest possible effective dose.
- Be cautious when using opioids with conditions that may potentiate opioid adverse effects.
- Do not combine opioids with sedative-hypnotics, benzodiazepines or barbiturates unless there is a specific medical and/or psychiatric indication for the combination and increased monitoring is initiated.
- Routinely assess function and pain status.
- Monitor patient for adverse effects and medication misuse.
- Conduct random urine drug testing to objectively assure compliance.
- Communicate clearly with patients about risks, benefits, and goals associated with opioid therapy.
- Inform the patient on how to properly dispose of unused opioids. ℞

Tina Kim, PhD, is a health science specialist, and **Ben Lee**, PhD, is the director, Epidemiology and Science Division, Substance Abuse Prevention and Control. **John Viernes**, Jr., MEd, is the Director of Substance Abuse Prevention and Control, Los Angeles County Department of Public Health.

The authors would like to thank Mike Small, program manager CURES/PDMP, California Department of Justice, and Farimah Fiali, MSQA, for their data support, and Maripza Perez for her literature search.

REFERENCES

1. Manchikanti L, Fellows B, Ailinani H, and Pampati V (2010). Therapeutic use and abuse, and nonmendical use of opioids: A ten-year perspective. *Pain Physician*, 13:401-435.

2. Cautious, evidence-based opioid prescribing. Physicians for responsible opioid prescribing, (http://www.supportprop.org/index_9_2167612031.pdf).

3. Centers for Disease Control and Prevention (February, 2011). Public Health Grand Round Presentation (PDF document) (http://www.cdc.gov/about/grand-rounds/archives/2011/pdfs/PHGRRx17Feb2011.pdf).

4. Alford DP, Kirsh, KL, Whitcomb, L, et al (2009). Prescription drug abuse: an introduction (http://www.drugabuse.gov/sites/default/files/prescription-drug-abuse-alt.pdf).

5. Trescot, AM, Boswell, MV, Atluri, SL (2006). Opioid Guidelines in the management of chronic non-cancer pain. *Pain Physician*, 9:1-40.

6. The New York City Department of Health and Mental Hygiene, City Health Information: Preventing misuse of prescription opioid drugs, December, 2011 (http://www.nyc.gov/html/doh/downloads/pdf/chi/chi30-4.pdf).

7. Utah Department of Health. Utah Clinical Guidelines on Prescribing Opioids for Treatment of Pain. 2009. (http://health.utah.gov/prescription/pdf/guidelines/final.04.09opioidGuidlines.pdf).

8. Morgan, L and Weaver, MF (2010). Preventing prescription opioid overdose. *Journal of Clinical Outcomes Management*, 17: 511-518.

9. Furlan, AD and Weppler, C (2010). Opioids for chronic noncancer pain: a new Canadian practice guideline. *Canadian Medical Association Journal*, 182 (9); 923-930.

10. Chou R, Fanciullo GJ, Fine PG, et al (2009). For the American Pain Society–American Academy of Pain Medicine Opioids Guidelines Panel. Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. *J Pain*, 10(2):113-130.

11. Miller, SC and Frankowski, D (August, 2012). Prescription opioid use disorder: A complex clinical challenge. *Current Psychiatry*, 11 (8): 14-22.

12. Butler SF, Fernandez K, Benoit C, et al (2008). Validation of the Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-R). *J Pain*, 9:360–72.

13. Belgrade MJ, Schamber CD and Lindgren BR (2006). The DIRE score: predicting outcomes of opioid prescribing for chronic pain. *J Pain*, 7:671–81.

14. Bohnert AS, Valenstein M, Blair MJ, et al (2011). Association between opioid prescribing patterns and opioid overdose related deaths. *JAMA*, 305(13):1315-1321.

15. Edles A. (2012). Opioid disposal: dos and don'ts. Practical Pain Management, 12 (4): 17-18. (http://www.practicalpainmanagement.com/opioid-disposal-dos-don-ts?page=0,0).

16. Washington State Agency Medical Directors' Group. Interagency guideline on opioid dosing for chronic non-cancer pain: an educational aid to improve care and safety with opioid therapy. 2010 Update. (www.agencymeddirectors.wa.gov).

HBV Infection Control During Foot and Nail Care Procedures

Moon Kim, MD, MPH

Clara Tyson, RN, MSN

Elizabeth Bancroft, MD, SM

During an investigation of a hepatitis B cluster in 2010 by LA County's Acute Communicable Disease Control Program, it was discovered that 5 patients acquired acute hepatitis B virus (HBV) infection due to poor infection control during routine outpatient foot care.[1] During the investigation of this outbreak and others, program staff observed infection control breaches that led to the transmission of HBV.

Routine outpatient foot care, such as nail clipping, callus shaving, and wound debridement, is often performed by dermatologists and family practitioners, as well as nurse practitioners and podiatrists. Although these foot care procedures may be routine, it is important that health care providers adhere strictly to aseptic techniques. Disregarding them may result in HBV transmission and harm to patients. (Note: Nail salons, which are not the subject of this article, follow regulations set by the California Department of Consumer Affairs, Board of Barbering and Cosmetology.)

Foot and nail care instruments such as nail clippers, scalpels, files, and burrs should be sterilized before being reused

HBV Characteristics

The hepatitis B virus is resistant to drying, simple detergents, and alcohol. Further, it can survive at room temperatures for 7 days.[2] HBV at concentrations of 100-1000 virions/mL can be present on environmental surfaces in the absence of any visible blood and still cause transmission.[3] Because infected patients can have high concentrations of HBV in blood or body fluids and HBV is stable at ambient temperatures, environmental surfaces and instruments may become contaminated without visible soiling. In addition to direct percutaneous infection by contaminated instruments, transmission of HBV can also occur through unapparent modes, such as contact of contaminated environmental surfaces or equipment that have been inadequately disinfected to non-intact skin (i.e., skin that is chapped or abraded).[4-6]

Infection Control Breaches

During the outbreak investigations, staff with the Acute Communicable Disease Control Program observed the following practices, which could have resulted in contamination of equipment and surfaces with infected blood:

- **No division of clean and dirty areas for separating equipment.** Non-disposable, used equipment (such as clippers) that were visibly contaminated with blood were placed next to clean equipment.
- **Lack of environmental disinfection between patients.** After nail trimming, callus shaving, or other treatments were performed, the visibly soiled areas (such as counters, chairs, floors) were not cleaned and disinfected between patients.
- **Poor reprocessing and disinfection of contaminated nail and foot care instruments.** A thorough cleaning with detergent and brushes was not performed prior to soaking the instruments in the disinfectant. Each instrument was not rinsed, dried, and put in a clean container before reusing on patients. Sterilization was not always performed before the instruments were used on subsequent patients.

These conditions may be exacerbated when health care providers perform these procedures outside of their usual office setting and do not have their usual workspace or equipment to comply with standard infection control practices.

What Physicians Can Do

Although the Centers for Disease Control and Prevention's guidelines for preventing transmission of infectious agents in the health care setting[7] do not specifically include foot and nail care procedures, the guidelines do recommend that all reusable equipment capable of penetrating sterile tissue be considered "critical" equipment and be cleaned, disinfected, and sterilized before reuse. Anything that can or does draw blood is, by definition, critical equipment.

Because blood is often drawn during routine nail clipping and callus debridement, foot and nail care instruments capable of penetrating the skin (such as nail clippers, scalpels, files, and burrs) should be considered critical instruments. As such, the equipment should be sterilized before being reused on another patient because HBV transmission can occur even in the absence of visible blood contamination.

At a minimum, all necessary steps at cleaning and appropriate high-level disinfection according to manufacturer's instructions should be performed; however, sterilization is the gold standard to ensure that these instruments do not transmit HBV.

Other important infection control practices:

- Keep clean equipment separate from used equipment to reduce the possibility of microcontamination.
- After every procedure, clean the patient care environment with a disinfectant active against hepatitis B. It is crucial to read the label of the disinfectant and make sure it specifically states that the disinfectant is effective against hepatitis B. Also be sure to follow the instructions as to how long the disinfectant must remain on the equipment, which may vary from manufacturer to manufacturer. Merely wiping down the equipment with the disinfectant is insufficient.

Following these basic infection control recommendations should help reduce the risk of HBV outbreaks and transmission to patients during routine foot and nail care procedures in physician offices. Rx

Moon Kim, MD, MPH, is a medical epidemiologist; **Clara Tyson**, RN, MSN, is a program specialist public health nurse; and **Elizabeth Bancroft** MD, SM, is a medical epidemiologist, Acute Communicable Disease Control Program, Los Angeles County Department of Public Health.

REFERENCES

1. Wise ME, Marquez P, Sharapov U, et al. Outbreak of acute hepatitis B virus infections associated with podiatric care at a psychiatric long-term care facility. *Am J Infect Control*. Feb 2012;40(1):16-21.

2. Favero MS, Bolyard EA. Microbiologic considerations: disinfection and sterilization strategies and the potential for airborne transmission of bloodborne pathogens. *Surg Clin North Am*. 1995 Dec;75(6):1071-89.

3. Advisory Committee on Immunization Practices. A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States. *MMWR* Recomm Rep. 2005 Dec 23;54(RR-16):1-31.

4. U.S. Public Health Service. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. *MMWR* Recomm Rep. 2001 Jun 29;50(RR11);1-42.

5. Chiarello LA. Prevention of patient-to-patient transmission of bloodborne viruses. *Sem Infect Control*. 2001;1:44-8.

6. Williams IT, Perz JF, Bell BP. Viral hepatitis transmission in ambulatory health care settings. *Clin Infect Dis*. 2004 Jun 1;38(11):1592-8.

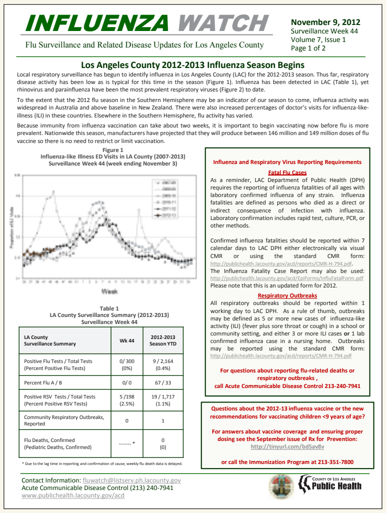
7. Healthcare Infection Control Practices Advisory Committee, CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008. www.cdc.gov/hicpac/pdf/guidelines/Disinfection_Nov_2008.pdf.

Flu Season: *Influenza Watch* Released

In November, the Department of Public Health released its first issue of *Influenza Watch* for the 2012-2013 season.

This biweekly e-newsletter, which is published during the influenza surveillance season (traditionally ending in mid-May), offers the latest flu surveillance and related disease updates for Los Angeles County. It provides statistics of influenza activity in Los Angeles, including the number of positive flu tests and the percent of emergency department visits for influenza-like illness. It also offers more global information, reporting on influenza in California and the nation.

To read the latest issue, log on to www.publichealth.lacounty.gov/acd/FluSurveillance.htm. If you would like to receive this free newsletter via e-mail, sign up on the ListServ at www.publichealth.lacounty.gov/listserv (select "Public Health Topics" and then "FLUWATCH").



INFLUENZA WATCH

Flu Surveillance and Related Disease Updates for Los Angeles County

November 9, 2012
Surveillance Week 44
Volume 7, Issue 1
Page 1 of 2

Los Angeles County 2012-2013 Influenza Season Begins

Local respiratory surveillance has begun to identify influenza in Los Angeles County (LAC) for the 2012-2013 season. Thus far, respiratory disease activity has been low as is typical for this time in the season (Figure 1). Influenza has been detected in LAC (Table 1), yet rhinovirus and parainfluenza have been the most prevalent respiratory viruses (Figure 2) to date.

To the extent that the 2012 flu season in the Southern Hemisphere may be an indicator of our season to come, influenza activity was widespread in Australia and above baseline in New Zealand. There were also increased percentages of doctor's visits for influenza-like-illness (ILI) in these countries. Elsewhere in the Southern Hemisphere, flu activity has varied.

Because immunity from influenza vaccination can take about two weeks, it is important to begin vaccinating now before flu is more prevalent. Nationwide this season, manufacturers have projected that they will produce between 146 million and 149 million doses of flu vaccine so there is no need to restrict or limit vaccination.

Figure 1
Influenza-like Illness ED Visits in LA County (2007-2013)
Surveillance Week 44 (week ending November 3)

Week

Table 1
LA County Surveillance Summary (2012-2013)
Surveillance Week 44

LA County Surveillance Summary	Wk 44	2012-2013 Season YTD
Positive Flu Tests / Total Tests (Percent Positive Flu Tests)	0/ 300 (0%)	9 / 2,164 (0.4%)
Percent Flu A / B	0/ 0	67 / 33
Positive RSV Tests / Total Tests (Percent Positive RSV Tests)	5 /198 (2.5%)	19 / 1,717 (1.1%)
Community Respiratory Outbreaks, Reported	0	1
Flu Deaths, Confirmed (Pediatric Deaths, Confirmed)	------- *	0 (0)

* Due to the lag time in reporting and confirmation of cause, weekly flu death data is delayed.

Influenza and Respiratory Virus Reporting Requirements

Fatal Flu Cases

As a reminder, LAC Department of Public Health (DPH) requires the reporting of influenza fatalities of all ages with laboratory confirmed influenza of any strain. Influenza fatalities are defined as persons who died as a direct or indirect consequence of infection with influenza. Laboratory confirmation includes rapid test, culture, PCR, or other methods.

Confirmed influenza fatalities should be reported within 7 calendar days to LAC DPH either electronically via visual CMR or using the standard CMR form: http://publichealth.lacounty.gov/acd/reports/CMR-H-794.pdf.
The Influenza Fatality Case Report may also be used: http://publichealth.lacounty.gov/acd/EpiForms/InfluFatalForm.pdf
Please note that this is an updated form for 2012.

Respiratory Outbreaks

All respiratory outbreaks should be reported within 1 working day to LAC DPH. As a rule of thumb, outbreaks may be defined as 5 or more new cases of influenza-like activity (ILI) (fever plus sore throat or cough) in a school or community setting, and either 3 or more ILI cases **or** 1 lab confirmed influenza case in a nursing home. Outbreaks may be reported using the standard CMR form: http://publichealth.lacounty.gov/acd/reports/CMR-H-794.pdf

For questions about reporting flu-related deaths or respiratory outbreaks, call Acute Communicable Disease Control 213-240-7941

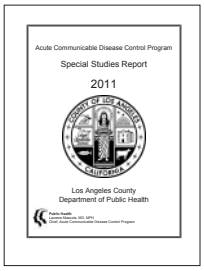
Questions about the 2012-13 influenza vaccine or the new recommendations for vaccinating children <9 years of age?

For answers about vaccine coverage and ensuring proper dosing see the September issue of Rx for Prevention: http://tinyurl.com/bd5av8v

or call the Immunization Program at 213-351-7800

Contact Information: fluwatch@listserv.ph.lacounty.gov
Acute Communicable Disease Control (213) 240-7941
www.publichealth.lacounty.gov/acd

County of Los Angeles Public Health

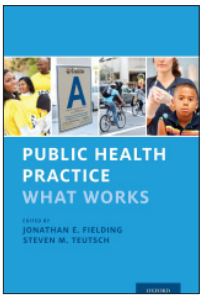


Report Examines Communicable Disease Surveillance and Trends

The LA County Department of Public Health has released the Acute Communicable Disease Control Program's "Special Studies Report, 2011." This 93-page publication provides the latest data on disease surveillance, trends, and summaries; infectious disease incidents/clusters/outbreaks; and public health policies and practice in LA County.

Topics include "Botulism Case Report Summary, 2011," "A Case of *Vibrio Cincinnatiensis* Septicemia," "The Scombroid, It Burns! Scombroid Fish Poisoning Outbreak," "Evaluating the LA County Public Health Urgent Disease Reporting System," "Response to the 9/11 Tenth-Year Anniversary and Ricin Bioterrorism Threat Reports," and "Determining Influenza and Other Respiratory Virus Activity in Outpatient Health Care Settings: The Influenza Incidence Surveillance Project in LA County."

The read the full report, go to www.publichealth.lacounty.gov/acd/Report.htm.



LA County Department of Public Health Releases New Book

Los Angeles County, the most populous county in the United States, is home to nearly 10 million people and 88 municipalities. It is larger than 41 of the 50 states. Comprising urban centers, extensive suburbs, and low-income, rural, and agricultural communities, it poses complex public health challenges that are diverse in scope and unmatched in scale.

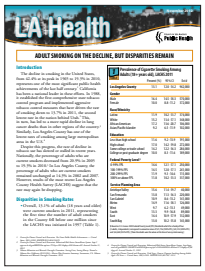
In "Public Health Practice: What Works," the leaders of LA County's Department of Public Health compile the lessons and best practices of working in a complex and evolving public health setting. Through stories of practical successes (and challenges), this book offers a guide to effective health policy and program interventions for individuals, teams, practitioners, and departments on any scale.

All facets of public health practice are illustrated through case-specific chapters, including coverage of core capacities, health promotion and protection, emergency response, and service delivery. Techniques and themes addressed include

- Cross-cutting interventions and intersectoral actions to improve population health
- Environmental problems and influences on health outcomes
- Policy as a public health tool
- Targeted and tailored programs and services, policies, and partnerships.

The 400-page hardcover book is composed of 37 chapters and covers dozens of topics, such as the history of public health in Los Angeles, measuring population health, promoting active living, infection control and outreach to hospitals, food product recalls, employees as first responders, preconception health, and reducing cases of HIV.

The book was coedited by Jonathan E. Fielding, MD, MPH, Director of Public Health and Health Officer, and Steven M. Teutsch, MD, MPH, Chief Science Officer, LA County Department of Public Health. It is available from Oxford University Press (www.oup.com/us) and Amazon (www.amazon.com) and will be released as an e-book at a later date.



Report Shows Smoking Rates Down in LA County

The number of adult smokers in LA County fell below one million for the first time since the Los Angeles County Health Survey was initiated in 1997, according to a new report by the LA County Department of Public Health. This 4-page report, titled, "LA Health—Adult Smoking on the Decline, But Disparities Remain," was released in November in honor of the 37th Annual Great American Smokeout. In 2011, approximately 942,000 adults in LA County, or 13.1 percent, were current smokers, down from 14.3 percent in 2002 and 2007.

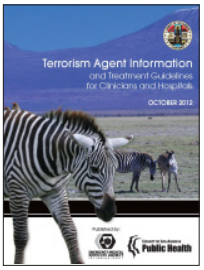
Additional key findings from the report include…

- The smoking rate was higher among men (16.4 percent) than women (10 percent).
- The smoking rate was highest among African American men and women (19.5 percent and 15.6 percent).
- The Antelope Valley Service Planning Area (SPA 1) had the highest smoking rate at 15.6 percent; the lowest smoking rate was in the West Service Planning Area (SPA 5) at 9.7 percent.
- The smoking rate was high among methamphetamine, cocaine, or ecstasy users (59.8 percent); heavy drinkers (38.4 percent); those less than 300 percent below the federal poverty level and homeless in the past five years (31.2 percent); and those suffering from anxiety (28.3 percent) or depression (22.1 percent).
- The smoking rate was low among 18- to 24-year-olds (9.7 percent), but peaked among 25- to 29-year-olds (20.3 percent).

Despite this promising downward trend in the number of smokers, still 1 out of every 7 deaths (nearly 8,600 deaths annually) and $4.3 billion in medical care and lost productivity costs are directly linked to cigarette smoking in LA County each year.

The stark disparities detailed in the report highlight the need for focused prevention efforts and tobacco cessation services, particularly for the African American population; those living in or near poverty; the gay, lesbian, bisexual, and transgendered populations; those with mental health conditions; and those with substance use disorders.

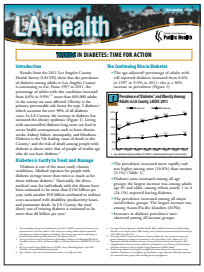
The full report may be viewed at www.publichealth.lacounty.gov/ha. Information on quit-smoking resources and smoke-free policy recommendations is available at www.publichealth.lacounty.gov/tob/index.htm.



Publication Offers Terrorism Agent Info and Treatment Guidelines

The "Terrorism Agent Information and Treatment Guidelines for Clinicians and Hospitals" (also known as the "Zebra Book") has been revised for 2012 by the LA County Department of Public Health and the LA County Department of Health Services' Emergency Medical Services Agency. The 228-page publication consists of three sections that provide information and treatment guidelines for bioterrorism, chemical terrorism, and nuclear/radiological terrorism. Updates to chapters on anthrax, botulism, plague, smallpox, ricin, glanders and melioidosis, and chemical terrorism are included, as well as a Public Health Laboratory protocol for specimen collection in the event of a chemical exposure. The book also contains two 11" x 17" fold-out posters on Bioterrorism Syndromes and Evaluating Patients for Smallpox.

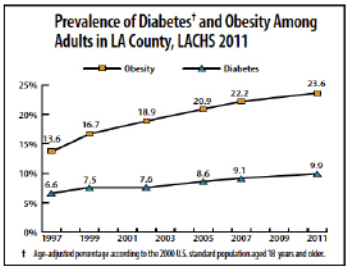
To order a hard copy of the book, visit www.publichealth.lacounty.gov/acd/HCPmaterials.htm; for an online version, go to www.publichealth.lacounty.gov/acd/Bioterrorism/TerrorismAgentInformation.pdf.



Diabetes on the Rise as LA County Obesity Rates Grow

Diabetes continues to rise in Los Angeles County, according to a new report titled "LA Health—Trends in Diabetes: Time for Action." This publication, released by the Los Angeles County Department of Public Health in collaboration with the American Diabetes Association, highlights the prevalence of diabetes from 1997 to 2011. In that time frame, the percentage of adults in the county with diabetes increased from 6.6 percent to 9.9 percent, with more than 685,000 adults now affected by the disease.

Obesity is the primary preventable risk factor for type 2 diabetes, which accounts for more than 90% of all diabetes cases. In LA County, the increase in diabetes has mirrored the obesity epidemic. Living with uncontrolled diabetes long-term can lead to severe health consequences such as heart disease, stroke, kidney failure, neuropathy, and blindness.



In Los Angeles County, diabetes is the fifth-leading cause of death. The risk of death among people with diabetes nearly doubles compared to people of similar age who do not have diabetes. Diabetes is also one of the most costly chronic conditions. Medical expenses for people with diabetes average more than twice as much as for those without diabetes, and the disease is estimated to cost more than $6 billion a year in medical expenses in LA County.

Additional key findings from the report include:

- Diabetes prevalence increased more rapidly and was higher among men (10.8%) than women (9.1%) in 2011.
- Diabetes rates increased among all age groups; the largest increase was among adults aged 65 and older, among whom nearly 1 in 4 (24.1%) reported having diabetes, in 2011.
- The prevalence increased among all major racial/ethnic groups. Asian/Pacific Islanders experienced the largest percentage increase (68%) from 1997 to 2011, with prevalence increasing from 5.9% to 9.9%; however, in 2011, diabetes prevalence was highest among Latinos (13.5%) and African Americans (12.4%). Latinos and African Americans also have the highest prevalence of obesity.
- Adults living in households below the federal poverty level (FPL) were nearly twice as likely to have diabetes compared to households at or above 200% of the FPL. This disparity is likely due to higher rates of risk factors for diabetes among those living in poverty, such as obesity and physical inactivity.

To read the full copy of the report, visit www.publichealth.lacounty.gov/ha.

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 Trainings

Immunization Training Resources for Clinicians

The Los Angeles County Department of Public Health Immunization Program, the California Department of Public Health, the CDC and other entities offer a variety of web-based and in-person immunization training programs for clinicians and staff. Some programs offer CMEs. Visit **www.publichealth.lacounty.gov/ip/trainconf.htm**.

Immunization Skills Training for Medical Assistants

The Immunization Skills Institute is a 4-hour course that trains medical assistants on safe, effective, and caring immunization skills. Visit **www.publichealth.lacounty.gov/ip** or call (213) 351-7800.

County of Los Angeles Public Health

Office of the Medical Director
241 N. Figueroa St., Suite 275
Los Angeles, CA 90012

PRESORTED
STANDARD
U.S. POSTAGE
PAID
PERMIT NO. 312
ARCADIA, CA

Comments or Suggestions? If so, or if you would like to suggest a topic for a future issue, e-mail Dr. Jeffrey Gunzenhauser, co-editor, at jgunzenhauser@ph.lacounty.gov.

Index of Disease Reporting Forms

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

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/STD_CMR.pdf (form)

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

Tuberculosis Suspects & Cases Confidential Morbidity Report
Tuberculosis Control **(213) 745-0800**
www.publichealth.lacounty.gov/tb/forms/cmr.pdf

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

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