

National Enteric Disease Surveillance: *Listeria* Annual Summary, 2007

Listeria Annual Summary, 2007

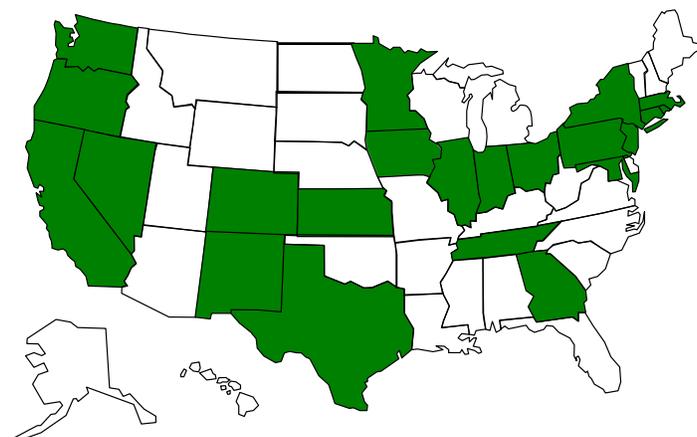
Listeria Initiative Data

An overview of the *Listeria* Initiative surveillance system is available at http://www.cdc.gov/nationalsurveillance/listeria_surveillance.html.

States reporting at least one listeriosis case to the *Listeria* Initiative during 2007 are shown in Figure 1.

- During 2007, 22 states reported 311 listeriosis cases to the *Listeria* Initiative.
- 242 cases (78%) were non-pregnancy-associated.
- 66 cases (21%) were pregnancy-associated; pregnancy status was not ascertained for three cases.

Figure 1. States reporting to the *Listeria* Initiative, 2007 (N=22).



Demographic and clinical characteristics of non-pregnancy-associated and pregnancy-associated listeriosis cases are shown in Tables 1 and 2, respectively.

- The median age of case-patients was 72 for non-pregnancy-associated cases and 27 for pregnancy-associated cases.
- Hispanic ethnicity was substantially more common in case-patients with pregnancy-associated cases (67%) than with non-pregnancy-associated cases (17%).
- The case-fatality ratio was high in all case categories. Twenty-five percent of non-pregnancy associated cases died; 17% of pregnancy-associated cases led to fetal death, and 5% of live-born infants died.

Table 1. Demographic and clinical characteristics of non-pregnancy-associated listeriosis cases reported to the *Listeria* Initiative, 2007 (N=242).

Characteristic	n (%)
Age in Years (N=242)	
Range (median)	1-99 (72)
Female Sex (N=242)	127 (52)
Hispanic Ethnicity (N=169)	29 (17)
Race (N=206)	
White	180 (87)
African American	18 (9)
Asian	4 (2)
Multiracial/Other	4 (2)
Source of Isolate (N=241)*	
Blood	205 (85)
CSF	31 (13)
Stool	3 (1)
Other**	17 (7)
Hospitalized (N=231)	204 (88)
Died (N=212)	52 (25)
*Fifteen cases had more than one site of isolation	
**Other sources include sites such as pleural fluid, bone, urine, and brain tissue.	

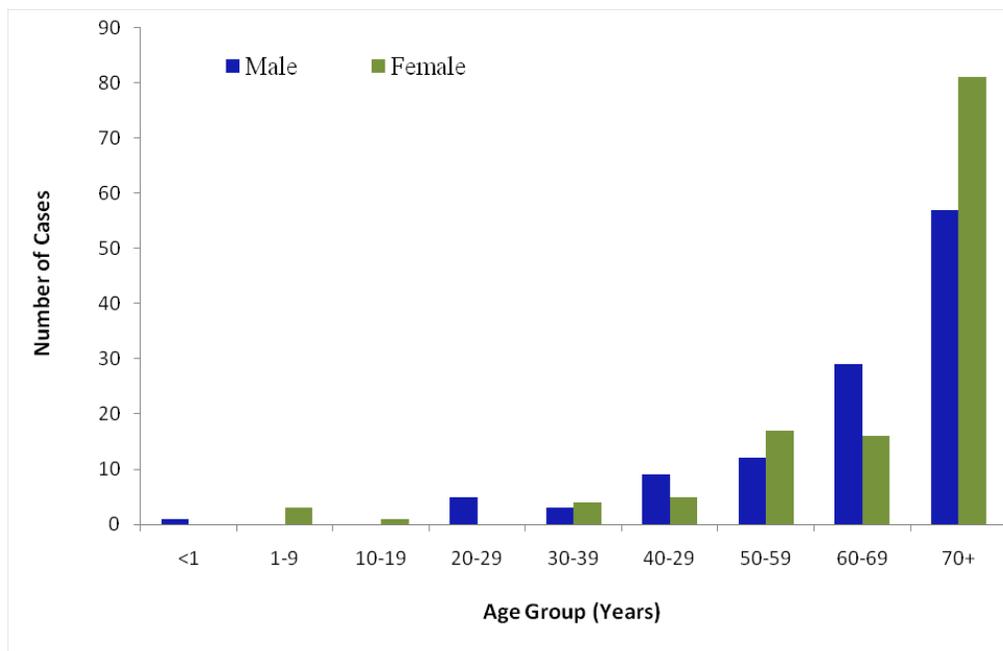
Table 2. Demographic and clinical characteristics of pregnancy-associated listeriosis cases reported to the *Listeria* Initiative, 2007 (N=66).

Characteristic	n (%)
Mother's Age in Years (N=38)	
Range (median)	16-42 (27)
Hispanic Ethnicity (N=49)	33 (67)
Race (N=48)	
White	40 (83)
African American	6 (13)
Asian	2 (4)
Multiracial/Other	0
Source of Isolate (N=65)*	
Blood from Neonate	26 (40)
Blood from Mother	19 (29)
CSF from Neonate	15 (23)
Placenta	10 (15)
Other**	5 (8)
Pregnancy Outcome (N=66)	
Live Birth	52 (78)
Fetal Death	11 (17)
Still Pregnant	3 (5)
Hospitalized-Mothers (N=53)***	25 (47)
Hospitalized-Live Born Infants (N=46)***	41 (89)
Died-Mothers (N=45)	0
Died-Live Born Infants (N=40)	2 (5)
*Ten cases had more than one site of isolation	
**Other sources include sites such as vaginal, sputum from neonate, and stool from neonate.	
***Hospitalizations related to <i>Listeria</i> infection.	

Non-pregnancy-associated cases reported to the *Listeria* Initiative during 2007 are shown by age group and sex in Figure 2.

- As in previous years, the number of cases per 10-year age group increased with age.

Figure 2. Non-pregnancy-associated listeriosis cases, by age group and sex, *Listeria* Initiative, 2007 (N=243).



The CDC *Listeria* Reference Laboratory serotypes *Listeria monocytogenes* isolates from cases reported to the *Listeria* Initiative. Serotypes identified from cases reported in 2007 are shown in Table 3.

- Serotype 4b remains the most commonly identified serotype, accounting for 46% of isolates.

Table 3. Serotypes of *Listeria monocytogenes* among cases reported to the *Listeria* Initiative, 2007 (N=213).*

Serotype	n (%)
4b	97 (46)
1/2a	44 (21)
1/2b	35 (16)
Other Serotypes	18 (8)
Untypeable	19 (9)

*Isolates serotyped at the CDC *Listeria* Reference Laboratory

NNDSS Data

The National Notifiable Disease Surveillance System (NNDSS) collects and compiles reports of nationally notifiable infectious diseases, including *Listeria*. The 2007 NNDSS report is available at <http://www.cdc.gov/mmwr/PDF/wk/mm5653.pdf>.

- A total of 808 cases of listeriosis were reported to NNDSS during 2007 (1).

NORS (Outbreak) Data

The National Outbreak Reporting System (NORS) collects reports of foodborne, waterborne, enteric person-to-person, and animal contact-associated disease outbreaks from state and territorial public health agencies. The full NORS report is available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5931a1.htm>.

- In 2007, one listeriosis outbreak was reported to CDC (2); this outbreak was associated with pasteurized milk and caused five illnesses and three deaths (3).

References

1. CDC. Summary of notifiable diseases—United States, 2007. *MMWR* 2009; 56(53): 1-94.
2. CDC. Surveillance for foodborne disease outbreaks—United States, 2007. *MMWR* 2010; 59(31):1277-1280.
3. Cumming, M., P. Kludt, B. Matyas, et. al. Outbreak of *Listeria monocytogenes* infection associated with pasteurized milk from a local dairy—Massachusetts, 2007. *MMWR* 2008; 57(40): 1097-1100.