

# National Enteric Disease Surveillance: *Listeria* Annual Summary, 2010

## *Listeria* Annual Summary, 2010

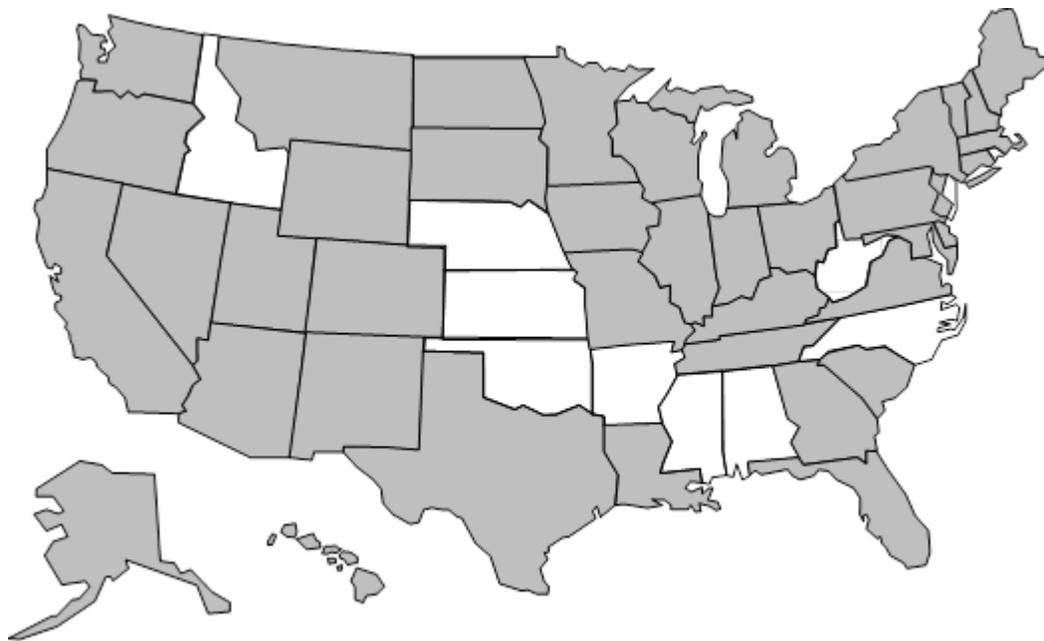
### *Listeria* Initiative Data

An overview of the *Listeria* Initiative surveillance system is available at [http://www.cdc.gov/nationalsurveillance/listeria\\_surveillance.html](http://www.cdc.gov/nationalsurveillance/listeria_surveillance.html).

States reporting at least one listeriosis case to the *Listeria* Initiative during 2010 are shown in Figure 1.

- Forty-one states and the District of Columbia reported 568 listeriosis cases.
  - 496 cases (87%) were non-pregnancy-associated.
  - 72 cases (13%) were pregnancy-associated.

Figure 1. States reporting at least one case of listeriosis to the *Listeria* Initiative, 2010 (N=41)\*.



\*Reporting states are indicated in gray.

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

- The median age of patients was 72 years for non-pregnancy-associated cases and 28 years for pregnancy-associated cases.
- Hispanic ethnicity was substantially more common in patients with pregnancy-associated cases (43%) than with non-pregnancy-associated cases (13%).
- Twenty percent of patients with non-pregnancy associated cases died. Nineteen percent of pregnancy-associated cases led to fetal death; 6% of live-born infants with cases of listeriosis died.

Table 1. Demographic and clinical characteristics of patients with non-pregnancy-associated listeriosis reported to the *Listeria* Initiative, 2010 (n=496).

Characteristic (number with information)	n	%
Age in years (n=496)		
Median (range)	72 (0-102)	
Female sex (n=494)	220	45
Hispanic ethnicity (N=393)*	51	13
Race (N=418)*		
White	340	81
African American	48	12
Asian	30	7
Source of isolate <sup>†</sup>		
Blood	417	85
CSF	69	14
Stool	2	<1
Other <sup>§</sup>	40	8
Hospitalized (n=464)	425	94
Died (n=387)	76	20
*Does not include reports with missing or unknown ethnicity (n=101) or race (n=76).		
<sup>†</sup> Thirty-six cases had more than one site of isolation		
<sup>§</sup> Peritoneal fluid, wound, and other sites.		

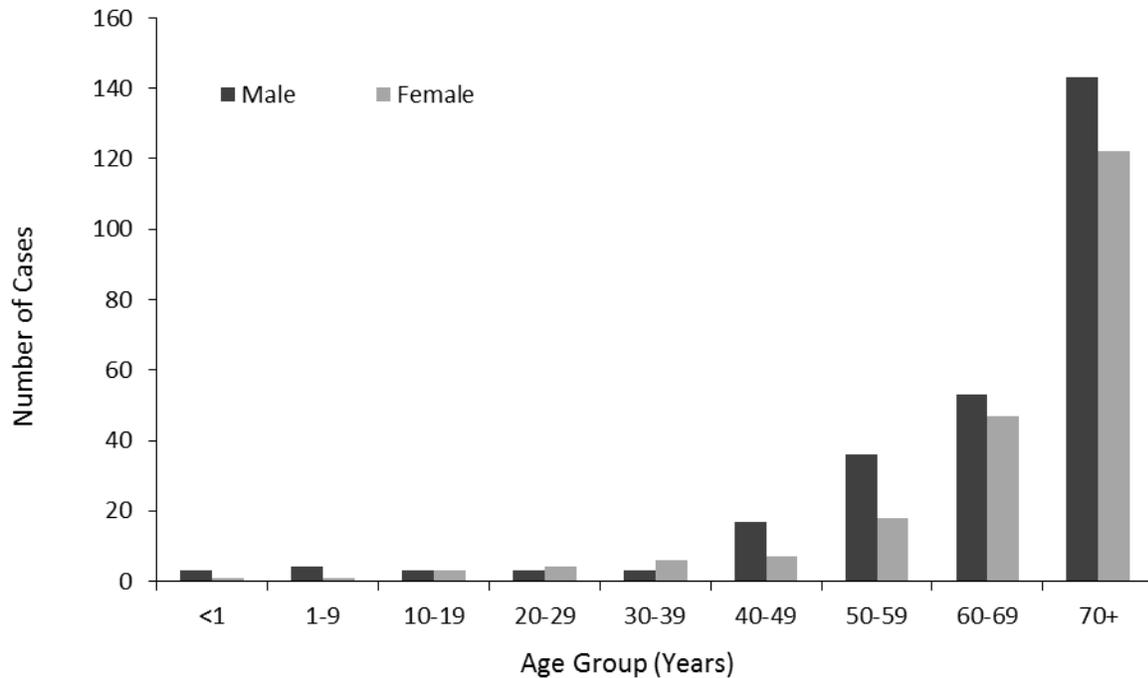
Table 2. Demographic and clinical characteristics of patients with pregnancy-associated listeriosis reported to the *Listeria* Initiative, 2010 (n=74).\*

Characteristic (number with information)	n	%
Mother's age in years (n=52)		
Median (range)	28 (7-39)	
Hispanic ethnicity (n=65) <sup>†</sup>	28	43
Race (n=57) <sup>†</sup>		
White	45	79
African American	8	14
Asian	3	5
Multiracial/Other	1	2
Source of isolate (n=73) <sup>§</sup>		
Blood from neonate	33	45
Blood from mother	24	33
Placenta	19	26
CSF from neonate	9	12
Amniotic fluid	1	1
Other <sup>¶</sup>	12	10
Hospitalization**		
Mothers (n=74)	38	51
Live born infants (n=52)	47	90
Pregnancy outcome (n=72)		
Live birth, survived	34	47
Live birth, died	2	3
Live birth, unknown outcome	16	22
Fetal Death	14	19
Still pregnant at time of case report	6	8
<p>*Cases involving mother-infant pairs are counted as a single case.  <sup>†</sup>Does not include reports with missing or unknown ethnicity (n=9) or race (n=17).  <sup>§</sup>In one case, four sites of isolation were reported; in three cases, three sites of isolation were reported; in 16 cases, two sites of isolation were reported.  <sup>¶</sup>Urine and other sites.  **Hospitalization related to <i>Listeria</i> infection.</p>		

Patients with non-pregnancy-associated listeriosis reported to the *Listeria* Initiative during 2010 are shown by patient 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. Patients with non-pregnancy-associated listeriosis, by patient age group and sex, *Listeria* Initiative, 2010 (n=474)



The *Listeria* Initiative questionnaire was designed not only for reporting of clinical characteristics of cases but also to assist public health investigation with a standardized questionnaire on food exposures. It assisted in implicating foods in at least three investigations in 2010:

- The Texas State Health Services determined that an outbreak of ten cases was due to celery served in a hospital,
- The Louisiana Department of Health and Hospitals determined that an outbreak of eight cases was due to hog head cheese (1), and
- State partners and CDC determined that a multistate outbreak of six cases was due to Mexican-style cheese made from pasteurized milk.

The CDC *Listeria* Reference Laboratory serotypes *Listeria monocytogenes* isolates from cases reported to the *Listeria* Initiative. Serotypes identified from cases reported in 2010 are shown in Table 3.

- Serotype 4b remained the most commonly identified serotype, accounting for 49% of isolates.

Table 3. Serotypes of *Listeria monocytogenes* isolated in cases reported to the *Listeria* Initiative, 2010 (n=346).

Serotype	n	%
4b	170	49
1/2a	91	26
1/2b	56	16
Other Serotypes	19	5
Untypeable	10	3

### **NNDSS Data**

The National Notifiable Disease Surveillance System (NNDSS) collects and compiles reports of nationally notifiable infectious diseases, including listeriosis. Reports can be found at [http://www.cdc.gov/mmwr/mmwr\\_nd/index.html](http://www.cdc.gov/mmwr/mmwr_nd/index.html)

### **Outbreak Data**

The Foodborne Disease Outbreak Surveillance System (FDOSS) collects reports of foodborne disease outbreaks from local, state, tribal, and territorial public health agencies. Reports can be found at [http://cdc.gov/outbreaknet/surveillance\\_data.html](http://cdc.gov/outbreaknet/surveillance_data.html).

### **References**

1. Centers for Disease Control and Prevention (CDC). Outbreak of invasive listeriosis associated with the consumption of hog head cheese --- Louisiana, 2010. *MMWR* 2011; 60(13): 401-405.

### **Reference Citation:**

**Centers for Disease Control and Prevention (CDC). National *Listeria* Surveillance Annual Summary, 2010. Atlanta, Georgia: US Department of Health and Human Services, CDC, 2012.**