

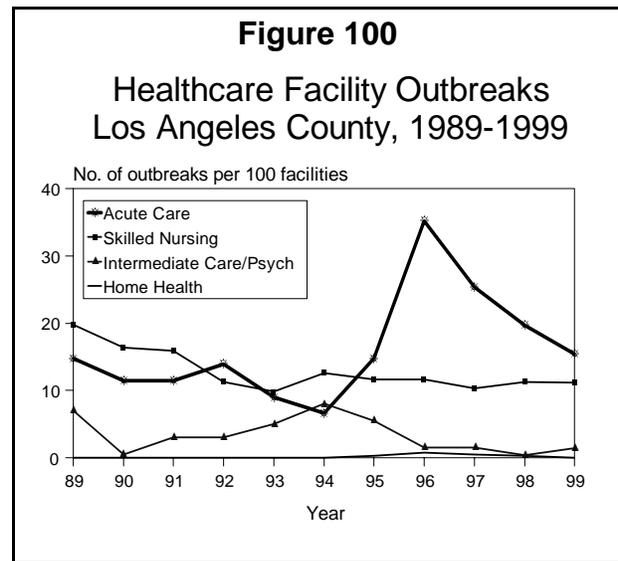
## HEALTHCARE FACILITY OUTBREAKS

### OUTBREAK DEFINITION AND ETIOLOGY

Outbreaks in healthcare organizations are defined as clusters of nosocomial (health-facility acquired) or home-healthcare-associated infections related in time and place or occurring above a baseline or threshold level for a facility or specific unit or ward.

### ABSTRACT

During 1999, outbreaks reported by acute-care hospitals declined for a third year after a record high outbreak rate recorded in 1996 (Figure 100, Table 13). In the acute-care setting outbreaks due to antimicrobial-resistant microorganisms and scabies continued to predominate. The outbreak rate in skilled-nursing facilities (SNFs) has stabilized over the past five years following a declining trend between 1989-93 (Figure 100).



**Table 13. Reported Outbreaks Occurring in Los Angeles County Healthcare Facilities, 1996-1999**

Type of Healthcare Facility (Number of Facilities Licensed in 2000)	1996		1997		1998		1999	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Acute-Care Hospitals (n = 117)	43	(45.7)	31	(40.8)	24	(35.8)	18	(28.6)
Subacute Care								
Home-Health Agencies (n = 217)	3	(3.2)	2	(2.6)	1	(1.5)	0	(0)
Intermediate Care/Psych (n = 281)	3	(3.2)	3	(4.0)	1	(1.5)	4	(6.3)
Skilled-Nursing Facilities (n = 366)	45	(47.9)	40	(52.6)	41	(61.2)	41	(65.1)
<b>Total</b>	<b>94</b>	<b>(100)</b>	<b>76</b>	<b>(100)</b>	<b>67</b>	<b>(100)</b>	<b>63</b>	<b>(100)</b>

### DATA

In acute-care hospitals, 18 outbreaks were reported (Table 13), a 25% decrease from 1998. Two hospitals reported more than one outbreak. Although acute-care outbreaks have declined in the past three years, the 18 outbreaks reported in 1999 represent a 34% increase since 1990. Nosocomial scabies outbreaks decreased from three in 1998 to only two in 1999 (Table 14). In 1998 nosocomial scabies cases accounted for 35% of all acute-care-outbreak-associated cases, while in 1999 scabies cases represented only 4.1% of acute care cases. In 1999 the etiologic agents contributing the largest number of cases in acute care outbreaks were *M.gordonae* (77/219) followed by VRE (48/219); the *M. gordonae* outbreak involved primarily colonizations in

immunosuppressed patients and was most likely associated with contamination/colonization of the hospital's water supply.

During 1999, 41 outbreaks were reported in skilled-nursing facilities and four in intermediate care/psychiatric facilities (Table 13). Four SNFs reported more than one outbreak. Although scabies outbreaks were the most frequently reported in subacute-care settings (21/45), this number has remained relatively stable since 1990 (Table 15). The number of outbreaks and the number of cases of gastroenteritis (unspecified and NLV) increased from 45 cases (3 outbreaks) in 1998 to 251 cases (9 outbreaks) in 1999. The 251 cases represented 62% of sub-acute care outbreak associated cases. Eight of the nine gastroenteritis outbreaks were reported from SNFs. In 1999 intermediate-care facilities reported four outbreaks (varicella, gastroenteritis, influenza, and scabies). Previous years reported predominantly ectoparasitic infestations.

**Table 14. Acute-Care Hospital Outbreaks by Disease/Condition  
Los Angeles County, 1999**

<b>Disease/Condition/Etiologic Agent</b>	<b>Number of Outbreaks</b>	<b>Number of Cases</b>
Methicillin-resistant <i>Staphylococcus aureus</i>	3	23
Vancomycin-resistant <i>Enterococcus sp.</i>	2	48
<i>Pseudomonas aeruginosa</i>	2	21
Scabies	2	9
<i>Mycobacterium gordonae</i>	1	77
<i>Acinetobacter baumannii</i>	1	13
Conjunctivitis	1	6
<i>Clostridium difficile</i>	1	6
Methicillin-sensitive <i>Staphylococcus aureus</i>	1	4
<i>Enterobacter aerogenes</i>	1	3
Necrotizing Enterocolitis	1	3
RSV	1	3
<i>Malassezia furfur</i>	1	3
<b>Total</b>	<b>18</b>	<b>219</b>

**Table 15. Subacute-Care Setting\* Outbreaks by Disease/Condition  
Los Angeles County, 1999**

<b>Disease/Condition</b>	<b>Number of Outbreaks</b>	<b>Number of Cases</b>
Scabies	21	94
Methicillin-resistant <i>S. aureus</i>	9	26
Gastroenteritis, unspecified	7	150
Influenza	3	26
Norwalk like virus	2	101
Varicella/zoster	1	4
VRE	1	2
Hepatitis B	1	4
<b>Total</b>	<b>45</b>	<b>407</b>

\*Skilled-Nursing, Intermediate-Care/Psychiatric, Home Health

## COMMENTS

Hospital outbreaks are principally managed by hospital infection control practitioners and monitored by ACDC staff, with more extensive oversight provided for outbreaks in facilities with minimal infection control resources and those with higher morbidity or mortality potential. Community Health Services district staff have primary responsibility for disease investigations in subacute-care settings. The number of scabies outbreaks in acute-care hospitals decreased from 13, 11, and three in 1996, 1997, and 1998 respectively, to only 2 in 1999. Distribution of ACDC's guideline for management of scabies in healthcare facilities and increased awareness of the potential for scabies transmission in the acute-care setting may have contributed to this decrease. Developing strategies to prevent and control the emergence and spread of antimicrobial-resistant microorganisms is a priority issue in both subacute and acute-care settings. This will require evaluating antimicrobial prescribing practices as well as continued emphasis on appropriate infection control practices.