



MUMPS

CRUDE DATA	
Number of Cases	10
Annual Incidence ^a	
LA County	0.10 ^b
California	0.13
United States	
Age at Diagnosis	
Mean	41.0 years
Median	49.5 years
Range	1 – 76 years
Case Fatality	
LA County	0.0%
United States	

^a Cases per 100,000 population.

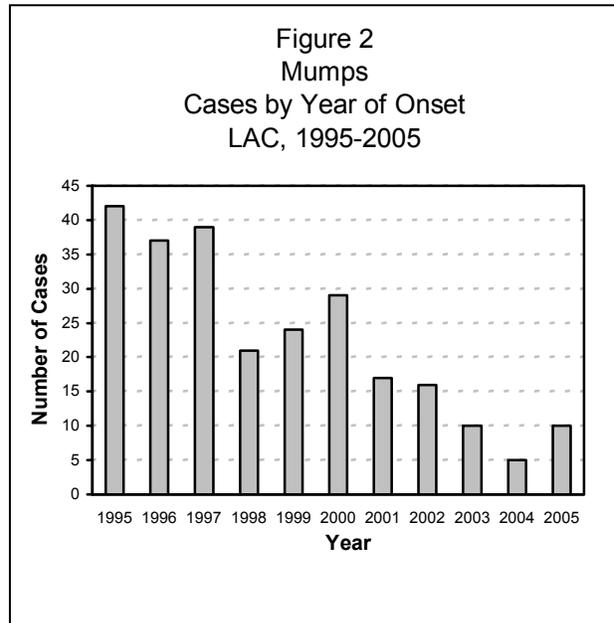
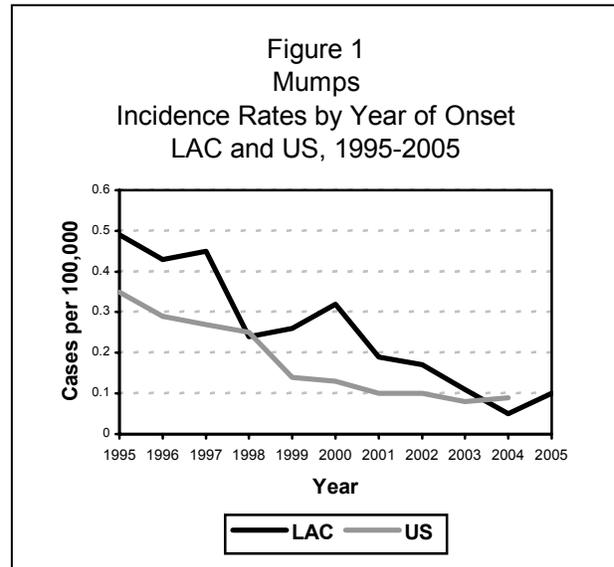
^b Rates based on less than 20 observations are unreliable.

DESCRIPTION

Mumps is a vaccine-preventable disease caused by an RNA paramyxovirus that is transmitted by direct contact with respiratory droplets from infected persons. Symptoms begin 14–18 days after exposure, with a range of 12–25 days, and include swelling of salivary glands, fever, and inflammation of the testes in teenage and adult males. Up to 20% of infected individuals may be asymptomatic. Sequelae include encephalitis, meningitis, orchitis, arthritis, and deafness. In addition, pregnant women who contract mumps are at increased risk of spontaneous abortions. Most reported cases are diagnosed based on clinical symptoms and do not have supporting laboratory confirmation (i.e., mumps IgM antibody assay). The minimum clinical criteria for mumps is an acute onset of unilateral or bilateral swelling of the parotid or other salivary gland lasting ≥ 2 days without other apparent cause. Although single probable or confirmed cases are reportable, only outbreaks of two or more cases are investigated.

DISEASE ABSTRACT

- The incidence of mumps cases in LAC has been steadily declining since 1995 (Figure 1).
- Of 50 suspect mumps reports received at the LAC Immunization Program during 2005, only 10 were identified as LAC mumps cases.

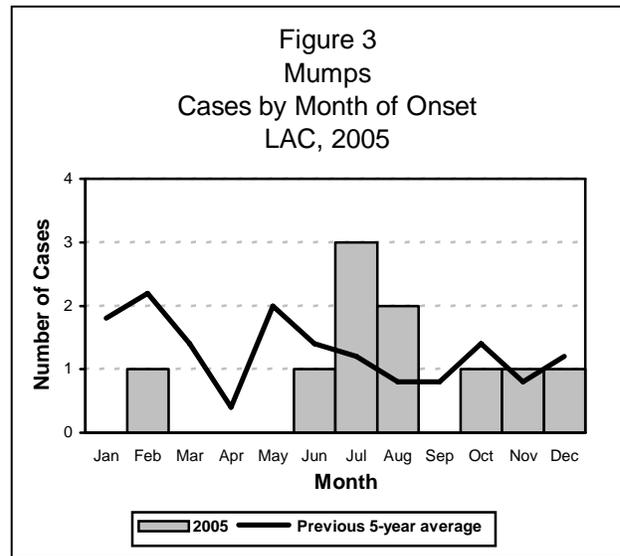




- During 2005, there were 47 reported cases in CA, of which 21% were reported in LAC.

IMMUNIZATION RECOMMENDATIONS

- Two doses of mumps-containing vaccine, usually given as Measles-Mumps-Rubella (MMR), are normally recommended to achieve immunity. The first dose is recommended at 12 months of age. The second dose can be given as early as four weeks after the first dose, but is usually given at ages 4 to 6 years. Vaccination is recommended for those who have no prior MMR, particularly if they are in a high-risk setting.
- Approximately 90% of those who receive two doses of the current live attenuated mumps vaccine develop immunity.
- Generally, persons can be considered immune to mumps if they were born before 1957, have serologic evidence of mumps immunity, have documentation of physician-diagnosed mumps, or have documentation of vaccination with at least one dose of live mumps vaccine on or after their first birthday.
- Women should not become pregnant within 4 weeks of vaccination.
- Individuals who are severely immunocompromised for any reason should not be given MMR vaccine.



STRATIFIED DATA

Trends: Since 1995, the annual number of cases of mumps has decreased by 76% (Figure 2). This decline reflects the effectiveness of the MMR vaccine in reducing the incidence of disease in the general population; however, the continued identification of cases indicates more work that needs to be done to vaccinate remaining individuals and prevent further transmission.

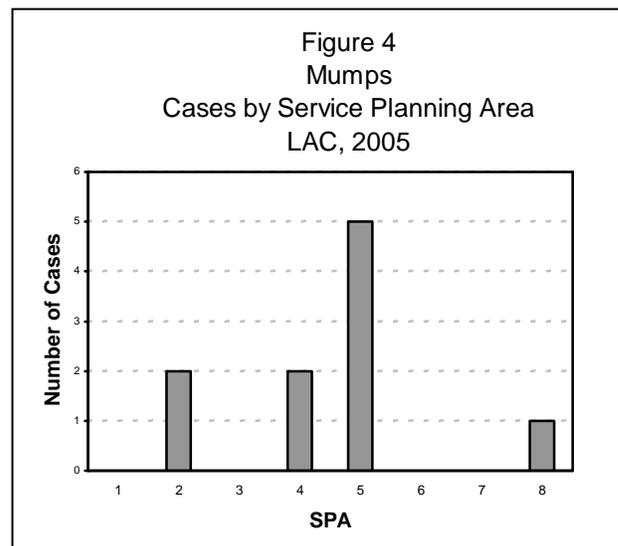
Seasonality: Historically, case reports have peaked during the winter and spring seasons. However, in 2005, 60% (n=6) of the cases occurred in the summer months with a peak in July (Figure 3).

Age: Similar to 2004, 80% (n=8) of all reported cases in 2005 were in adults over the age of 20.

Sex: The male-to-female ratio of the cases was 1:2.3. It is unknown why twice as many females than males have been reported.

Race/Ethnicity: More than half of the reported mumps cases occurred among non-Latinos. There were 4 White cases, 4 Asian cases, 1 Hispanic case, and 1 as unspecified race/ethnicity.

Location: Cases were reported in four of the 8 SPAs (Figure 4). Five of the cases (50%) resided in West (SPA 5). San Fernando Valley (SPA 2) and Metro (SPA 4) reported two cases each. South Bay (SPA 8) reported one case.





COMMENTS

The majority of reported individual (non-outbreak related) and non-lab confirmed clinical mumps cases among highly immunized populations are most likely caused by other agents such as coxsackie and parainfluenza group 3 viruses. Recurrent parotitis can also result from non-infectious etiologies. Determination of MMR vaccination status and appropriate laboratory testing (mumps IgM antibody assay) will help ensure that only true mumps cases are reported.

Cluster Identification: Two of the cases in 2005 were epidemiologically linked to each other. The cases were household contacts residing in SPA 5. Both were Asian females, aged 54 and 76 years old. Onset of mumps symptoms occurred in June and July. One of the cases was laboratory-confirmed with a positive mumps IgM antibody test result. Neither of the cases knew her vaccination status.

Vaccination Status: None of the cases had documented dates for their MMR vaccinations. One case (age 1) was never vaccinated. Nine cases did not know or remember their vaccination status.

Laboratory Confirmation: Eighty percent (n=8) of the cases had supporting laboratory confirmation.

ADDITIONAL RESOURCES

Additional information is available at:

- National Immunization Program – www.cdc.gov/ip
- Immunization Action Coalition – www.immunize.org
- LAC DHS, Immunization Program – www.lapublichealth.org/ip