

**MINNESOTA DEPARTMENT OF HEALTH
EMERGING INFECTIONS PROGRAM**

**REPORTED CASES OF INVASIVE BACTERIAL DISEASE
JANUARY 1, 2002 - DECEMBER 31, 2003**

<u>PATHOGEN</u>	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		
	<u>No.</u>	<u>Rate per 100,000*</u>	<u>No.</u>	<u>Rate per 100,000*</u>	
<i>Neisseria meningitidis</i>		36	0.73	29	0.59
Serogroup B	8			8	
Serogroup C	17			16	
Serogroup Y	9			3	
Serogroup W135	1			1	
Serogroup X	1			0	
Not groupable	0			1	
Reported but isolate not available	0			0	
<i>Haemophilus influenzae</i>		52	1.06	57	1.16
type a	2			0	
type b	1			5	
type c	1			2	
type d	2			0	
type e	4			4	
type f	11			8	
Non-typeable	22			34	
Reported but isolate not available	9			4	
Group A streptococcus		147	2.99	181	3.68
Group B streptococcus		312	6.34	329	6.69
<i>Streptococcus pneumoniae</i>		598	12.16	607	12.34

*Annual rate using populations from the U.S. Bureau of the Census 2000

Note: Active surveillance for these pathogens began April 1, 1995. Previous reports have summarized data for 4/1/95-12/31/02. This current report can also be located via the MDH Web Page at: www.health.state.mn.us

MDH Emerging Infections Program (612) 676-5414

TABLE 2

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
NEISSERIA MENINGITIDIS, JANUARY 1, 2002 - DECEMBER 31, 2003

	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		
RESIDENCE				OUTCOME					
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	8	(22)	19	(66)	Yes	31	(86)	26	(90)
<u>Greater Minnesota</u>	<u>28</u>	<u>(78)</u>	<u>10</u>	<u>(34)</u>	<u>No</u>	<u>5</u>	<u>(14)</u>	<u>3</u>	<u>(10)</u>
TOTAL	36	(100)	29	(100)	TOTAL	36	(100)	29	(100)
AGE				SITE OF ISOLATE CULTURE					
<u>Age (Years)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<1	5	(14)	2	(7)	Blood	22	(61)	15	(52)
1-4	6	(17)	2	(7)	CSF	13	(36)	9	(31)
5-9	2	(6)	2	(7)	<u>Other</u>	<u>1</u>	<u>(3)</u>	<u>5</u>	<u>(17)</u>
10-19	5	(14)	9	(31)	TOTAL	36	(100)	29	(100)
20-29	3	(8)	5	(17)					
30-39	1	(3)	3	(10)					
40-49	3	(8)	6	(21)					
50-59	1	(3)	0	(0)					
<u>60+</u>	<u>10</u>	<u>(28)</u>	<u>0</u>	<u>(0)</u>					
TOTAL	36	(100)	29	(100)					
GENDER				TYPE OF INFECTION					
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Male	17	(47)	15	(52)	Bacteremia	17	(47)	4	(14)
<u>Female</u>	<u>19</u>	<u>(53)</u>	<u>14</u>	<u>(48)</u>	Meningitis	16	(44)	17	(59)
TOTAL	36	(100)	29	(100)	Pneumonia	3	(8)	2	(7)
					Septic arthritis	0	(0)	1	(3)
					Pericarditis	0	(0)	1	(3)
					Otitis	0	(0)	0	(0)
					<u>Other</u>	<u>0</u>	<u>(0)</u>	<u>4</u>	<u>(14)</u>
					TOTAL	36	(100)	29	(100)
RACE				SEROGROUP					
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Serogroup</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
White Only	15	(42)	12	(41)	B	8	(22)	8	(28)
Black Only	2	(6)	3	(10)	C	17	(47)	16	(55)
American Indian/ Alaskan Native Only	1	(3)	0	(0)	Y	9	(25)	3	(10)
Asian/Pacific Isl. Only	0	(0)	0	(0)	W135	1	(3)	1	(3)
≥ 2 Races	0	(0)	0	(0)	X	1	(3)	0	(0)
Other Only	3	(8)	1	(3)	Not groupable	0	(0)	1	(3)
<u>Unknown</u>	<u>15</u>	<u>(42)</u>	<u>13</u>	<u>(45)</u>	<u>Unknown</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
TOTAL	36	(100)	29	(100)	TOTAL	36	(100)	29	(100)

Cases of *Neisseria meningitidis* Invasive Disease by Culture Date, Minnesota January 1, 2002 - December 31, 2003

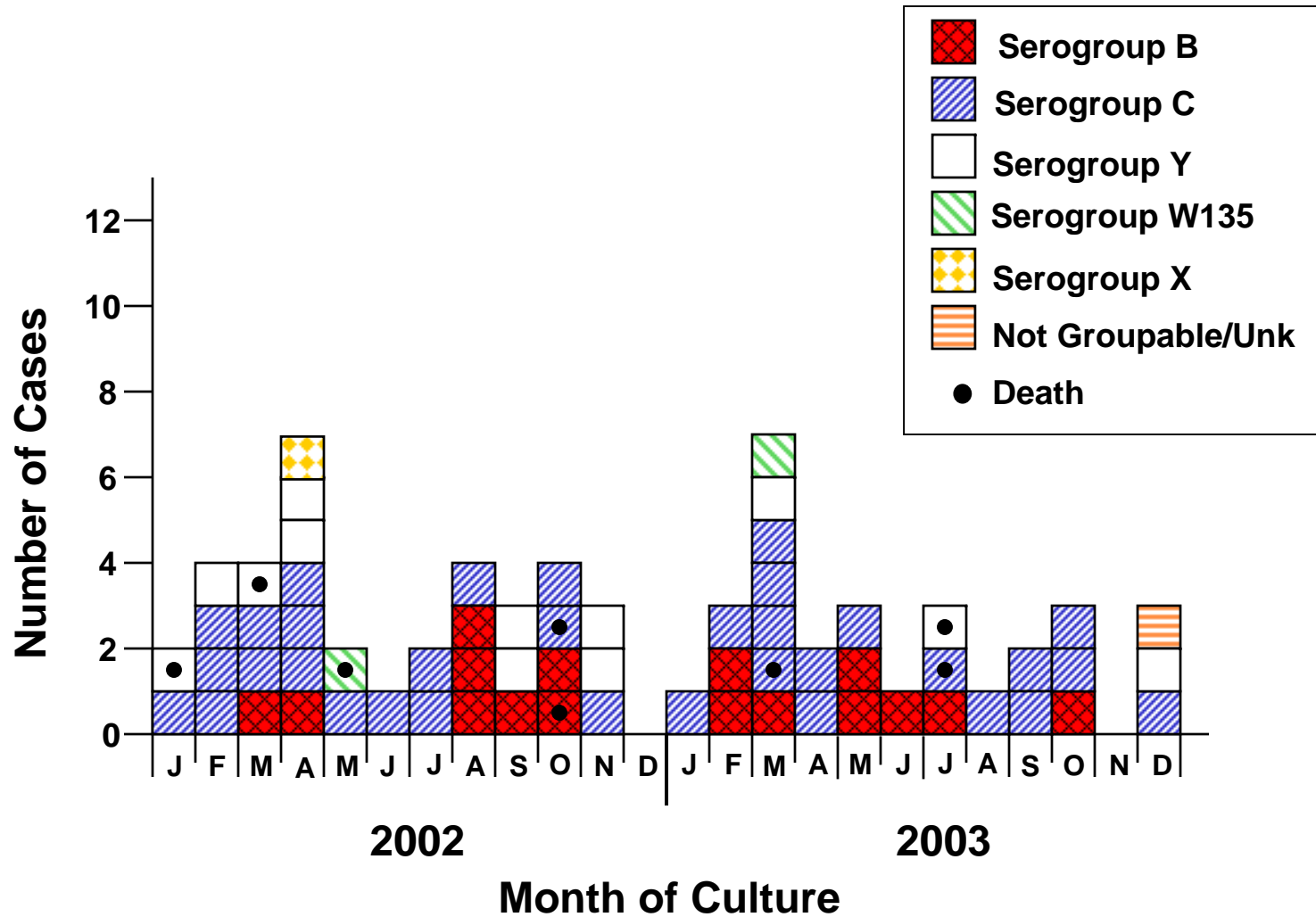


TABLE 3

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
HAEMOPHILUS INFLUENZAE, JANUARY 1, 2002 - DECEMBER 31, 2003

	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		
RESIDENCE					OUTCOME				
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	24	(46)	27	(47)	Yes	49	(94)	49	(86)
<u>Greater Minnesota</u>	<u>28</u>	<u>(54)</u>	<u>30</u>	<u>(53)</u>	<u>No</u>	<u>3</u>	<u>(6)</u>	<u>8</u>	<u>(14)</u>
TOTAL	52	(100)	57	(100)	TOTAL	52	(100)	57	(100)
AGE					SITE OF ISOLATE CULTURE				
<u>Age (Years)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<1	8	(15)	8	(14)	Blood	41	(79)	49	(86)
1-4	0	(0)	4	(7)	CSF	4	(8)	3	(5)
5-9	1	(2)	1	(2)	Peritoneal	0	(0)	1	(2)
10-19	3	(6)	3	(5)	Joint	2	(4)	1	(2)
20-29	4	(8)	0	(0)	Pleural fluid	2	(4)	0	(0)
30-39	2	(4)	1	(2)	<u>Other</u>	<u>3</u>	<u>(6)</u>	<u>3</u>	<u>(5)</u>
40-49	0	(0)	0	(0)	TOTAL	52	(100)	57	(100)
50-59	11	(21)	10	(18)					
60-69	4	(8)	8	(14)					
<u>70+</u>	<u>19</u>	<u>(37)</u>	<u>22</u>	<u>(39)</u>					
TOTAL	52	(100)	57	(100)					
GENDER					TYPE OF INFECTION				
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Male	31	(60)	29	(51)	Bacteremia	17	(33)	18	(32)
<u>Female</u>	<u>21</u>	<u>(40)</u>	<u>28</u>	<u>(49)</u>	Pneumonia	17	(33)	23	(40)
TOTAL	52	(100)	57	(100)	Meningitis	7	(13)	4	(7)
					Cellulitis	1	(2)	1	(2)
					Peritonitis	0	(0)	1	(2)
					Epiglottitis	1	(2)	2	(4)
					Chorioamnionitis	0	(0)	0	(0)
					Arthritis	1	(2)	2	(4)
					Sinusitis	0	(0)	0	(0)
					<u>Other</u>	<u>8</u>	<u>(15)</u>	<u>6</u>	<u>(11)</u>
					TOTAL	52	(100)	57	(100)
RACE									
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>					
White Only	23	(44)	32	(56)					
Black Only	3	(6)	5	(9)					
American Indian/ Alaskan Native Only	3	(6)	1	(2)					
Asian/Pacific Isl. Only	1	(2)	0	(0)					
≥ 2 Races	1	(2)	0	(0)					
Other Only	2	(4)	1	(2)					
<u>Unknown</u>	<u>19</u>	<u>(37)</u>	<u>18</u>	<u>(32)</u>					
TOTAL	52	(100)	57	(100)					

TABLE 3 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
HAEMOPHILUS INFLUENZAE, JANUARY 1, 2002 - DECEMBER 31, 2003

	<u>1/1/2002-</u> <u>12/31/2002</u>		<u>1/1/2003-</u> <u>12/31/2003</u>	
	ISOLATE SEROTYPE			
<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
a	2	(4)	0	(0)
b	1	(2)	5	(9)
c	1	(2)	2	(4)
d	2	(4)	0	(0)
e	4	(8)	4	(7)
f	11	(21)	8	(14)
Non-typeable	22	(42)	34	(60)
<u>Missing</u>	<u>9</u>	<u>(17)</u>	<u>4</u>	<u>(7)</u>
TOTAL	52	(100)	57	(100)

SEROTYPE B (Hib) CASES BY AGE

<u>Age (Years)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<1	1	(100)	2	(40)
1-4	0	(0)	0	(0)
5-9	0	(0)	0	(0)
10-14	0	(0)	0	(0)
15-19	0	(0)	0	(0)
20-39	0	(0)	0	(0)
40-59	0	(0)	2	(40)
<u>60+</u>	<u>0</u>	<u>(0)</u>	<u>1</u>	<u>(20)</u>
TOTAL	1	(100)	5	(100)

Cases of *Haemophilus influenzae* Invasive Disease by Culture Date, Minnesota January 1, 2002 - December 31, 2003

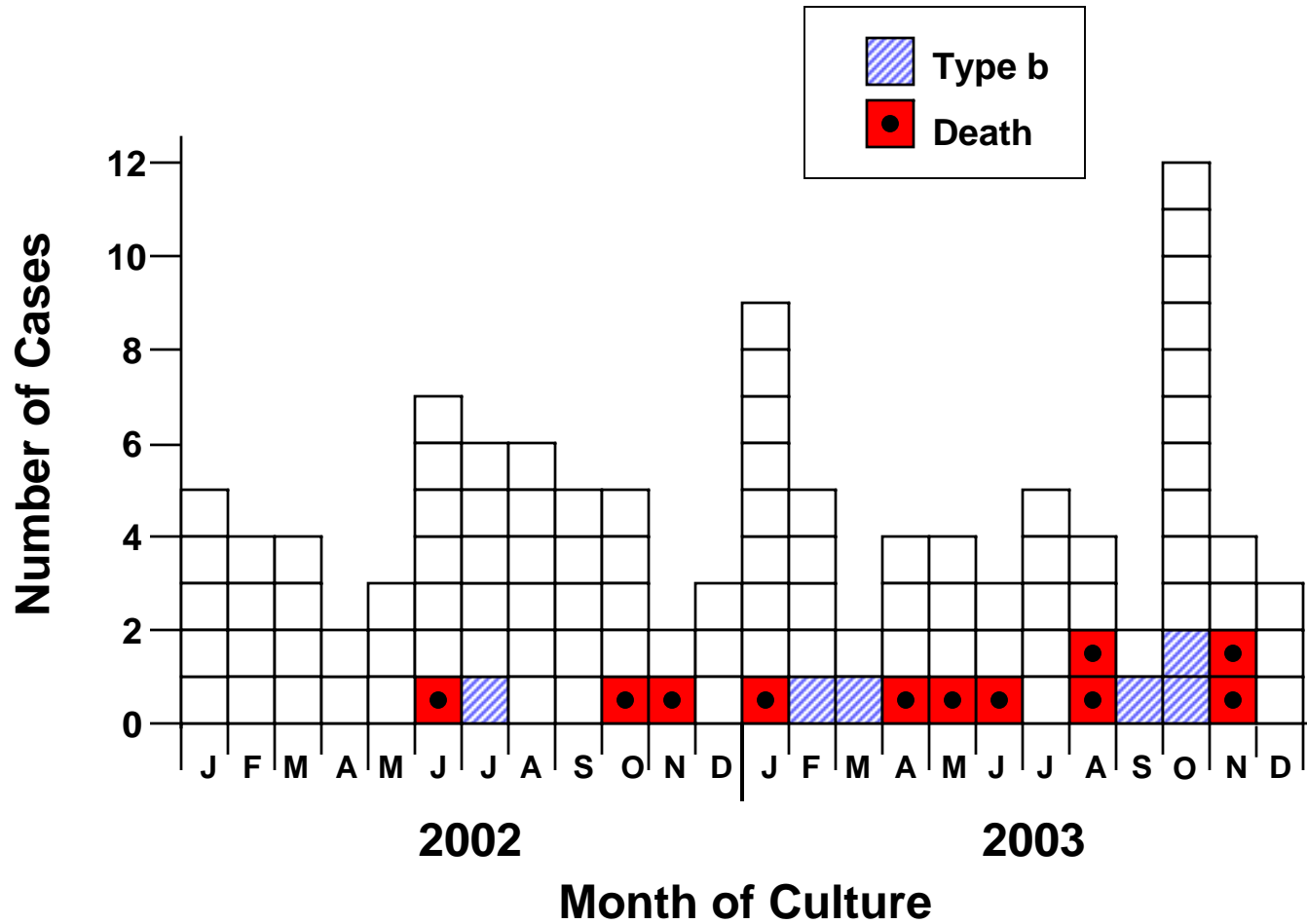


TABLE 4

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP A STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

	<u>1/1/02-</u> <u>12/31/2002</u>		<u>1/1/03-</u> <u>12/31/2003</u>		<u>1/1/02-</u> <u>12/31/2002</u>		<u>1/1/03-</u> <u>12/31/2003</u>		
RESIDENCE					SITE OF ISOLATE CULTURE				
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	82	(56)	98	(54)	Blood only	92	(63)	101	(56)
<u>Greater Minnesota</u>	<u>65</u>	<u>(44)</u>	<u>83</u>	<u>(46)</u>	CSF only	1	(1)	0	(0)
TOTAL	147	(100)	181	(100)	Blood and other	5	(3)	22	(12)
AGE					Joint	11	(7)	19	(10)
<u>Age (Years)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	Surgical Specimen	7	(5)	0	(0)
<1	2	(1)	1	(1)	Peritoneal	2	(1)	2	(1)
1-4	6	(4)	13	(7)	Pleural	5	(3)	6	(3)
5-9	7	(5)	12	(7)	Middle ear	1	(1)	0	(0)
10-19	10	(7)	9	(5)	Bone	0	(0)	2	(1)
20-29	6	(4)	9	(5)	Surgical Aspirate	5	(3)	0	(0)
30-39	11	(7)	20	(11)	Muscle	8	(5)	8	(4)
40-49	19	(13)	23	(13)	Internal Body Site	1	(1)	5	(3)
50-59	19	(13)	11	(6)	<u>Other sterile site</u>	<u>9</u>	<u>(6)</u>	<u>16</u>	<u>(9)</u>
60-69	23	(16)	27	(15)	TOTAL	147	(100)	181	(100)
<u>70+</u>	<u>44</u>	<u>(30)</u>	<u>56</u>	<u>(31)</u>	TYPE OF INFECTION				
TOTAL	147	(100)	181	(100)	<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
GENDER					Bacteremia only	30	(20)	45	(25)
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	Meningitis	1	(1)	0	(0)
Male	73	(50)	90	(50)	Pneumonia only	10	(7)	12	(7)
<u>Female</u>	<u>74</u>	<u>(50)</u>	<u>91</u>	<u>(50)</u>	Cellulitis only	36	(24)	41	(23)
TOTAL	147	(100)	181	(100)	Necrotizing fasciitis (NF) only	8	(5)	9	(5)
RACE					Peritonitis	1	(1)	3	(2)
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	Arthritis only	7	(5)	6	(3)
White	99	(67)	129	(71)	Osteomyelitis	1	(1)	3	(2)
Black	5	(3)	6	(3)	Endometritis	2	(1)	1	(1)
American Indian/ Alaskan Native	5	(3)	4	(2)	Abscess	9	(6)	8	(4)
Asian/Pacific Islander	1	(1)	4	(2)	Otitis Media	2	(1)	0	(0)
Other	0	(0)	4	(2)	Peurperal Sepsis	1	(1)	0	(0)
<u>Unknown</u>	<u>37</u>	<u>(25)</u>	<u>34</u>	<u>(19)</u>	STSS	4	(3)	4	(2)
TOTAL	147	100	181	100	Pneumonia + other	3	(2)	9	(5)
					NF + other	5	(3)	8	(4)
					Cellulitis + other	10	(7)	13	(7)
					Abscess + other	3	(2)	2	(1)
					<u>Other + Epiglot (2)</u>	<u>14</u>	<u>(10)</u>	<u>17</u>	<u>(9)</u>
					TOTAL	147	(100)	181	(100)

TABLE 4 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP A STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

	<u>1/1/02-</u> <u>12/31/2002</u>		<u>1/1/03-</u> <u>12/31/2003</u>	
	OUTCOME			
<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Yes	123	(84)	159	(88)
No	24	(16)	22	(12)
<u>Unknown</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
TOTAL	147	(100)	181	(100)

TYPE OF INFECTION
RESULTING IN DEATH

<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Bacteremia	4	(17)	8	(36)
Meningitis	0	(0)	0	(0)
Necrotizing fasciitis	3	(13)	0	(0)
Pneumonia	4	(17)	2	(9)
Abscess	1	(4)	0	(0)
STSS	2	(8)	1	(5)
Cellulitis	4	(17)	6	(27)
Peritonitis + STSS	0	(0)	1	(5)
Peurperal Sepsis	1	(4)	0	(0)
Septic Arthritis	1	(4)	1	(5)
Pneumonia + Cellulitis	0	(0)	0	(0)
NF + Cellulitis	2	(8)	0	(0)
Pneumonia + STSS	0	(0)	1	(5)
NF + STSS	1	(4)	0	(0)
Cellulitis + STSS	1	(4)	0	(0)
Strep Pharyngitis/Inf	0	(0)	1	(5)
<u>Mediastinitis</u>	<u>0</u>	<u>(0)</u>	<u>1</u>	<u>(5)</u>
TOTAL	24	(100)	22	(100)

Cases of Invasive Group A Streptococcal Disease by Date of Culture, Minnesota January 1, 2002 – December 31, 2003

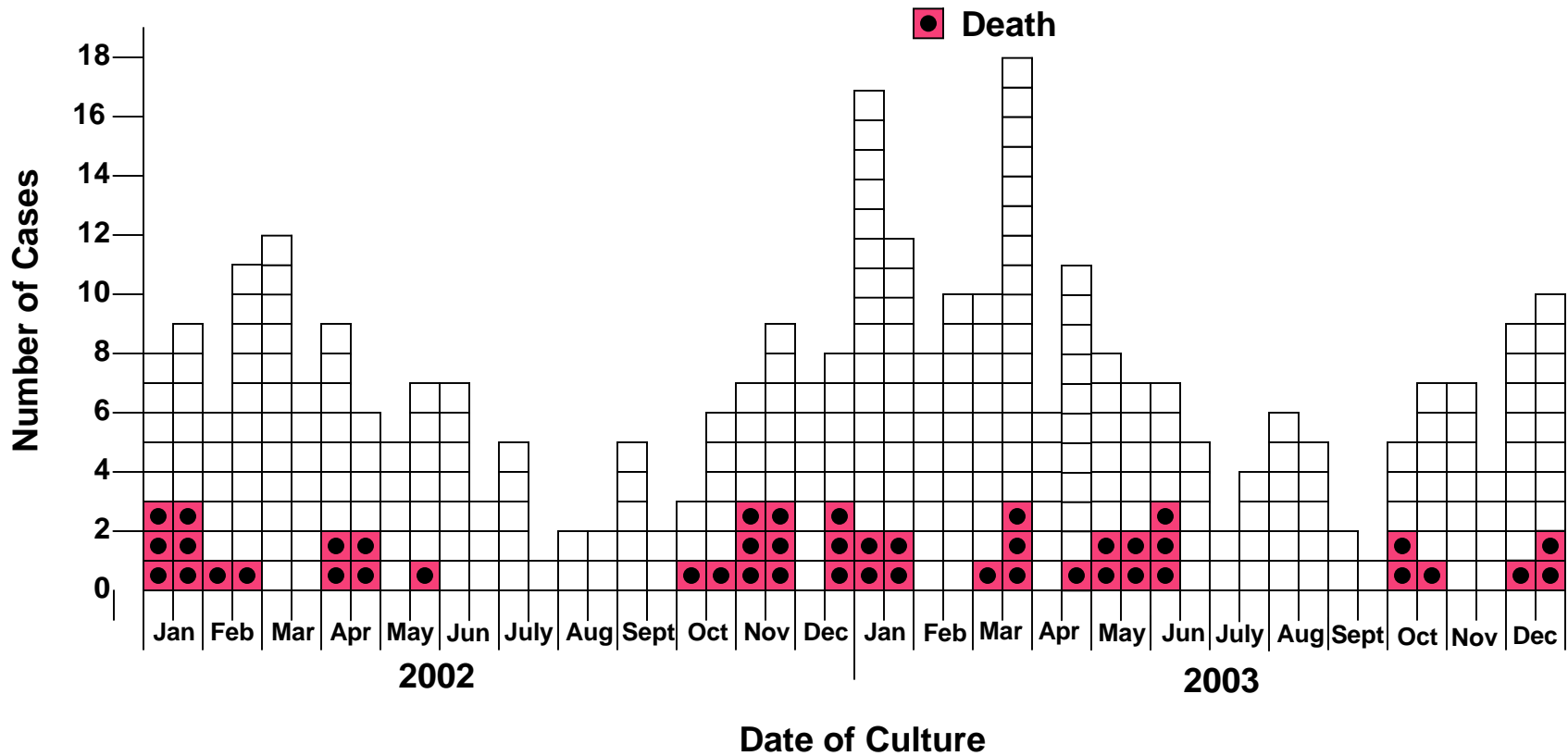


TABLE 5

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP B STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

		<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>				<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>	
RESIDENCE						OUTCOME					
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	188	(60)	175	(53)	Yes	288	(92)	297	(90)		
<u>Greater Minnesota</u>	<u>124</u>	<u>(40)</u>	<u>154</u>	<u>(47)</u>	No	24	(8)	27	(8)		
TOTAL	312	(100)	329	(100)	<u>Unknown</u>	<u>0</u>	<u>(0)</u>	<u>5</u>	<u>(2)</u>		
						TOTAL	312	(100)	329	(100)	
AGE						SITE OF ISOLATE CULTURE					
<u>Age</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<7 days	27	(9)	20	(6)	Blood only	240	(77)	244	(74)		
7-90 days	18	(6)	16	(5)	CSF only	13	(4)	7	(2)		
91 days-11 mos.	2	(1)	2	(1)	Blood and CSF	0	(0)	2	(1)		
1-9	0	(0)	0	(0)	Pleural	3	(1)	1	(0)		
10-19	5	(2)	2	(1)	Joint	22	(7)	35	(11)		
20-29	15	(5)	6	(2)	Placenta	8	(3)	4	(1)		
30-39	20	(6)	20	(6)	Amniotic fluid	0	(0)	0	(0)		
40-49	35	(11)	39	(12)	Surgical Specimen	1	(0)	0	(0)		
50-59	37	(12)	46	(14)	Internal body site	0	(0)	3	(1)		
60-69	56	(18)	50	(15)	Peritoneal	8	(3)	9	(3)		
<u>70+</u>	<u>97</u>	<u>(31)</u>	<u>128</u>	<u>(39)</u>	Bone	17	(5)	24	(7)		
TOTAL	312	(100)	329	(100)	<u>Other</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>		
						TOTAL	312	(100)	329	(100)	
GENDER						TYPE OF INFECTION					
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Male	166	(53)	173	(53)	Bacteremia	139	(45)	154	(47)		
<u>Female</u>	<u>146</u>	<u>(47)</u>	<u>156</u>	<u>(47)</u>	Meningitis	9	(3)	9	(3)		
TOTAL	312	(100)	329	(100)	Pneumonia	23	(7)	21	(6)		
						Cellulitis	46	(15)	40	(12)	
						Arthritis	20	(6)	24	(7)	
						Osteomyelitis	13	(4)	25	(8)	
						Abscess	10	(3)	12	(4)	
						Necrotizing fasciitis	3	(1)	4	(1)	
						Peritonitis	8	(3)	8	(2)	
						Septic abortion	6	(2)	2	(1)	
						or stillbirth					
						<u>Other</u>	<u>35</u>	<u>(11)</u>	<u>30</u>	<u>(9)</u>	
						TOTAL	312	(100)	329	(100)	
RACE											
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>							
White	180	(58)	224	(68)							
Black	22	(7)	11	(3)							
Amer Indian/Alas Native	6	(2)	6	(2)							
Asian/Pacific Islander	6	(2)	6	(2)							
More than 1 race	0	(0)	0	(0)							
<u>Other/Unknown</u>	<u>98</u>	<u>(31)</u>	<u>82</u>	<u>(25)</u>							
TOTAL	312	(100)	329	(100)							

TABLE 5 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP B STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

	EARLY ONSET CASES*				LATE ONSET CASES*			
	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>		<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>	
RESIDENCE								
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	19	(70)	15	(75)	11	(61)	10	(63)
Greater Minnesota	8	(30)	5	(25)	7	(39)	6	(38)
TOTAL	27	(100)	20	(100)	18	(100)	16	(100)
GENDER								
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Male	11	(41)	11	(55)	8	(44)	7	(44)
Female	16	(59)	9	(45)	10	(56)	9	(56)
TOTAL	27	(100)	20	(100)	18	(100)	16	(100)
RACE								
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
White	21	(78)	12	(60)	13	(72)	12	(75)
Black	1	(4)	2	(10)	5	(28)	1	(6)
American Indian/ Alaskan Native	2	(7)	1	(5)	0	(0)	2	(13)
More than 1 race		(0)	0	(0)		(0)	0	(0)
Asian/Pacific Islander	2	(7)	1	(5)	0	(0)	0	(0)
Other/Unknown	1	(4)	4	(20)	0	(0)	1	(6)
TOTAL	27	(100)	20	(100)	18	(100)	16	(100)
OUTCOME								
<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Yes	26	(96)	20	(100)	17	(94)	16	(100)
No	1	(4)	0	(0)	1	(6)	0	(0)
Unknown	0	(0)	0	(0)	0	(0)	0	(0)
TOTAL	27	(100)	20	(100)	18	(100)	16	(100)
TYPE OF INFECTION								
<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Bacteremia	18	(67)	16	(80)	13	(72)	12	(75)
Meningitis	1	(4)	1	(5)	4	(22)	4	(25)
Pneumonia	4	(15)	3	(15)	0	(0)	0	(0)
Other	4	(15)	0	(0)	1	(6)	0	(0)
TOTAL	27	(100)	20	(100)	18	(100)	16	(100)

* Early onset is defined as occurring in the first 6 days, and late onset in the 7th-89th days of life.

TABLE 5 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP B STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

<u>Type of Case*</u>	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>	
	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Maternal case with miscarriage/ stillbirth	8	(3)	3	(1)
Other maternal case	6	(2)	1	(0)
Infant case - early onset	27	(9)	20	(6)
Infant case - late onset	18	(6)	16	(5)
<u>Not pregnant/postpartum/infant case</u>	<u>253</u>	<u>(81)</u>	<u>289</u>	<u>(88)</u>
TOTAL	312	(100)	329	(100)

*A maternal case is defined as invasive GBS infection during pregnancy or postpartum. An early onset infant case is defined as invasive disease occurring in the first 6 days, and late onset in the 7th - 90th days of life.

TYPE OF INFECTION REPORTED FOR MATERNAL CASES

<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Bacteremia without another focus of infection	1	(7)	1	(25)
Septic abortion/ stillbirth	8	(57)	3	(75)
Meningitis	0	(0)	0	(0)
Chorioamnionitis	1	(7)	0	(0)
Abscess	0	(0)	0	(0)
Pyelonephritis	1	(7)	0	(0)
Unknown	2	(14)	0	(0)
<u>Bleeding on ultrasound</u>	<u>1</u>	<u>(7)</u>	<u>0</u>	<u>(0)</u>
TOTAL	14	(100)	4	(100)

OUTCOME OF FETUS FOR MATERNAL CASES

<u>Outcome</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Survived, no apparent clinical illness	4	(29)	1	(25)
Survived, clinical infection	1	(7)	0	(0)
Live birth, neonatal death-GBS related	0	(0)	0	(0)
Miscarriage/stillbirth-likely GBS-related	8	(57)	3	(75)
<u>Induced abortion</u>	<u>1</u>	<u>(7)</u>	<u>0</u>	<u>(0)</u>
TOTAL	14	(100)	4	(100)

TABLE 5 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
GROUP B STREPTOCOCCUS, JANUARY 1, 2002 - DECEMBER 31, 2003

1/1/2002-
12/31/2002 1/1/2003-
12/31/2003

SITE OF ISOLATE CULTURE FOR MISCARRIAGES/STILLBIRTHS

<u>Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Maternal blood	2	(25)	1	(33)
Amniotic fluid	0	(0)	0	(0)
Placenta only	6	(75)	2	(67)
<u>Autopsy only</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
TOTAL	8	(100)	3	(100)

WEEKS GESTATION AT TIME OF MISCARRIAGE/STILLBIRTH

<u>Age (weeks)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<24	0	(0)	0	(0)
24-27	0	(0)	0	(0)
28-32	0	(0)	0	(0)
33-34	0	(0)	0	(0)
35-36	0	(0)	0	(0)
37+	0	(0)	0	(0)
<u>Unknown</u>	<u>8</u>	<u>(100)</u>	<u>3</u>	<u>(100)</u>
TOTAL	8	(100)	3	(100)

GESTATIONAL AGE OF EARLY ONSET CASES

<u>Age (weeks)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<28	6	(21)	1	(5)
28-32	1	(4)	1	(5)
33-34	1	(4)	1	(5)
35-36	2	(7)	0	(0)
37+	17	(61)	17	(85)
<u>Unknown</u>	<u>1</u>	<u>(4)</u>	<u>0</u>	<u>(0)</u>
TOTAL	28	(100)	20	(100)

BIRTH WEIGHT OF EARLY ONSET CASES

<u>Weight (grams)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<1000	5	(18)	1	(5)
1000-1999	2	(7)	1	(5)
2000-2999	4	(14)	3	(15)
≥3000+	17	(61)	15	(75)
<u>Unknown</u>	<u>0</u>	<u>(0)</u>	<u>0</u>	<u>(0)</u>
TOTAL	28	(100)	20	(100)

Cases of Group B Streptococcal Disease by Date Cultured, Minnesota January 1, 2002 – December 31, 2003

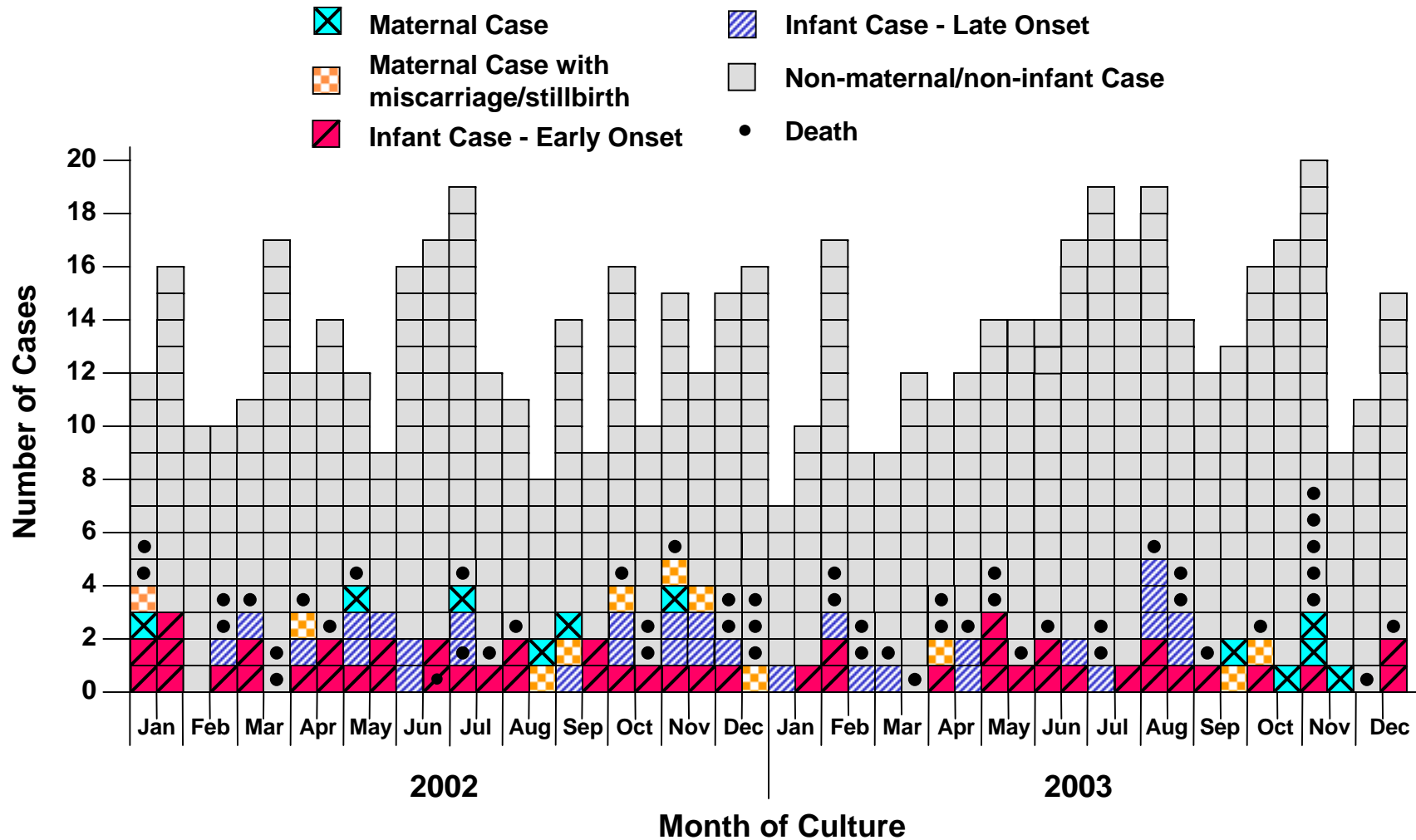


TABLE 6

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
STREPTOCOCCUS PNEUMONIAE, JANUARY 1, 2002 - DECEMBER 31, 2003

	1/1/2002- 12/31/2002		1/1/2003- 12/31/2003		1/1/2002- 12/31/2002		1/1/2003- 12/31/2003		
RESIDENCE					OUTCOME				
<u>Residence</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Survived</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
Twin Cities Metro Area	300	(50)	314	(52)	Yes	528	(88)	535	(88)
<u>Greater Minnesota</u>	<u>298</u>	<u>(50)</u>	<u>293</u>	<u>(48)</u>	<u>No</u>	<u>70</u>	<u>(12)</u>	<u>72</u>	<u>(12)</u>
TOTAL	598	(100)	607	(100)	TOTAL	598	(100)	607	(100)
AGE					SITE OF ISOLATE CULTURE				
<u>Age (Years)</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	<u>Culture Site</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<1	21	(4)	28	(5)	Blood Only	539	(90)	558	(92)
1	23	(4)	26	(4)	Blood and CSF	1	(<1)	5	(1)
2-4	29	(5)	20	(3)	CSF Only	35	(6)	15	(2)
5-17	29	(5)	28	(5)	Pericardial Fluid	1	(<1)	0	(0)
18-34	25	(4)	38	(6)	Pleural	9	(2)	17	(3)
35-49	93	(16)	102	(17)	Joint	3	(1)	3	(<1)
50-64	128	(21)	110	(18)	Peritoneal	4	(1)	4	(1)
65-79	146	(24)	125	(21)	<u>Other</u>	<u>6</u>	<u>(1)</u>	<u>5</u>	<u>(1)</u>
80+	<u>104</u>	<u>(17)</u>	<u>130</u>	<u>(21)</u>	TOTAL	598	(100)	607	(100)
TOTAL	598	(100)	607	(100)	TYPE OF INFECTION				
GENDER					<u>Type</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
<u>Gender</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	Bacteremia				
Male	314	(53)	312	(51)	without focus	186	(31)	177	(29)
<u>Female</u>	<u>284</u>	<u>(47)</u>	<u>295</u>	<u>(49)</u>	Pneumonia	333	(56)	358	(59)
TOTAL	598	(100)	607	(100)	Meningitis	46	(8)	36	(6)
RACE					Otitis	2	(<1)	4	(1)
<u>Race</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>	Cellulitis	2	(<1)	2	(<1)
White Only	353	(59)	384	(63)	<u>Other</u>	<u>29</u>	<u>(5)</u>	<u>30</u>	<u>(5)</u>
Black Only	33	(6)	37	(6)	TOTAL	598	(100)	607	(100)
American Indian/ Alaskan Native Only	6	(1)	9	(1)	PENICILLIN SUSCEPTIBILITY				
Asian/Pacific Isl. Only	5	(1)	10	(2)	<u>Susceptibility</u>	<u>No.</u>	<u>(%)</u>	<u>No.</u>	<u>(%)</u>
2 Races or More	2	(<1)	1	(<1)	Susceptible (MIC ≤ 0.06)	425	(81)	488	(86)
Other Only	9	(2)	11	(2)	Intermediate	38	(7)	32	(6)
<u>Unknown</u>	<u>190</u>	<u>(32)</u>	<u>155</u>	<u>(26)</u>	(MIC = 0.12 - 1.0)				
TOTAL	598	(100)	607	(100)	<u>Resistant (MIC > 2.0)</u>	<u>64</u>	<u>(12)</u>	<u>47</u>	<u>(8)</u>
					TOTAL	527	(100)	567	(100)
					Not Tested	71	(12)	40	(7)

TABLE 6 (CONTINUED)

REPORTED CASES OF INVASIVE DISEASE ATTRIBUTED TO
STREPTOCOCCUS PNEUMONIAE, JANUARY 1, 2002 - DECEMBER 31, 2003

PENICILLIN NON-SUSCEPTIBILITY* BY AGE

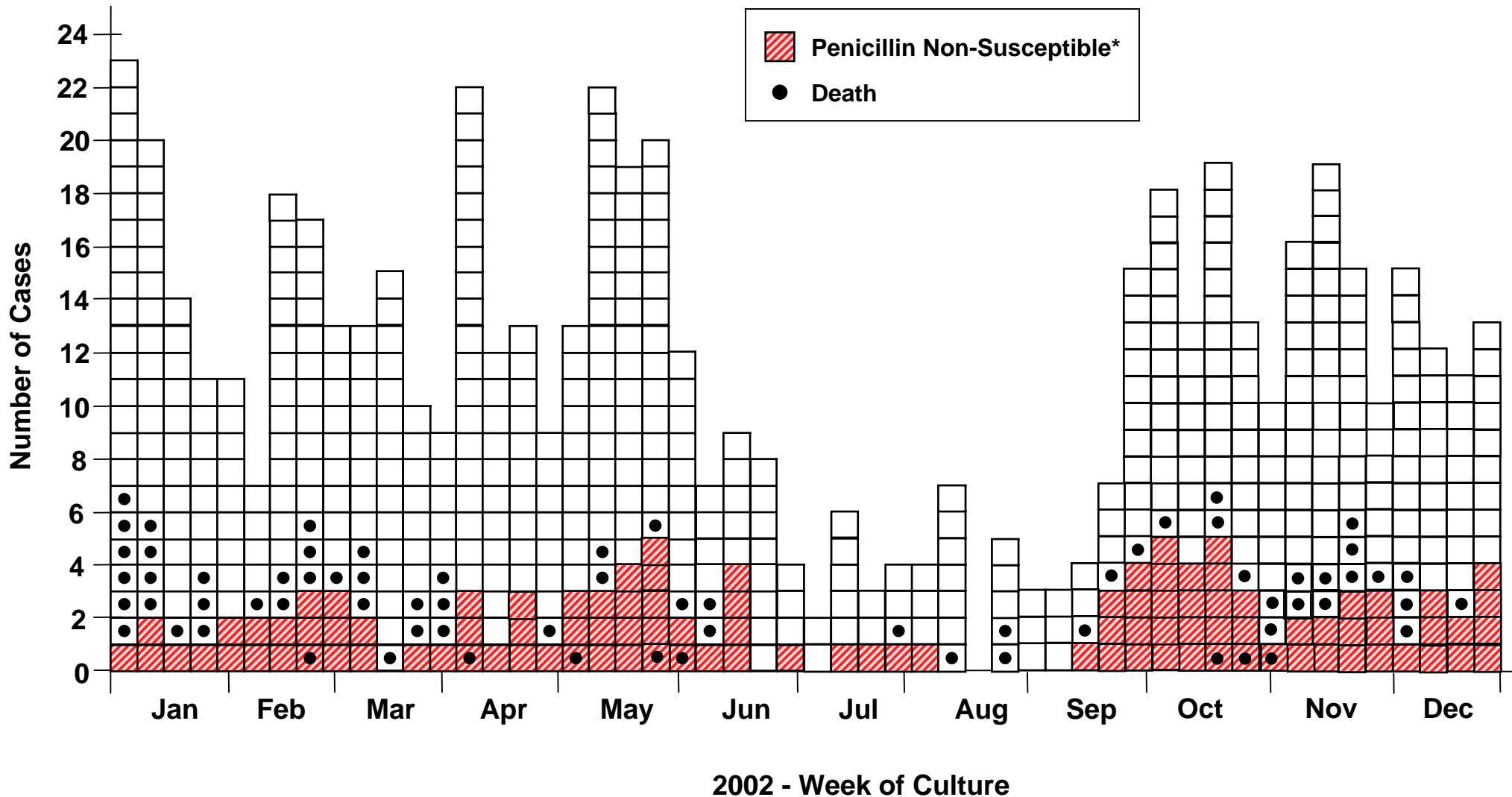
<u>Age (Years)</u>	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 12/31/2003</u>	
	<u>Non-Susceptible Total</u>	<u>(%)</u>	<u>Non-Susceptible Total</u>	<u>(%)</u>
<1	6 / 21	(29)	2 / 28	(7)
1	5 / 23	(22)	3 / 26	(12)
2-4	3 / 29	(10)	3 / 20	(15)
5-17	4 / 29	(14)	5 / 28	(18)
18-34	3 / 25	(12)	3 / 38	(8)
35-49	14 / 93	(15)	5 / 102	(5)
50-64	21 / 128	(16)	12 / 110	(11)
65-79	28 / 146	(19)	24 / 125	(19)
80+	<u>18 / 104</u>	<u>(17)</u>	<u>22 / 130</u>	<u>(17)</u>
TOTAL	102 / 598	(17)	79 / 607	(13)

PENICILLIN NON-SUSCEPTIBILITY* BY TYPE OF INFECTION

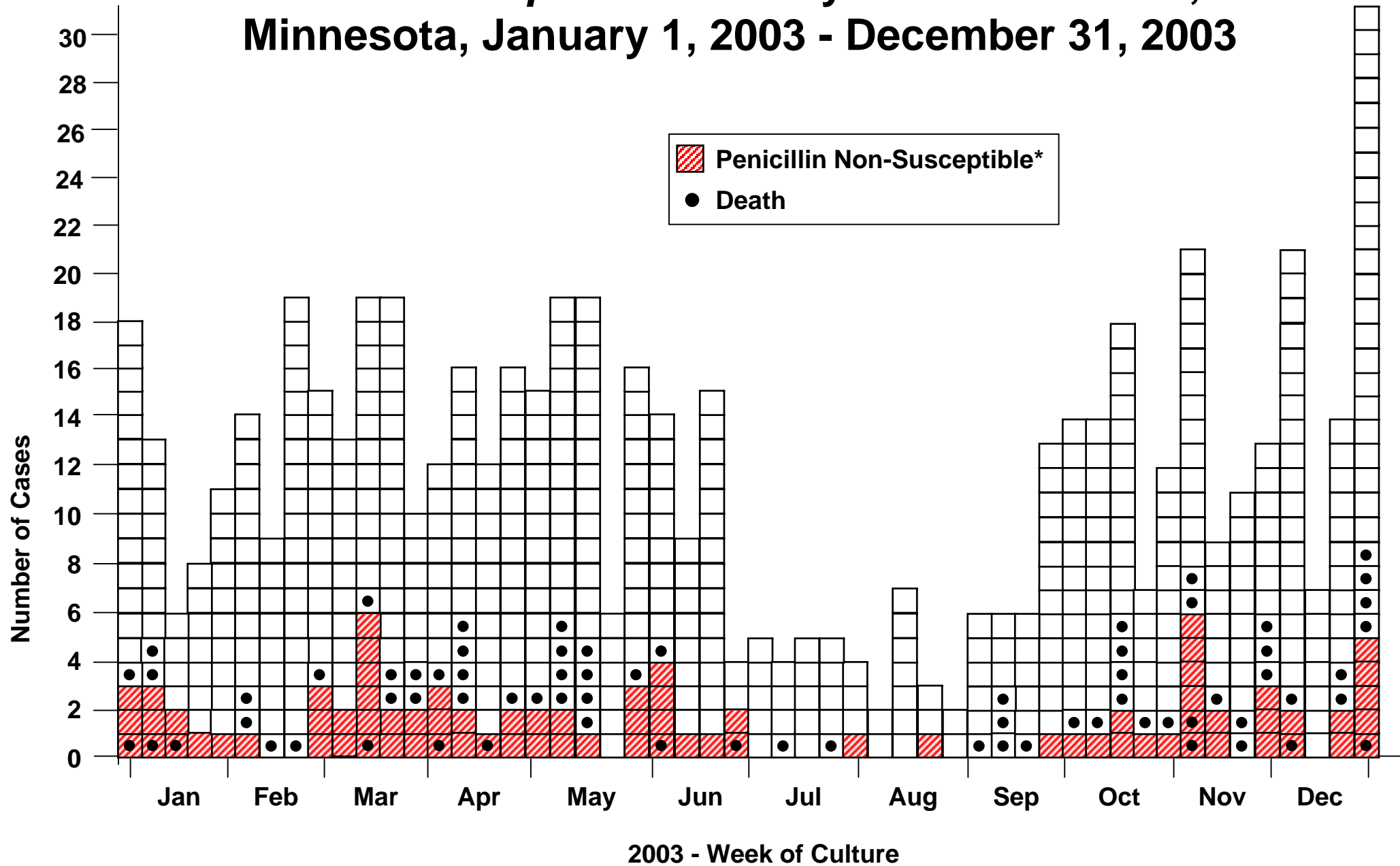
<u>Type</u>	<u>1/1/2002- 12/31/2002</u>		<u>1/1/2003- 9/30/2003</u>	
	<u>Non-Susceptible Total</u>	<u>(%)</u>	<u>Non-Susceptible Total</u>	<u>(%)</u>
Bacteremia	33 / 186	(18)	20 / 177	(11)
Pneumonia	52 / 333	(16)	48 / 358	(13)
Meningitis	8 / 46	(17)	6 / 36	(17)
<u>Other/Unknown</u>	<u>9 / 33</u>	<u>(27)</u>	<u>5 / 36</u>	<u>(14)</u>
TOTAL	102 / 598	(17)	79 / 607	(13)

*Penicillin non-susceptible includes isolates with a MIC \geq 0.12 μ g/ml.

Cases of *S. pneumoniae* by Week of Culture, Minnesota, January 1, 2002 - December 31, 2002



Cases of *S. pneumoniae* by Week of Culture, Minnesota, January 1, 2003 - December 31, 2003



* Penicillin non-susceptible includes isolates with a MIC \geq 0.12 μ g/ml