This is an exciting time to be a health provider and participate in the most dramatic health care coverage and delivery system transformation since the creation of Medicaid and Medicare. For the past 50 years, the U.S. health care system has directed disproportionate resources to acute care services, with the concomitant erosion of our nation’s primary and preventive care infrastructure. Despite spending more on health care per person than any other country, almost 50 million people remain uninsured. Consequently, we have lower life expectancy and lag behind competitor nations on many health indicators.

The Patient Protection and Affordable Care Act (ACA), commonly known as “Obamacare” or health reform, will bring major shifts to our health care system in six key areas:

- Expand coverage for poor uninsured adults
- Redesign the outpatient workforce for primary care providers and associated non-physician medical home team members
- Improve the patient experience
- Increase the effective use of electronic health records and health information technology
- Change the payment system to obtain more patient-centered outcomes
- Increase the focus on preventive services.

Of particular importance to those in primary care, the ACA supports care models such as the patient-centered medical home—a care model that emphasizes continuity, coordination, and team-based care for patients.

Along the way, there will be challenges. All providers, health systems, and insurers will face increased pressure to retain patients, provide better customer care, and contain costs. Reimbursements will also shift and be tied to performance and quality. All of these changes will occur simultaneously as our nation’s health system provides more care for people who previously lacked access and health coverage.

The Transformation of County-Run Primary Care

The Los Angeles County Department of Health Services is transforming as well. DHS, which has a number of internal medicine, pediatric, family practice, and med/peds residency programs and 19 clinics, has undertaken a significant restructuring of its primary care system. The focus over the past 2 years has been to empanel patients, improve care coordination, reduce the need for face-to-face specialty visits, and design a new...
team-based model that DHS patients are calling their “medical home.”

Most of the changes now, and in the future, will be focused on keeping DHS patients healthy, cutting needless face-to-face visits, and proactively managing preventive care. For patients with a chronic condition, the goal is to improve clinical outcomes by improving care coordination and management among the primary care physician, specialists, and hospitals to reduce admissions, re-admissions, and medical inefficiencies.

In addition to defining its primary care patient panel, DHS has also focused on improving specialty access and communication by implementing “curbside consulting” (eConsult) for both DHS and safety net clinics (federally qualified health centers). While it may take more than 3 months to obtain a face-to-face visit with a specialist, a primary care physician (PCP) can now obtain an electronic “curbside consult” with a specialist within 2 days. There have been dramatic outcomes as a result: eConsult has enabled a PCP to receive immediate feedback from a specialist, reducing the number of face-to-face visits by 30%-60% for the specialties on the eConsult platform. While there has not yet been a reduction in wait times in Los Angeles, the San Francisco safety net system has seen a dramatic reduction in wait times across specialties that have implemented eConsult. In addition, the pre-visit workup is more complete and the PCP feels supported and learns from the interaction. A key element of eConsult’s success is the clinician-to-clinician dialogue.

DHS has also adopted a patient registry system that equips primary care/medical home teams with their panels of patients. The system provides reminders of overdue or upcoming preventive services and empowers all medical home team members to contribute to the patient’s care. By using the patient registry, staff can proactively reach out to patients to obtain lab work or procedures, such as mammograms, before their visits so that results of indicated preventive services are available when the patient arrives for the appointment.

Finally, DHS is moving away from paper charting by adopting an electronic health record system. For the first time, a single medical record for every patient will be available wherever he or she seeks care in DHS.

Moving Forward
As ACA is implemented and evolves, there will be challenges. DHS’ perspective is that ACA is heading in the right direction at the right time to expand health coverage for as many people as possible, reduce costs, improve care coordination, innovate, invest, and provide the essential services in the outpatient setting to improve health for patients.

DHS embraces the changes and opportunities to deliver the greatest benefit for our patients. Not everyone who is uninsured will gain coverage under ACA but, as a safety net provider, DHS will continue to provide care for as many people as we can.

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Affordable Care Act Resources for Primary Care Providers

Here are a few actions primary care providers can take now to learn more about health care changes with the Affordable Care Act:

- Work and engage with your contracted health plan and medical group (IPA) on understanding your contract, contract changes, incentive programs, and how your clinical care and practice will be measured in the near future.
- Explore whether your practice is interested in adopting an electronic health record system by asking other colleagues and peers about their experience, or contact the local federally designated electronic health record regional extension center, HITEC-LA for advice. Log on to www.HITEC-LA.ORG.
- Uninsured patients may qualify for the pre-Medi-Cal program called Healthy Way LA. For more information, log on to the DHS website at www.ladhs.org/wps/portal/HWLA.
- Follow up the development of the California health exchange (Covered California). Its website (www.healthexchange.ca.gov) will include regular updates on how health coverage will be expanded for those who qualify through this exchange.
Coccidioidomycosis: The Importance of Clinical Recognition

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Since 2004, the number of coccidioidomycosis cases in Los Angeles County has increased substantially. Laboratory and clinically confirmed cases of coccidioidomycosis, also known as “Valley Fever,” typically numbered between 21 and 80 cases per year since 1973. However, 133 cases occurred in 2004 and started an upward trend that reached 306 cases in 2011 (Figure 1).

Between two 4-year time periods, 2000-2003 and 2008-2011, 19 of the 24 health districts of the County of Los Angeles have had at least a 100% increase in cases. The average of these increases is 458% with a range of 100% to 1,500%. Most cases have occurred in the northern area of the county, specifically Antelope Valley, West Valley, and San Fernando Valley.

The Centers for Disease Control and Prevention reported in its March 29, 2013, Morbidity and Mortality Weekly Report that coccidioidomycosis case reports have dramatically increased during 1998 to 2011. Arizona, California, Nevada, New Mexico, and Utah, where the fungi that cause the disease are endemic in the United States, reported an overall 260% increase between 2000-2003 and 2008-2011. Individually, Arizona, which reports the highest number of cases in the nation, had a 332% increase, and California had a 149% increase.

Transmission. Coccidioidomycosis is typically caused by the inhalation of spores from fungal species belonging to the Coccidioides genus. It is not transmitted person to person. The fungi are endemic to the southwestern United States (including Texas) and parts of Central and South America. Commonly found in the soil of arid to semi-arid environments with low rainfall, long hot seasons, and mild winters, the fungi infect people during strong winds, dust storms, building construction, agriculture, earthquakes, and archaeological digs. Exposure to airborne dust or soil and travel to endemic areas including Kern County, Ventura County, Arizona, the Central California Valley (San Joaquin Valley), and Antelope Valley should be noted.

Clinical Picture. About 60% of infected people do not develop any symptoms. One to four weeks after exposure to the spores, 40% of people become ill (see Box 1). Most experience a primary and often self-limited infection presenting as a flu-like illness, fatigue, cough, chest pain, headache, other body aches and pains, fever, or rash. A small percentage of symptomatic individuals develop chronic pulmonary disease. continued on page 4 >

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**Figure 1.** Annual Coccidioidomycosis Incidence (N=3,296) in LA County, 1973-2011

Except for an outbreak in 1992-1994, the annual number of cases ranged from 21 to 84 between 1973 and 2003. Increasing numbers of cases have been seen since 2004.
Some of these individuals also experience disseminated disease that can involve multiple organ systems, be debilitating, last life-long, and lead to outcomes such as meningitis and death. Disseminated disease is associated with male gender, immunosuppression, pregnancy, lack of previous exposure to an endemic area, race (African American, Filipino American, Native American, Asian), and age (infants and adults over 65 years old).

**Diagnosis.** Given the increasing number of cases and the non-specific presentation of primary disease, clinical suspicion is critical in diagnosing and treating coccidioidomycosis. There are many laboratory tests that can be ordered to identify the disease, but a clinician must carefully first assess symptoms along with the patient's exposure and travel history to determine if laboratory tests are warranted (see Box 1). Serology is recommended for diagnosis. Even in the areas with the highest number of cases, missed diagnosis is a recognized problem that contributes to mounting unnecessary costs in secondary visits, inappropriate treatment, and hospitalization. Patients testing positive should be informed and counseled appropriately.

**Treatment.** Antifungal medication (e.g., amphotericin B, itraconazole, or fluconazole) is recommended for disseminated disease or primary pulmonary infection in patients with increased risk for disseminated disease.

**Education.** Awareness and education of coccidioidomycosis among primary care practitioners is a key first step toward improving clinical recognition, risk assessment, patient counseling, treatment effectiveness, and preventing disease progression.

- For more information on coccidioidomycosis, visit the “Valley Fever Center for Excellence” at https://www.vfce.arizona.edu/ValleyFeverInPeople/FAQs.aspx.
- Training and free continuing medical education credit may be obtained at https://www.vfce.arizona.edu/clinicians/FreeOnlineCME.aspx.
- For real-life stories about how coccidioidomycosis has affected individuals and for more information about the latest developments, visit the “Just One Breath” reporting series at http://www.reportingonhealth.org/valleyfever.

**Mandatory Reporting in Los Angeles County**
The Los Angeles County Department of Public Health urges all health care providers to be aware of coccidioidomycosis, especially among patients with community-acquired pneumonia continuing for more than 3 or 4 weeks or with infections (e.g., meningitis or skin, bone, or joint infections) where the cause has not been identified. To help target intervention and prevention efforts from a population perspective, all cases meeting the clinical and laboratory criteria (see Box 1) must be reported to the department.

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**BOX 1**

### Coccidioidomycosis

#### Clinical Signs

A patient with coccidioidomycosis can present with any of the following clinical signs and symptoms:

- Influenza-like signs and symptoms, fatigue, cough, fever, profuse night sweats, loss of appetite and weight, chest pain or discomfort, generalized muscle and joint aches (particularly of ankles and knees), headache
- Pneumonia or other pulmonary lesion diagnosed by chest radiograph
- Erythema nodosum or erythema multiforme rash
- Involvement of bones, joints, or skin by dissemination
- Meningitis
- Involvement of viscera and lymph nodes.

#### Laboratory Testing

Any of the following laboratory tests can confirm coccidioidomycosis:

- Culture, histopathologic, or molecular tests for Coccidioides species
- Positive serologic test for coccidioidal antibodies in serum, cerebrospinal fluid, or other body fluids by detection of IgM by immunodiffusion, enzyme immunoassay (EIA), latex agglutination, or tube precipitin
- Detection of IgG by immunodiffusion, EIA, or complement fixation.

To file a report, contact the Communicable Disease Reporting System at (888) 397-3993; submit a Confidential Morbidity Report (CMR) Form, which may be downloaded at www.publichealth.lacounty.gov/acd/reports/CMR-H-794.pdf; or log on to the Visual CMR online system (restricted to designated persons). The report may also be faxed to (213) 482-4856.

For more information or questions regarding coccidioidomycosis, call (213) 240-7941.

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epatitis B and hepatitis C can become chronic, lifelong infections that may lead to liver cancer. Millions of Americans are living with chronic viral hepatitis, and many do not know they are infected.

May's designation as Hepatitis Awareness Month provides an ideal opportunity for clinicians to review updated hepatitis guidelines, conduct risk assessments with their patients, and educate patients at risk of infection. The following articles focus on two types of hepatitis: hepatitis C and pregnant women who are positive for hepatitis B.

**Updated Guidelines on Hepatitis C**

Hepatitis C is the most common bloodborne infection and the most common cause of chronic liver disease in the nation. The Centers for Disease Control and Prevention (CDC) estimates that 3 million adults (mostly baby boomers born between 1945-1965) in the U.S. have been infected with the hepatitis C virus (HCV); 75% of whom are unaware of their infection.

On May 10, 2013, the CDC released updated guidelines for health care providers and laboratory personnel on HCV testing. These guidelines, also used by the California Department of Public Health, reinforce previous recommendations that patients who test positive for the HCV antibody should also be tested for HCV RNA. The CDC issued this updated guidance for three reasons: changes in the availability of certain commercial HCV antibody tests, evidence that many persons who are identified as reactive by an HCV antibody test might not subsequently be evaluated to determine if they have current HCV infection, and significant advances in the development of antiviral agents with improved efficacy against HCV.

**Who Should be Tested?**
The CDC recommends HCV screening for patients at increased risk:
- Persons born from 1945 through 1965 (baby boomers)
- Persons who have ever injected illegal drugs, including those who injected only once many years ago
- Recipients of clotting factor concentrates made before 1987
- Recipients of blood transfusions or solid organ transplants before July 1992
- Patients who have ever received long-term hemodialysis treatment

**Hepatitis C Resources**

- Testing for HCV Infection: An Update of Guidance for Clinicians and Laboratorians
  [www.cdc.gov/mmwr/preview/mmwrhtml/mm6218a5.htm?scid=mm6218a5_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6218a5.htm?scid=mm6218a5_w)
- Hepatitis C: Frequently Asked Questions for Health Professionals
  [www.cdc.gov/hepatitis/HCV/HCVfaq.htm#section5](http://www.cdc.gov/hepatitis/HCV/HCVfaq.htm#section5)
- Viral Hepatitis Online Risk Assessment for Patients
- Patient Education Materials
  [www.cdc.gov/hepatitis/c/patienteduc.htm](http://www.cdc.gov/hepatitis/c/patienteduc.htm)
- California Department of Public Health Hepatitis C Guidelines
  [www.cdph.ca.gov/programs/Pages/HepatitisCGuidelines.aspx](http://www.cdph.ca.gov/programs/Pages/HepatitisCGuidelines.aspx)
HEPATITIS RISK ASSESSMENTS AND PATIENT EDUCATION from page 5

- Persons with known exposures to HCV, such as
  - Health care workers after needlesticks involving HCV-positive blood
  - Recipients of blood or organs from a donor who later tested HCV-positive
- All persons with HIV infection
- Patients with signs or symptoms of liver disease (e.g., abnormal liver enzyme tests)
- Children born to HCV-positive mothers (to avoid detecting maternal antibody, these children should not be tested before age 18 months).

Pregnant Women Who Test Positive for Hepatitis B
Without postexposure prophylaxis (PEP [hepatitis B vaccine and hepatitis B immunoglobulin]), infants born to women who are hepatitis B surface antigen positive (HBsAg+) and hepatitis B virus (HBV) e antigen positive (HBeAg+) have a 70%-90% risk of chronic infection by 6 months of age. The risk of chronic infection is less than 10% for infants born to HBsAg+ pregnant women (HPPW) who are HBeAg negative.

The prevalence of HBV in pregnant women who delivered in Los Angeles County in 2011 was 0.52%. In 2011, 77% (n=546) of HPPW were Asian, followed by 8% (n=55) Hispanic, 5% (n=36) White, 4% (n=25) Black, 3% (n=23) Other, 2% (n=14) Unknown, and 1% (n=5) Pacific Islander. To reduce the risk of infection, the CDC recommends testing all pregnant women and referring for treatment as recommended.

California Health and Safety Code §125080-125085 require testing of all pregnant women during each pregnancy for HBsAg to prevent perinatal hepatitis B transmission. The CDC also recommends HBsAg testing and referring HPPW to a physician experienced in the management of chronic liver disease to assess and monitor the liver function and damage and determine eligibility for antiviral therapy during pregnancy. A baseline evaluation should include testing for HBeAg, HBV DNA, and antibody to HBeAg (anti-HBe).

Women who are HBeAg+ and have a high HBV DNA are more infectious. Despite timely PEP, approximately 5%-10% of their infants still become infected and are at risk of developing chronic HBV infection. Ten infants (0.2%) born in LA County between 2008-2012 became HBsAg+ after completing the hepatitis B vaccine series. Four of their mothers (40%) may have qualified for antiviral therapy during pregnancy because they had documented positive HBeAg and/or HBV DNA results.

Transmission can occur in utero, during birth, and after birth from infected household contacts; e.g., sharing a toothbrush or contact with exudates from dermatologic lesions and HBsAg-contaminated surfaces. To prevent perinatal hepatitis B transmission, it is important that health care providers follow the recommendations outlined by the CDC. These recommendations may be found at www.cdc.gov/hepatitis/HBV/PerinatalXmt.htm#section1.

The LA County Department of Public Health’s Perinatal Hepatitis B Prevention Unit provides consultation and education to patients, health care providers, laboratories and hospitals to ensure testing, reporting, appropriate PEP at birth and timely completion of the hepatitis B vaccine series. For more information, call (213) 351-7400 or visit the website at www.publichealth.lacounty.gov/ip/perinatalhepB/index.htm.

Elaine Waldman is the Viral Hepatitis Prevention Coordinator, Communicable Disease Control and Prevention; Kim Moore, RN, MSN, FNP-C is the Perinatal Hepatitis B Coordinator, Immunization Program, and Alvin Nelson El Amin, MD, MPH, is the Medical Director, Immunization Program, Los Angeles County Department of Public Health.

REFERENCES
Report Provides Overview of Health in LA County

The Los Angeles County Department of Public Health has released its latest Key Indicators of Health by Service Planning Area report, which includes the data collected from its 2011 Los Angeles County Health Survey and other sources.

This 28-page report, which offers a broad snapshot of health and health-related indicators in LA County, covers health conditions and health behaviors, as well as important factors in the social and physical environments, as these strongly influence health and contribute substantially to disparities in health outcomes.

The publication covers many categories, such as Demographics, Social Determinants, Physical Determinants, Parenting Practices, Health Status, Access to Care, Preventive Services, Health Behaviors, and Health Outcomes. Much of the data is contained in colorful tables that allow for easy comparison by Los Angeles County Service Planning Area, LA County overall, the United States, and the U.S. Healthy People 2020 goals.

Subjects that are featured in the report include food insecurity, tobacco use, television viewing, breastfeeding, mental health, immunizations, alcohol and drug use, fast food and sugar-sweetened beverage consumption, physical activity, and chronic and communicable diseases.

The 2011 Los Angeles County Health Survey comprises self-reported data by a random sample of 8,036 LA County adults and 6,013 parents/guardians/primary caregivers of children who are representative of the population in LA County.

The indicators in this report provide a foundation for communities, providers, government agencies, businesses, schools, and other organizations to work together to create positive change and to improve the health and well-being of our Los Angeles County population.

To view this report, log on to www.publichealth.lacounty.gov/ha/docs/KIR_2013_FinalS.pdf.

New Report on HIV Surveillance Released

The 2012 Annual HIV Surveillance Report for Los Angeles County has just been released by the Los Angeles County Department of Public Health. This 48-page electronic report contains analyzed data for HIV cases reported through December 31, 2012.

Since 1982, 80,115 cases of HIV and AIDS have been reported in LA County, of which 34,641 (42%) have died and 45,474 are living, according to the report.

This number does not include individuals estimated to be living with HIV because they were reported by code, their cases are pending investigation, or they are unaware of their infection. In all, the department estimates around 60,000 persons to be living with HIV in LA County.

Highlights from the 2012 Annual HIV Surveillance Report include the following:

- In 2011, Los Angeles County reported 1,880 new HIV diagnoses, accounting for 38% of California's 4,950 HIV diagnoses reported in that year.

- HIV surveillance data are now being used to monitor National HIV/AIDS Strategy (NHAS) indicators, which stress the need to monitor how well jurisdictions place persons newly diagnosed with HIV into care, retained in care and on adequate treatment to suppress their viral load, so that better clinical outcomes as well as decreased transmission of HIV can be realized. Three NHAS indicators are included in this year's HIV surveillance report.

- Comparable to a recent national indicator report, the department has evidence that, in 2010, 79% of persons newly diagnosed with HIV in LA County were placed into care within 3 months.

- Among persons living with an HIV infection in 2010, 56% were retained in care in LA County (i.e., had evidence of 2 visits in the calendar year at least 3 months apart).

- Of persons with HIV in LA County who had an HIV viral load test result done in 2010, 79% had indication of complete viral suppression (i.e., a viral load test result with less than 200 virus particles per milliliter of blood plasma).

- While accounting for less than 1% of population and persons living with HIV, American Indian/Alaskan Native (AI/AN) persons were second only to Black/African Americans in the race/ethnic-specific HIV prevalence rate (768 vs. 998 per 100,000 population respectively).

- AI/AN persons living with HIV were more likely to be less than 50 years old than were the combined total of non-AI/AN race/ethnic groups (68% vs. 60%).

- AI/AN persons living with HIV were three times more likely to have reported being men who have sex with men who injected drugs than were the combined total of non-AI/AN race/ethnic groups (18% vs. 6%).

To receive an electronic copy of this report as well as future reports, log on to www.publichealth.lacounty.gov/hiv, click the “Subscribe to the Mailing List” link,” and complete the subscription form.
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.

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

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
Division of HIV and STD Programs
(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

Use of trade names and commercial sources in Rx for Prevention is for identification only and does not imply endorsement by the Los Angeles County Department of Public Health (LACDPH). References to non-LACDPH sites on the Internet are provided as a service to Rx for Prevention readers and do not constitute or imply endorsement of these organizations or their programs by LACDPH. The Los Angeles County Department of Public Health is not responsible for the content of these sites. URL addresses listed in Rx for Prevention were current as of the date of publication.