x for Prevention

Promoting health through prevention in Los Angeles County

This Issue

- **Continuing Medical Education:** Successful Treatment of **Tobacco Addiction**
- Link to Online CME Test
- **Vital Signs**
 - Report focuses on communicable disease morbidity in LA County
 - STD home kit offers popular testing option
- (1) Controlling the Spread of **Vaccine-Preventable Diseases**
- 11 Subacute Health Care Facilities: **LA County Outbreaks** and Prevention
- 17 Index of Disease **Reporting Forms**

CME ACTIVITY

Successful Treatment of Tobacco Addiction

Marsha Epstein, MD, MPH

Donna Sze, MPH

Linda Aragon, MPH

moking is the leading preventable cause of death in the United States. Up to one-half of long-term smokers are expected to die of tobaccorelated diseases. These smokers lose an average of 14 years of life. In Los Angeles County, smoking kills almost 9,000 people a year and impacts diseases in every medical specialty.

Although the rate of smoking in LA County has decreased dramatically, more than one million residents continue to smoke. Highest rates are among those with mental health or substance abuse problems or who are African-American, on Medi-Cal, without health insurance, living in poverty, or are lesbian, gay or bisexual. African-American children in LA County have the highest rates of exposure to tobacco smoke in their homes.

Stopping tobacco use has immediate and long-term benefits. Most smokers want to stop—and every year, more than half of them try. Only 5% or fewer are successful with each attempt because most try without tobacco counseling or medications. Studies have consistently shown that counseling combined with medication dramatically increases the proportion of patients who successfully stop smoking, achieving long-term success

each attempt. In fact, smoking interventions are more cost effective than most other routine preventive

ASK all patients about tobacco use at every visit.

ADVISE all tobacco users to stop. **REFER** all tobacco users to treatment resources:

- Refer patients to the FREE California Smokers' Helpline: 1-800-NO-BUTTS.
- **Prescribe** pharmacotherapy to help patients become tobacco-free.

medical interventions. And smokers offered assistance to stop smoking were more satisfied with their medical care, even if they did not want to stop.

By using the following recommended guidelines, effective tobacco use interventions can take as little as 30 seconds. Your advice to your patients to stop smoking is the most cost-effective use of time to increase the quality and length of their lives.

Effective Intervention

Stopping tobacco addiction is difficult. Fortunately, proven effective interventions can be integrated into a busy practice in primary care and in all specialties. In 30 seconds or less, you can Ask, Advise and Refer. (Note: ICD-9 and CPT coding at www.surgeongeneral.gov/ tobacco/treating tobacco use08.pdf, p. 231-240).

continued on page 2 >





CME ACTIVITY: TOBACCO ADDICTION from page 1

1. *Ask* **patients about tobacco use at every visit.** Also ask about exposure to secondhand smoke in the home. Make tobacco-use screening a regular part of your practice. Have office systems in place (e.g., vital signs stamp or a prompt in an electronic health record) with reminders to systematically document tobacco-use status and make referrals.

| Vital Signs | | |
|--|-----------|-------------------------------|
| BP: | Pulse: | Temp: |
| WT: | HT: | BMI: |
| Tobacco Use Current Referred for counseling | r tobacco | Never Smoke-free home Yes No |

2. *Advise* **all tobacco users to stop.** Smokers say their clinician's repeated advice is an important motivator to stop smoking. Advice must be clear, strong, positive and personalized. For example: "As your physician, and someone who cares about you and your health, I encourage you to stop smoking because that is the most important thing you can do to protect your health."

Inform smokers that appropriate medications or counseling alone can *double* their chances of being able to become free of tobacco, and appropriate medications plus multiple-session counseling can *at least triple* their chances of success with each attempt.

Personalized advice is most effective. Statements similar to the following may create a "teachable moment":

- "Smoking is strongly linked with snoring and sleep problems.
 Your sleep could improve after you stop smoking."
- "Stopping smoking will dramatically improve your *asthma*."
- "Stopping smoking reduces heart attacks, impotence and strokes."
- **3.** *Refer* **patients to resources**, whether they are ready to stop or not.

Hand patients the phone number of the free California Smokers' Helpline (1-800-NO-BUTTS) or local tobacco treatment resources. Let them know that four to seven sessions of tobacco counseling can *double* their chances of staying off tobacco. Long-term success rates can be as high as 20% with either consistent follow-up counseling or pharmacotherapy and rise to 36% when combined. Tobacco counselors, like football coaches, suggest activities to prepare for the game, and strategies during the game, thereby increasing success. *Strongly encourage patients to utilize all sessions of counseling.*

The California Smokers' Helpline offers reading materials, referrals to local resources, and up to six free sessions with a trained telephone counselor. The Helpline provides services in English, Chinese (Mandarin and Cantonese), Korean, Spanish, and Vietnamese, and TDD/TTY for the hard of

| | Immediate & Long-Term Benefits of Stopping Smoking | | | | |
|-------------------|--|--|--|--|--|
| 20 minutes | Heart rate drops | | | | |
| 12 hours | Carbon monoxide level in blood drops to normal | | | | |
| 48 hours | Ability to smell and taste starts to improve | | | | |
| 2-3 weeks | Heart attack rate drops, circulation and lung function improve, walking becomes easier | | | | |
| 6-8 weeks | Immune system restored, post-op complications decrease | | | | |
| 1-9 months | Coughing and shortness of breath decrease | | | | |
| 5-15 years | Risk of stroke is reduced to that of nonsmoker | | | | |
| 10 years | Lung cancer death rate is about half that of a smoker; risk of cancer of the mouth, throat and esophagus decreases | | | | |
| 15 years | Risk of coronary heart disease returns to that of a nonsmoker | | | | |

hearing. They provide specialized services for pregnant women, teens, and tobacco chewers. Tobacco counseling is also available online, in groups and individually (see page 8).

Offer self-help materials that include tips to help patients succeed. Refer to the sample handout on page 8 or visit http://www.californiasmokershelpline.org.

Prescribing Pharmacotherapy

Pharmacotherapy doubles or triples the chances of success with each attempt. It is a key part of a multi-component approach to assisting patients with their tobacco dependence. Therefore, offer and prescribe optimal pharmacotherapy to help all tobacco users. Determine a regimen based upon contraindications/precautions (Table 1), level of addiction (Table 2), issues that complicate treatment (page 5), medication effectiveness (Table 3) and patient preference. Patient involvement in decision-making improves outcomes. Use clinical judgment in providing treatment to pregnant and adolescent smokers (page 5). Medi-Cal, Medicare or private insurance may require tobacco counseling (e.g., the California Smokers' Helpline) before paying for tobacco medications.

continued on page 4 >

Table 1. FDA-Approved Medications for Tobacco Dependence

| Table | ble 1. FDA-Approved Medications for Tobacco Dependence | | | | | | |
|------------------------|--|--|---|--|--|---|---|
| Availability | Zyban [®] Wellbutrin SR [®] Generic SR (Prescription only) | Nicoderm CQ® Nicotrol® Habitrol® Generic (Available OTC & prescription) | Nicorette® Nicorette Mint® (All OTC) | Commit [®] Generic (All OTC) | Nicotrol Inhaler® (Prescription only) | Nicotrol NS® (Prescription only) | Chantix® (Prescription only) |
| Duration | 7-12 weeks; maintenance up to 12 months. Reduces relapse when used 12 months | 4-6 weeks 2-4 weeks 2-4 weeks | Up to 12 weeks Taper 7-12 weeks | Up to 12 weeks | Up to 6 months | 3 to 6 months | 3 to 6 months |
| Dosage | 150 mg every morning for 3 days, then 150 mg twice daily Begin 1-2 weeks before first tobacco-free Brit on the Free Mark of the MRT in petite and elderly, use 150 mg daily for 5-7 days prior to BID dose | See Table 2. For most patients: 21 mg/24 hours Then 14 mg/24 hours Then 7 mg/24 hours Beginning a week before stop date may increase effectiveness | 1-24 cigarettes/day 2 mg gum 25+ cigarettes/day 4 mg gum Chew each piece slowly until peppery taste; park between cheek & gum 30 minutes, 10-12 pieces per day, up to 24/day. | 1st cigarette more than 30 min. after waking: 2 mg PRN 1st cigarette less than 30 min. after awakening: 4 mg PRN Up to 20 lozenges/day | 6-16 cartridges/day PRN Continuous puffing 20 minutes per cartridge, into mouth/throat. Do NOT inhale deeply into lungs, to reduce cough/airway irritation Taper dosage after 3-6 months | Recommend 1-2 doses/hr PRN 5 doses/hr, 40 doses/day maximum One dose equals two sprays, one spray in each nostril (nearly equals nicotine from one cigarette) | Begin 1-2 weeks before stop date Days 1-3: 0.5 mg tablet every morning Days 4-7: 0.5 mg tablet twice daily Days 8 to end of freatment: 1 mg tablet twice daily |
| Disadvantages | Prescription needed. Pregnancy Category C Monitor for rare changes in mood, behavior, psychiatric symptoms or suicidal ideation Contraindications. Check for drug interactions Seizure disorders, stroke Current use of MAO inhibitors, levodopa Anorexia, bulimia Other seizure-threshold-lowering conditions (e.g., alcohol dependence, head trauma) | Continuous delivery not able to dose PRN with cravings Contraindications: Pregnancy Category D. Severe or unstable angina pectoris, serious arrhythmias, for two weeks after acute MI Use clinical judgment in pregnancy/teens | Proper user technique required. Absorption through buccal mucosa. See package insert. Difficult for users with bad teeth, dentures Coffee, tea, soda & fruit juice limit absorption Contraindications: Pregnancy Category D TMJ disease. Also see patch | No eating or drinking before and during use Lozenges take 20-30 minutes to dissolve Coffee, tea, soda & fruit juice limit absorption Contraindications: Pregnancy Category D Also see patch | Prescription needed Needs frequent puffs into mouth/throat, not lungs Does not work in cold (<40 degrees F) Contraindications: Pregnancy Category D Reactive airway disease. Severe or unstable angina pectoris, serious arrhythmias, for two weeks after acute MI | Prescription needed Localized adverse effects limit use Change in sense of smell or taste Contraindications: Pregnancy Category D. Reactive airway disease. Also see patch | Prescription needed. Do not use while nursing Precautions: Pregnancy Category C • Dose adjustment for significant renal impairment • Monitor for rare changes in mood, behavior, psychiatric symptoms or suicidal ideation • Screen for mental health history before treatment |
| Advantages | Easy to use (pill) No concerns for cardiac patients Effective in patients with depression and dysphoria Limits weight gain Can be used with NRT | Steady levels of nicotine May delay weight gain Easy to use, more compliance Unobtrusive No prescription needed—OTC | Can use with patches to control urge in addicted smokers User controls dose No prescription needed—OTC May delay weight gain | Can use with patches to control urge in addicted smokers User controls dose May delay weight gain. OTC Easy to use and conceal | Can be used with patches to control urges in addicted smokers User controls dose Addresses hand-to-mouth habit May delay weight gain | Can use with patches to control urge in addicted smokers Highest effectiveness of NRT Most rapid nicotine delivery; simulates smoking | Easy to use (pill) Blocks nicotine & therefore, the pleasure of smoking No drug interactions Industry-sponsored trials suggest it may be superior to bupropion SR or NRT alone |
| Common Side Effects | Insomnia Dry mouth | Local skin reaction Insomnia | Mouth soreness Jaw ache Dyspepsia Hiccups | Nausea Throat irritation Hiccups Dyspepsia | Local irritation of mouth and throat Mild cough and rhinitis initially | Nasal irritation Dyspepsia Sneezing Red, watery eyes initially | Nausea Insomnia Abnormal dreams Dry mouth |
| Pharmacotherapy | Bupropion SR | Nicotine Patch | Nicotine Gum | Nicotine Lozenge | Nicotine Inhaler (Puffer) | Nicotine Nasal Spray | Varenicline |

Other benefits of stopping smoking include reduced risks for

- Miscarriage, stillbirth, SIDS, cleft lip
- Diabetes complications (e.g., amputations)
- Emphysema and asthma attacks
- Cataracts and macular degeneration
- Osteoporosis and hip fractures
- Surgery/dental work complications
- Bad breath (halitosis), wrinkled skin, hair loss
- Cancer: lung, pharynx, larynx, oral, esophagus, pancreas, stomach, genitourinary
- Erectile dysfunction, reduced fertility

Encourage your patients to consider medications: "Medication doubles or triples your success in becoming free of tobacco. Would you like to discuss which medications are best for you?"

• Nicotine replacement therapy (NRT) as a single method alone doubles success rates (Table 3). Starting a week before stop date may double success with the patch. NRT is FDA-approved for adults 18 and over. NRT is safe for most patients, including those with stable heart disease.

NRT is available in several forms and most are over-thecounter. The nicotine patch is the most convenient form for most smokers, providing steady doses of nicotine. Combining daily use of the nicotine patch with shortacting "rescue" NRTs (gum, lozenge, nasal spray, inhaler) results in the highest long-term success rates. A few patients continue to use NRT, which is FDA-approved for long-term use and *much* safer than tobacco. See Table 2 for initial dosing.

- **Bupropion SR** (marketed as the antidepressant Wellbutrin SR®*, Zyban®* for treatment of smoking addiction and available as generic) doubles success rates with each attempt. Due to its antidepressant effects (dopamine and norepinephrine), it may be the best choice for patients with a history of or current depression. For patients who are *heavily addicted*, *substance abusers* or *schizophrenic*, use bupropion combined with NRT for increased effectiveness. Contraindications include a history of seizures, bipolar disorder (relative contraindication), bulimia or anorexia. The FDA approved bupropion SR for long-term maintenance for tobacco dependence and depression. (*See paragraph below on mood changes*.)
- Varenicline (Chantix®*) triples the success rate. It binds to nicotine receptors to reduce cravings by mild agonist and strong antagonist properties that limit the pleasurable effects of inhaled nicotine. Varenicline combined with an NRT patch may cause increased side effects without increased benefits. Varenicline is being investigated for long-term use and for use with bupropion. (See paragraph below on mood changes.)

Nicotine reduction or abstinence by stopping tobacco use with inadequate nicotine replacement or blocking of nicotinic receptors by varenicline may exacerbate underlying psychiatric disorders; e.g., anxiety, depression, ADHD, PTSD, bipolar disease, schizophrenia or eating disorders. Screen for mental health history prior to treatment. Clinicians, patients and families should monitor for mood changes, clinical worsening, suicidality, and any unusual changes in behavior in all patients, especially those on varenicline or bupropion.

Nortriptyline and clonidine are considered second-line therapy due to significant adverse effects and toxicity and are not approved by the FDA for tobacco addiction treatment. Other drugs, including antidepressants, have not been shown to increase success rates. Neither acupuncture nor hypnosis has been proven effective.

continued on page 6 >

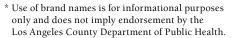




Table 2. Suggested Initial Dosages for Nicotine Replacement Therapy (NRT)

| Patient Characteristics |
|---|
| -10 cigarettes/day; smokes 1 hour after waking |
| 1-24 cigarettes/day; smokes 1 hour fter waking |
| 5+ cigarettes/day; smokes within 30 minutes f waking Or depression, other psychiatric conditions, Icohol or substance use.‡ Or prior failed attempts despite NRT or upropion alone |

[†] MUST give instructions for use of gum and lozenges or refer patient to pharmacist for instructions. Practice using before tobacco stop date. If patient exhibits moderate or severe withdrawal when stopping, increase dose, add rescue NRT and/or add bupropion. See Minnesota Withdrawal Scale at http://www.uvm.edu/~hbpl/?Page=minnesota/default.html

Issues that may complicate treatment

Pregnancy

Intensive counseling is recommended as a first-line intervention. Patients who continue to smoke are usually highly addicted or have other comorbid conditions; screen for alcohol and other drug use, depression and refer for treatment. The California Smokers' Helpline has specialized counseling for pregnant smokers.

Nicotine gum or lozenges or bupropion SR may be used during pregnancy when non-drug treatments have failed. Fetal risk from these drugs should be balanced against the greater risk of maternal smoking. Do not prescribe nicotine nasal spray because of potentially higher peak levels of nicotine.

Adolescence

Screen pediatric and adolescent patients and their parents for tobacco use and strongly urge total abstinence from tobacco. Also encourage patients and parents to maintain a smoke-free home. Offer advice and medications to parents who smoke.

NRT, varenicline and bupropion SR are NOT approved by the FDA for use in people 17 years of age and younger, and are not generally effective in this age group. Antidepressants increased the risk of suicidal thinking and behavior in adolescents and adults under 24 years old in studies of major depressive disorder and other psychiatric disorders.

Weight gain

Provide strategies for monitoring weight gain. Bupropion SR and NRTs can delay weight gain. Consider for longer use for medical conditions impacted by obesity or who gained weight at previous attempt to stop tobacco use.

Psychiatric or substance abuse problems

Smoking prevalence is high (40%-90%); treatment is more complicated and relapse is more common. Treat underlying psychiatric conditions concurrently. Use a depression screening tool, especially for heavy smokers, before and during first month of medications; e.g., QIDS-SR₁₆ (www.ids-qids.org) or PHQ-9 (www.depression-primary care.org).

Consider using bupropion with NRT; success is improved when NRT is combined with bupropion SR. When using NRT, care should be taken not to under-dose. In persons with schizophrenia, consider

prescribing nicotine nasal spray, as its higher peak levels are the closest to inhaled smoke from a cigarette. The effectiveness of two forms of NRT used concurrently is higher than the effectiveness of varenicline.

Monitor mood closely the first few weeks in patients with a history of depression or anxiety since reduced nicotine levels or abstinence may exacerbate psychiatric symptoms.

Heavily addicted

Consider bupropion with NRT, patch plus rescue NRT, or varenicline. Consider bupropion in combination with NRT in patients with depression, substance abuse or a psychiatric condition. Consider multiple 21 mg/24-hour patches if patient smokes over two packs/day. Because smoking induces cytochrome P450, psychotropic drug doses may need to be adjusted in heavy smokers who have stopped smoking.

Special populations

Interventions should be language appropriate, as well as culturally and educationally appropriate. Treatments are effective with all special populations.

[‡] See "Issues" box below.

CME ACTIVITY: TOBACCO ADDICTION from page 4

What Else Can You Do to Help Your Patients Stop Smoking?

FOLLOW UP to see how patients are doing. Your repeated concern emphasizes importance.

PREVENT AND TREAT RELAPSE: Identify triggers and develop coping skills.

EDUCATE patients about the risks of secondhand smoke. Encourage all patients (including non-smokers) to maintain a smoke-free home and car.

Follow up with patients who are willing to discuss stopping smoking.

Your repeated concern emphasizes importance. Reinforce the use of the California Smokers' Helpline and other counseling sources. Assess for abstinence at all subsequent contacts.

Prevent and treat slips, lapses and relapse. "Former" users who stopped in the last six months are at risk of relapse. Many patients alternate between thinking about stopping, making attempts, relapsing, and trying to stop again over the course of years. Relapse is not a sign of personal failure of the tobacco user or the clinician; it usually takes multiple tries to successfully stop smoking. Most smokers who relapse want to stop again soon. *A relapse should be viewed as a learning experience*. When the patient relapses, he or she can become aware of their triggers, their reasoning ("one cigarette won't hurt") and the steps that led to picking up that first cigarette.

• Ask patients who have relapsed if they are willing to make another attempt to stop now.

- Discuss the circumstances surrounding the relapse and help patients determine what worked and what didn't work at their last attempt. Identify and treat/refer for depression, anxiety or stress.
- Refer the patient to the California Smokers' Helpline and tobacco treatment classes.
- Suggest a different medication at next attempt, a longer course or a combination of medications; e.g., bupropion plus NRT, or nicotine patch plus short-acting nicotine (gum, lozenge, inhaler or nasal spray) to use as a rescue agent. Varenicline has a higher success rate than a single form of NRT or bupropion alone, but costs more.
- Suggest additional resources such as attending free Nicotine Anonymous meetings (800-642-0666 or http://www.scina.org/index.html for Southern California meeting information) or SOS-Save Our Selves, a non-spiritual program (323-666-4295, http://sossobriety.org/meetings). Internet programs, such as those listed on page 8, have been shown to increase success.

Educate all patients about the dangers of secondhand smoke and encourage patients to maintain a smoke-free home and car. Secondhand smoke increases the risk of serious respiratory problems; e.g., a greater number and severity of asthma attacks and lower respiratory tract infections, and increases the risk for middle ear infections in children. Inhaling secondhand smoke can cause lung cancer and coronary heart disease in nonsmoking adults. Smokers are up to 10 times more likely to successfully stop if their home is smoke-free.

| Medication | Estimated Odds Ratio° | Estimated Continuous Success at 6 Months |
|---|--------------------------|---|
| Monotherapies | | |
| Varenicline (2 mg/day) | 3.1 (2.5-3.8) | 33.2 (28.9-37.8)% |
| Nicotine Lozenge 4 mg | 2.8 (1.9-4.0) | only one study |
| Nicotine Nasal Spray | 2.3 (1.7– 3.0) | 26.7 (21.5-32.7)% |
| High-Dose Nicotine Patch > 25 mg (Both standard or long-term duration) | 2.3 (1.7– 3.0) | 26.5 (21.3–32.5)% |
| Long-Term Nicotine Gum (> 14 weeks) | 2.2 (1.5-3.2) | 26.1 (19.7–33.6)% |
| Nicotine Inhaler | 2.1 (1.5-2.9) | 24.8 (19.1– 31.6)% |
| Bupropion SR (7-12 weeks) | 2.0 (1.8-2.2) | 24.2 (22.2–26.4)% |
| Nicotine patch 21 mg (6 weeks or more) | 1.9 (1.7– 2.2) | 23.4 (21.3–25.8)% |
| Combination therapies | | |
| Patch (long-term; > 14 weeks) + ad lib NRT (gum or spray) | 3.6 (2.5–5.2) | 36.5 (28.6–45.3)% |
| Patch + Bupropion SR | 2.5 (1.9–3.4) | 28.9 (23.5–35.1)% |
| Patch + Inhaler | 2.2 (1.3–3.6) | 25.8 (17.4–36.5)% |

[°] Odds ratio (OR): More effective than placebo; e.g., OR 3.6 means 3.6 times more effective than placebo.

For Tobacco Users Unwilling to Stop Smoking

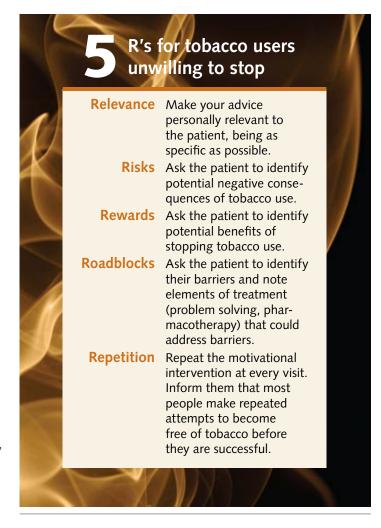
Reiterate that "stopping smoking is the most important thing you can do to protect your health." Smokers may be unaware of the facts, concerned about feeling bad from nicotine withdrawal, or discouraged because of previous unsuccessful attempts. If you have time, provide the "5 R's" (Relevance, Risks, Rewards, Roadblocks, and Repetition) to motivate smokers who are reluctant or refractory.

Pearls for Practice

- 1. Tobacco is the leading cause of preventable death.

 Treatment is the most cost-effective preventive clinical service. Benefits of stopping tobacco use impact every medical specialty.
- 2. In LA County, smoking rates are highest in those who have mental health or substance abuse problems or who are African-American, on Medi-Cal, without health insurance, living in poverty, or are lesbian, gay or bisexual. African-American children have the highest tobacco smoke exposure in their homes.
- 3. Most smokers want to stop and over half try to stop annually (without counseling or medications).
- 4. Tobacco users expect and want their health care providers to discuss tobacco use and offer assistance.
- 5. Tobacco counseling doubles success rates, and is available by phone, online, in groups and in person.
- 6. The California Smokers' Helpline (1-800-NO-BUTTS) offers free multi-session, tobacco counseling in English, Spanish, Vietnamese, Korean and Chinese (Mandarin and Cantonese). It provides specialized counseling for pregnant women, teens and tobacco chewers.
- 7. In 30 seconds or less you can Ask, Advise and Refer and save someone's life.
- 8. Medications can double or triple the long-term success rate and should be offered to every tobacco user.
- 9. Adding counseling to medications can result in success rates as high as 36% for each attempt.
- 10. Smokers are up to 10 times more likely to successfully stop smoking if their home is smoke-free.

For questions, contact the Los Angeles County Tobacco Control & Prevention Program at (213) 351-7890, or e-mail tobaccol@ph.lacounty.gov



This CME activity has been adapted from Tran, N. Treating Tobacco Addiction, City Health Information. 2008;27(1):1-8. With permission from the New York City Department of Health and Mental Hygiene. Available at www.nyc.gov/html/doh/downloads/pdf/chi/chi27-1.pdf and Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008. Available at http://www.ahrq.gov/path/tobacco.htm

Free Continuing Medical Education Credit

To obtain CME credit, complete the eLearning module on "Successful Treatment of Tobacco Addiction" at https://publichealth.lacounty.gov/elearning

This educational activity is offered by the Los Angeles 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.

Tobacco-Cessation Resources For Patients

Five Tips to Become Free of Tobacco



- **1. Get ready.** Set a stop date. Keep your home smoke-free. Stay away from places where people smoke.
- **2. Make a plan; get support.** If you talk with a tobacco counselor when you stop, you double your chance of success. Choose from a telephone helpline (1-800-NO-BUTTS), local classes and online chat/message boards.
- **3. Learn new skills.** Try to distract yourself from urges to smoke. Talk to someone, go for a walk, or plan something fun to do every day. Stay away from triggers such as alcohol, other smokers, caffeine, and stress.
- **4. Get medicine and use it correctly.** Ask your doctor about the three types of effective medications. Medications double or triple your chance of stopping for good, even if you only use them for 6-12 weeks!
- **5. Be ready for difficult situations.** Feeling bad when you stop can be controlled with medicines. Feelings are the worst for 1-3 weeks after stopping. Being more physically active will help your mood, control weight and help relieve stress, cravings, and withdrawal symptoms. Try a 30-minute walk every day. More exercise, a healthy diet and medicines can help limit weight gain.

Coaching and medications together are even more powerful to help stay off tobacco for good.

Becoming tobacco-free takes a lot of preparation, but You Can Do It!

Online Resources

Become an EX®

www.BecomeAnEX.org or www.convierteteenunex.com Free plan to re-learn life without cigarettes. Also see MaryQuits.org

QuitNet.com

www.quitnet.com

Free & low-cost professional online support services

Tobacco Free California

www.tobaccofreeca.com has free message boards to help smokers stop

National Cancer Institute

www.cancer.gov/cancertopics/smoking

Live, online chat/text message, English & Spanish, M-F, 9 am-11 pm, Eastern Time, and other resources 1-877-44U-QUIT www.smokefree.gov

American Lung Association

www.lungusa.org for low-cost online help with Freedom From Smoking® or 1-800-458-8252 for more information

American Cancer Society

www.cancer.org online help, personalized tools, message boards; network of volunteers, supporters, and survivors

The California Smokers' Helpline can help you

become free of tobacco. When you call, you can get...

- Stopping tobacco materials.
- Places near you that offer more help for stopping.
- Up to six phone sessions with a tobacco counselor. M-F, 7 am-9 pm; Saturday, 9 am-1 pm

There are special programs for pregnant women, teens, and tobacco chewers, too. Please tell your family and friends who use tobacco about this FREE and helpful service.

1-800-NO-BUTTS English

1-800-45-NO-FUME Spanish

1-800-838-8917 Chinese (Mandarin and Cantonese)

1-800-778-8440 Vietnamese

1-800-556-5564 Korean

1-800-933-4TDD Hearing Impaired

1-800-844-CHEW Chewers' Helpline

Or visit www.californiasmokershelpline.org

For free or low-cost local classes or support groups call the California Smokers' Helpline. Some groups are in Spanish. Groups are also available for those with mental illnesses or recovering from substance abuse. Or go to www.californiasmokershelpline.org/CountyListings.aspx

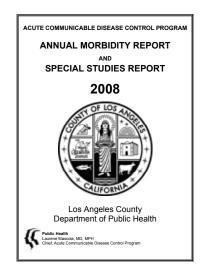
VITAL SIGNS

Report focuses on communicable disease morbidity in LA County

More than 85 diseases and conditions (plus unusual disease occurrences and outbreaks) are reportable by law to the Acute Communicable Disease Control program of the LA County

Department of Public Health. This program conducts surveillance and investigates most communicable diseases, except tuberculosis, sexually transmitted diseases, and HIV/AIDS.

The program's latest "Annual Morbidity Report 2008" is filled with tables of notifiable diseases, disease summaries, and disease outbreak summaries. The summaries facilitate identification of patterns



of disease and therefore shape future prevention efforts.

The Special Studies Report section includes interesting case studies, outbreak investigations, and trends of selected conditions. Topics include a "Cluster of Enterovirus Infections Among Day Care Attendees," "Salmonella Javiana Outbreak at a Multi-Site Preschool Program," and "Mycobacterium Chelonae Infection Following Liposuction."

The full report may be accessed at http://www.publichealth.lacounty.gov/acd/Publications.htm.

STD home kit offers popular testing option

In Los Angeles County, Chlamydia infections have been rising steadily since 1996. They account for three out of every four STDs reported in the county, and the majority of those infected (63%) are young women between the ages of 15 and 24.

In 2008, there were 43,431 cases of Chlamydia and 8,415 cases of gonorrhea reported in Los Angeles County. The Centers for Disease Control and Prevention and the U.S. Preventive Services Task Force recommend screening all sexually active women age 25 and younger for Chlamydia at least once a year.

To help overcome barriers to testing, the Los Angeles County Department of Public Health is offering a free STD Home Test Kit. The "I Know" kit, which was launched over the summer, is specifically designed for women 25 years of age and younger, the demographic group most at risk for Chlamydia and gonorrhea infection and complications. The program was made possible through support from the Third Supervisorial District.



The kit has proven to be a highly popular and successful testing option. During the first five months of operation, more than 2,100 test kits were ordered from the online site, www.DontThink Know.org. Of those

ordered, 1,042 testable specimens were received. Of these, the Public Health Laboratory found 8.9%, or 93 specimens, positive. This level of case detection is considered excellent, exceeding that of some STD clinics.

According to Peter R. Kerndt, MD, MPH, Director, LA County STD Program, "The kit is an excellent option for young women who have difficulty going to a clinic. There may be concerns about cost, transportation, inconvenience, privacy, and embarrassment—all reasons that women may avoid going to a doctor or clinic for an STD test."

Obtaining treatment

Clients who test positive are encouraged to print out a copy of their test results from the website and bring it to their health provider so treatment can begin. The results sheet contains instructions to clinicians for treatment and follow-up. Clinicians are encouraged to provide patient-delivered partner therapy, as appropriate. This allows the patient's sex partner(s) also to be treated, which diminishes the patient's chance of reinfection.

The results sheet can be used as a Confidential Morbidity Report by clinicians, who can complete the necessary fields on the sheet and fax it to the STD Program, thereby fully meeting their reporting responsibility. Due to the accuracy of the test used, clinicians are encouraged to not retest clients with positive home test results for Chlamydia or gonorrhea.

The "I Know" kit can be ordered online (www.DontThink Know.org) or by phone, (800) 758-0880. Clinician inquiries about the kit or handling of clients who used the kit can be made to Christine Wigen, MD, at the STD Program, cwigen@ph.lacounty.gov. Posters and palm cards publicizing the home test kit can be ordered from Harlan Rotblatt, at hrotblatt@ph.lacounty.gov, or by phone, (213) 744-3127.

Controlling the Spread of Vaccine-Preventable Diseases

Vi Nguyen, MPH

he Los Angeles County Department of Public Health's Immunization Program plays a vital role in controlling the spread of vaccine-preventable diseases (VPDs) in this county. Surveillance for VPDs requires the collaboration of public health professionals, health care providers, and laboratories. All suspect and confirmed cases among residents of Los Angeles County should be reported to the Communicable Disease Reporting System by telephone, (888) 397-3993, or fax, (888) 397-3778. After hours, report to (213) 974-1234. Cases among residents of Long Beach, (562) 570-4302, or Pasadena, (626) 744-6000, should be reported to their respective city health departments.

Appropriate laboratory testing is essential for accurate diagnosis and to rule out other possible causes of disease. If an assessment of immune status is necessary, only an IgG assay (not IgM) should be ordered.

The following table summarizes the reporting requirements and confirmatory laboratory tests for select vaccine-preventable diseases. If you have questions on reporting or lab testing, contact the Immunization Program at (213) 351-7800.

Vi Nguyen, MPH, is the vaccine-preventable disease coordinator with the Immunization Program, Los Angeles County Department of Public Health.

| Disease | Reporting Requirements | Confirmatory Tests | Other Notes |
|--|--|--|--|
| Diphtheria | Immediately by phone | Culture (swab of nose, throat, membrane) Toxigenicity testing (Elek test) | Use tellurite-containing media |
| Haemophilus influenzae, invasive disease | Report cases among persons <15 years of age within 1 working day of identification | Culture from a normally sterile site (blood, CSF) Serotyping | All sterile isolates should be sent to the Public Health Lab for serotyping |
| Hepatitis B (perinatal) | Within 7 calendar days of identification | Anti-HBc (antibody to core antigen) HBsAg (surface antigen) Anti-HBs (antibody to surface antigen) | All 3 tests should be performed. HBsAg-positive results should also be confirmed by HBsAg neutralization assay |
| Measles | Within 1 working day of identification | IgM or Paired sera for IgG | Specimens for culture/PCR can also be collected (throat, nasopharyngeal, urine) |
| Mumps | Within 7 calendar days of identification | Culture (buccal) IgM or Paired sera for IgG | Massage the parotid gland area for 30 seconds prior to swab collection. Use a Dacron (non-cotton) swab |
| Pertussis (whooping cough) | Within 1 working day of identification | Culture (nasopharyngeal swab or aspirate) PCR | Use Dacron (non-cotton) swab and Regan-Lowe media. Serologic results are not currently accepted as lab confirmation |
| Poliovirus, paralytic | Within 1 working day of identification | Culture (stool, pharynx, or CSF) Paired sera for IgG | Immediately transport to lab at 4°C or maintain culture specimens frozen |
| Rubella (acute and congenital) | Within 7 calendar days of identification | IgM or Paired sera for IgG Culture/PCR (nasopharyngeal, throat, urine) | Immediately transport to lab at 4°C or maintain culture/PCR specimens frozen (except urine) |
| Tetanus | Within 7 calendar days of identification | None | There are no lab findings characteristic of tetanus |
| Varicella (chickenpox) | Fatal cases: Immediately by phone Hospitalized cases: Within 7 calendar days of identification Outbreaks: Routinely ≥ 5 cases within 21 days, but ≥ 2 cases in sensitive settings such as health facilities, prisons, or long-term care facilities | Culture PCR DFA Paired sera for IgG | Preferred specimen for culture/ PCR/DFA is fluid from vesicles |

Subacute Health Care Facilities LA County Outbreaks and Prevention

Rachel Civen, MD, MPH

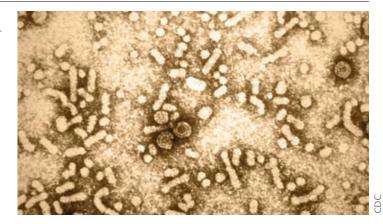
ike community-based outbreaks, outbreaks occurring in health care settings are reportable to the public health department, under Health and Safety Code, Section 2500. Health care-associated outbreaks are defined as clusters of infections in health care settings related in time and place, or occurring above a baseline or threshold level for a facility, specific unit, or ward. The baseline is defined as what is normally observed in a particular setting.

Within Los Angeles County, there are over 400 licensed subacute care facilities. Each year 60 to over 100 outbreaks in subacute care facilities are reported and investigated by the public health department. The subacute care facilities include skilled nursing facilities, intermediate care facilities, and psychiatric care facilities. Skilled nursing facilities provide continuous skilled nursing care to patients on an extended basis. Intermediate care facilities also provide skilled nursing care to patients, but the care is not continuous. Psychiatric facilities provide 24-hour inpatient care for patients with psychiatric care needs. The control of outbreaks within these facilities is of particular interest because the facilities house a diverse group of vulnerable patients, including frail elderly, ventilator-dependent, and mentally and physically challenged, for prolonged time periods. These patients may be highly susceptible to various infectious disease agents or prone to easily transmit infections among themselves.

In 2008, there were 87 outbreaks in subacute care facilities compared to 116 outbreaks in 2007. In 2008, the most frequent type of outbreaks was scabies, 37 outbreaks involving 303 persons, followed by gastrointestinal with 33 outbreaks reported involving 631 individuals, followed by respiratory illness with 6 outbreaks affecting 68 persons (see table).

Early identification of outbreaks is dependent on prompt and timely reporting by facility administrators or nursing supervisors to the public health department. Once the report is obtained, Community Health Services public health nursing staff will conduct a site visit and initiate an investigation. The investigation will include a facility tour, medical record review, additional specimen collection as needed, and the provision of recommendations for outbreak containment.

Respiratory outbreaks are of special interest in the subacute facility settings because of the high mortality and morbidity associated with influenza infection in these populations. It is essential to determine if influenza could be the etiology by collecting appropriate specimens. Control measures can be rapidly instituted by the administration of antiviral medication and vaccination to staff and residents to prevent further transmission and acute disease. Of the six respiratory outbreaks in 2008 with a documented etiology, two were confirmed influenza outbreaks. In 2009, 21 respiratory outbreaks were identified, and four were associated with pandemic H1N1 strain. Of the 138 total respiratory cases, there was one death, and 21 hospitalizations documented.



Hepatitis B virions, or Dane particles

Prevention

The majority of outbreaks in subacute care facilities are caused by agents that are spread via person-to-person contact. Thus, appropriate hand hygiene by staff and residents is a crucial infection control measure. Influenza vaccination for skilled nursing facility staff and residents as well as proper hand washing, utilization of antiviral prophylaxis, administrative controls, and isolation are essential for the prevention of seasonal and pandemic influenza.

Excerpted and summarized from "Annual Morbidity Report 2008," Acute Communicable Disease Control Program, Los Angeles County Department of Public Health

Subacute Care Facility Outbreaks in 2008

| Disease/ Conditions | Number of Outbreaks | Number of Cases | Transmission |
|---|------------------------|--------------------|---------------------|
| PSYCHIATRIC CARE FAC | ILITY OUTBREAKS | | |
| Acute Hepatitis B | 1 | 9 | Bloodborne |
| Norovirus | 1 | 8 | Contact |
| SKILLED NURSING FACIL | ITY | | |
| Adenovirus | 1 | 10 | Respiratory/droplet |
| Conjuctivitis | 1 | 9 | Contact |
| Clostridium difficile | 1 | 3 | Contact |
| Gastroenteritis Unspecified (n=16) Norovirus (n=17) | 33 | 631 | Contact |
| Scabies | 37 | 303 | Contact |
| Scabies, Atypical | 2 | 12 | Contact |
| Unknown Rash | 4 | 14 | Contact |
| Respiratory Illness Unspecified (n=4) influenza (n=2) | 6 | 68 | Respiratory/droplet |
| TOTAL | 87 | 1,067 | |

Rachel Civen, MD, MPH, is a medical epidemiologist with the Acute Communicable Disease Control Program, Los Angeles County Department of Public Health.

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**.

R for Prevention

Promoting health through prevention in Los Angeles County

Upcoming Training

Screening, Brief Intervention and Referral to Treatment

Free training for trauma, emergency department, and primary care personnel to identify and address substance-related problems

Hosted by the LA County Department of Public Health's Substance Abuse Prevention and Control Program; training presented by UCLA Integrated Substance Abuse Programs

- March 26, 2010 | 9 am-4 pm
- LA County Lecture Hall, Alhambra
- CME credits available

RSVP by Friday, March 19, to Grant Hovik at ghovik@ucla.edu. For more information, call (310) 388-7647.

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. 2053 LOS ANGELES, CA

LOS ANGELES COUNTY BOARD OF SUPERVISORS

Gloria Molina, First District Mark Ridley-Thomas, Second District Zev Yaroslavsky, Third District Don Knabe, Fourth District Michael D. Antonovich, Fifth District

DEPARTMENT OF PUBLIC HEALTH

Jonathan E. Fielding, MD, MPH

Director and Health Officer

Jonathan Freedman

Chief Deputy, Public Health

Jeffrey D. Gunzenhauser, MD, MPH Medical Director of Public Health

Steven Teutsch, MD, MPH Chief Science Officer

EDITORS IN CHIEF

Jeffrey D. Gunzenhauser, MD, MPH jgunzenhauser@ph.lacounty.gov

Steven Teutsch, MD, MPH steutsch@ph.lacounty.gov

EDITORIAL BOARD

Melanie Barr, RN, MSN
Trista Bingham, MPH, PhD
James DeCarli, MPH, MPA, CHES
Kevin Donovan, MPH
Marsha Epstein, MD, MPH
Kim Harrison Eowan, MPH, CHES
Julia Heinzerling, MPH
David Meyer, MPH
Sadina Reynaldo, PhD
Ben Techagaiciyawanis, MPH, CHES

Summer Nagano, Managing Editor Alan Albert & Kathleen Pittman, Graphic Designers Maria Ojeda, Administration

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)