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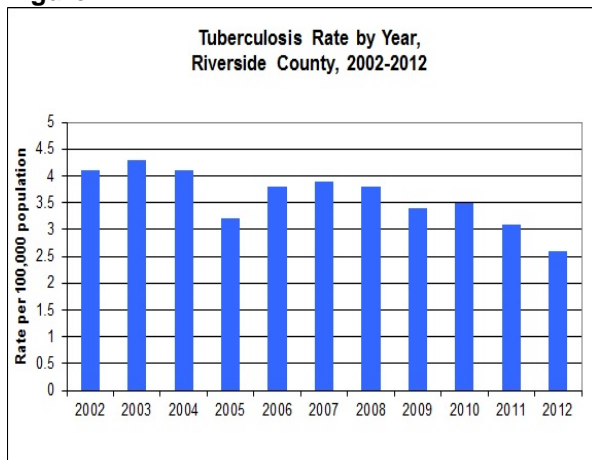
## WORLD TB DAY - MARCH 24, 2013

### “STOP TB IN OUR LIFETIME”

“Stop TB in Our Lifetime” is this year’s World TB Day theme. Tuberculosis (TB) is a disease that requires a global approach while implementing specific strategies at the local level.

According to the Centers for Disease Control and Prevention (CDC), TB infects one third of the world’s population. An estimated 2.3 million Californians are estimated to be infected with TB. The California Department of Public Health indicated that 2,189 (provisional data) cases were identified in the State in 2012 compared to 2,323 for 2011, a reduction of 134 cases. Riverside County’s case rate of 2.6 for 2012 exceeds the national objective of 1.0 case per 100,000 populations. The number of cases per year has ranged from 80 to 56 cases; rates are reflected in Figure 1.

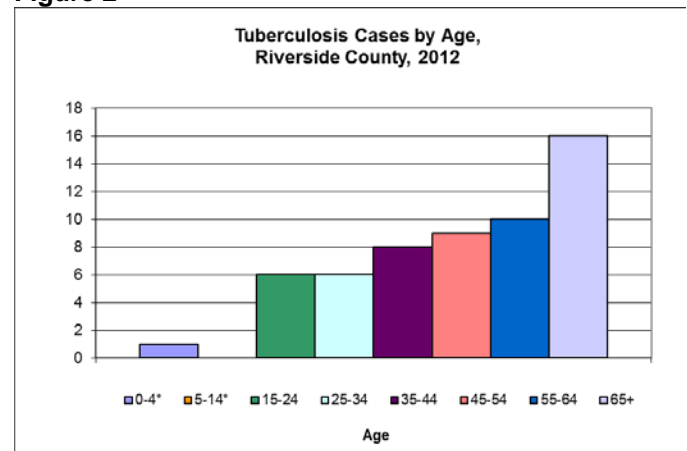
Figure 1



### Profile of TB Cases

A review of the demographic characteristics of reported cases for 2012 indicates that 46% of the individuals were 55 years or older. One case occurred in a child in the 0-4 year age group, indicating recent transmission. The age distribution is depicted in Figure 2.

Figure 2



Eighty (80) percent of reported cases were foreign born, with the majority of cases from Mexico.

Although the largest number of tuberculosis cases occurred in Western Riverside County, cases are distributed throughout Riverside County. The geographic distribution is reflected in Table 1.

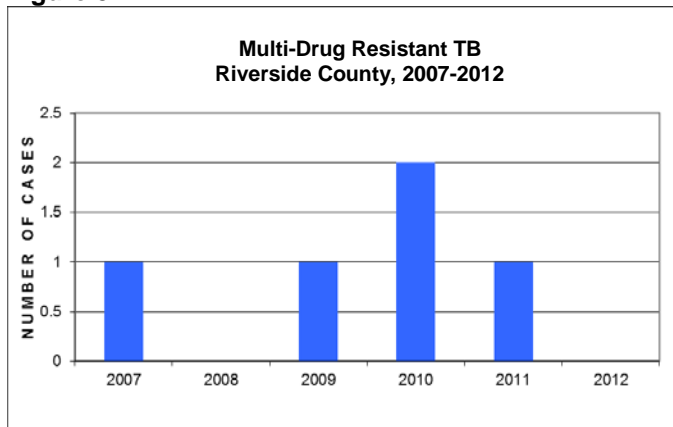
Table 1: N= 56

Geographic Area	Cases Reported
West	26
Mid-County	7
South	5
East	18

### Important TB Control Strategies

A key TB control strategy to move toward the control of tuberculosis is the early identification and appropriate treatment of individuals with active disease. The core regimen for pan-sensitive TB consists of INH, rifampin, PZA and ethambutol. Patients with Multiple-Drug Resistant (MDR) TB require treatment for 18-24 months with appropriate medications based on the drug susceptibility studies. No MDR TB cases were identified in 2012 in Riverside County (See Figure 3). All patients on treatment for TB are assessed for risk for non-adherence by a Public Health Nurse. At risk patients are enrolled in the Directly Observed Therapy Program (DOT).

Figure 3



### Nationwide Shortage of Isoniazid

The current shortage of Isoniazid (INH) presents a challenge for ensuring adequate treatment of patients with pan-sensitive TB disease and those with latent TB infection (LTBI). If the supply of INH is severely limited (< 3 week supply), the following actions should be taken:

- Prioritize INH use for treatment of active TB disease over treatment of LTBI

- Select alternative, effective treatment regimens for active TB disease that do not utilize INH
- Alternate regimens should be selected in accordance with national and state treatment guidelines
- Expert guidance is encouraged in the selection of alternative regimens

### TB-HIV Connection

It is important to assess individuals with tuberculosis for human immunodeficiency virus infection (HIV). Testing should occur at the time of TB diagnosis, unless the patient is known to be HIV positive, or a negative HIV test result was documented within the previous 6 months.

Co-infection with TB and HIV requires expert care and coordination of treatment for both diseases. A major concern in treating TB in HIV-infected persons is the interaction of rifampin (RIF) with certain anti-retroviral agents (some protease inhibitors [PIs] and non-nucleoside reverse transcriptase inhibitors [NRTIs]). Rifabutin, which has fewer problematic interactions, may be used as an alternative to RIF.

### Moving Toward TB Elimination

Although progress has been made at the national, state and local levels, in the fight against tuberculosis, the disease continues to impact individuals, their families and communities throughout the world.

The recognition of March 24 as world TB Day highlights the importance of thinking globally while acting locally to control tuberculosis. Collaboration between Public Health, the medical community and other key partners is essential for the control of this disease.

Tuberculosis is reportable to Public Health, Disease Control within 1 day of identification. Phone: (951) 358-5107 Fax: (951) 358-7922

