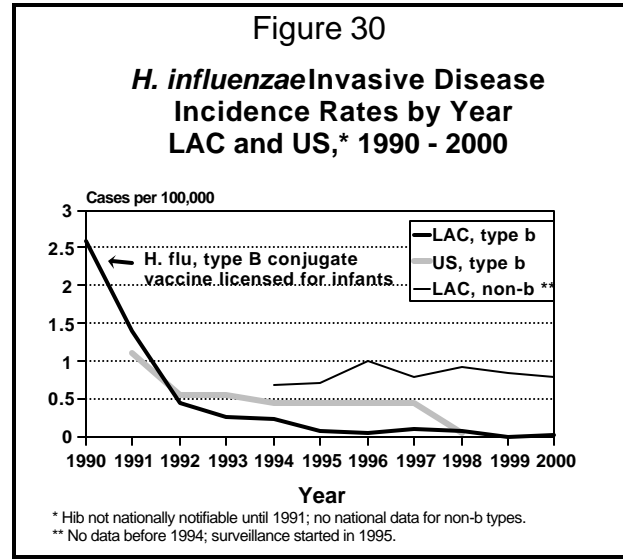


## HAEMOPHILUS INFLUENZAE INVASIVE DISEASE

CRUDE DATA	
Number of Cases	73
Annual Incidence <sup>a</sup>	
LA County	0.79
California	0.32 <sup>b</sup>
United States	0.43
Age at Onset	
Mean	44 years
Median	54 years
Range	birth -102 years
Case Fatality	
LA County	8%
United States	N/A



<sup>a</sup>Cases per 100,000 population.

<sup>b</sup>Cases per 100,000 persons, aged less than 30 years. In California, *H. influenzae* among persons > 29 years of age is not reportable.

### ETIOLOGY

*Haemophilus influenzae* can cause both invasive and non-invasive disease. *H. influenzae* invasive disease can cause meningitis, sepsis, pneumonia, cellulitis, and septic arthritis. *H. influenzae* can be transmitted by contact with the respiratory secretions of individuals colonizing the organism. There are six encapsulated, typable strains (a-f) and unencapsulated, nontypable strains of *H. influenzae*. The disease primarily affects infants and the elderly, as well as immunocompromised individuals and those who have abnormal splenic function. An effective vaccine against *H. influenzae* type b (Hib) was licensed in 1990. *H. influenzae* type b is the only type that is vaccine-preventable.

### DISEASE ABSTRACT

- The widespread use of the Hib vaccine since 1990 has dramatically decreased the incidence of *H. Influenzae* type b.
- In 2000, 73 cases of *H. influenzae* invasive disease were reported, with only one case reported as type b.
- No cases of Hib in LAC were reported in children aged less than 5 years.

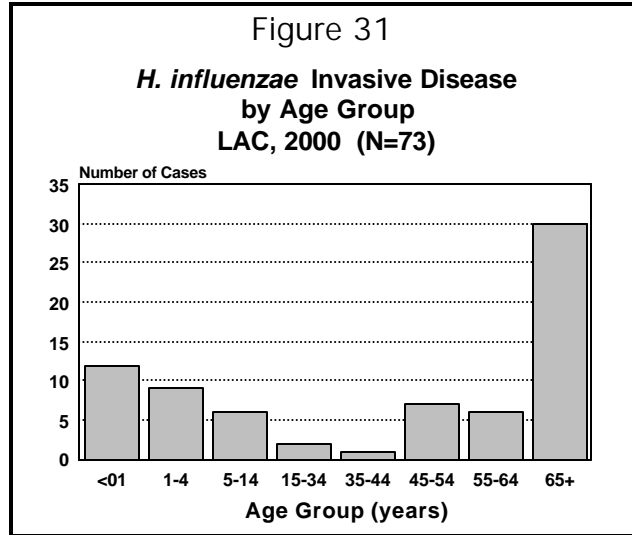
### STRATIFIED DATA

**Trends:** Only one case of Hib invasive disease was reported in LAC during 2000. Since the Hib vaccine was licensed in 1990, Hib invasive disease has decreased from an incidence of 2.6 cases per 100,000 population to nearly zero. Incidence rates for non-b serotypes of *H. influenzae* have not varied substantially in LAC since the start of data collection in 1994 (Figure 30).

**Age:** The incidence of *H. influenzae* invasive disease was highest in persons over 65 years of age and infants. The lowest incidence was found in persons aged 35-44 years and the highest incidence in persons aged 65 years and older. Infants most likely had the highest rate of disease, but the number of cases in that age group was too small to calculate a reliable rate.

**COMMENTS**

The only cases of *H. influenzae* investigated in LAC are those in persons aged under 30 years. Contacts of these cases are investigated and chemoprophylaxis is given when appropriate. Non-invasive disease caused by *H. influenzae*, such as conjunctivitis and respiratory infections, is neither investigated nor reported, regardless of the serotype.



***H. influenzae* type b**

One case of Hib was detected in a 75-year-old female with sepsis. No cases of Hib were identified in individuals under the age of 30. Over 95% of infants who receive three doses of the Hib conjugate vaccine will develop a protective immune response.

***H. influenzae*, non-b serotypes**

Most *H. influenzae* isolates in 2000 (32%) were non-typable and 17% were *H. aegyptius/H. influenzae* biotype III (Figure 32). Fourteen percent of the isolates were type f and 20% were not serotyped.

Six deaths were reported in 2000 (one non-typable, one type d, one *H. aegyptius/H. influenzae* biotype III, and three unknown). Their ages ranged from six years to 86 years.

**ADDITIONAL RESOURCES**

Additional information is available from the National Immunization Program at [www.cdc.gov/nip](http://www.cdc.gov/nip), from the Immunization Action Coalition at [www.immunize.org](http://www.immunize.org), and from the Acute Communicable Disease Control website at <http://lapublichealth.org/acd/procs/b73/b73index.htm>.

