

NARMS Quarterly Conference Call  
October 6, 2000  
**Draft Minutes**

Attendees: CT, CO, GA, LA, MD, NJ, NYC, NY, TN WA, USDA-ARS  
Absent: CA, FL, KS, MA, MN, OR, WV, FDA

**National Issues:**

1. A highly resistant strain of *Salmonella* Newport is emerging. There was no evidence of this strain in the 1996-1997 NARMS data. The 2000 NARMS data show that 1/3 of all Newport isolates are this highly resistant strain, which has a distinguishable PFGE pattern. This strain has been associated with a case cluster in KS and an outbreak in VA. After *S. Typhimurium* DT104 and *S. Typhimurium* with the AKSSuT resistance pattern, this Newport strain is the most prevalent *Salmonella* strain. There were 3 EID presentations describing this strain.

Sites were asked to monitor changes in *S. Newport* submissions. Several sites requested the PFGE pattern to be posted on PulseNet. We have relayed this request to our lab and it should be posted soon.

2. There has been an emergence of ceftriaxone resistance in *Salmonella*. An article relating to this subject was recently published in the New England Journal of Medicine (April 27, 2000, Vol. 342, No17) by Paul Fey et al. titled “Ceftriaxone-Resistant *Salmonella* Infection Acquired by a Child from Cattle.”

3. *S. Typhimurium* DT208 is a newly described definitive type of AKSSuT resistant Typhimurium.

4. A multidrug-resistant *S. Typhimurium* has re-emerged in Europe. This DT204 strain was prevalent in Europe before the widespread emergence of DT104. A recent outbreak has led to the re-emergence of DT208. This outbreak strain is resistant to all antibiotics except high levels of fluoroquinolones and high levels of gentamicin. There is an ongoing multinational investigation to determine the source, which is thought to be lettuce from Southern Europe.

5. Conference call participants were invited to join Global Salm-Surv, which is listserv established by WHO. To date, there are over 300 members representing 150 institutions. Global Salm-Surv is a global network of laboratories and individuals involved in *Salmonella* surveillance and the identification, isolation and antimicrobial testing of *Salmonella*. Global Salm-Surv, a collaborative project of the World Health Organization (WHO), the Danish Veterinary Laboratory, and the WHO Collaborating Center for Foodborne Disease Surveillance at CDC, aims to facilitate data sharing and reporting between laboratories and individuals around the world. Global Salm-Surv serves as a forum for web-based, electronic discussions that address issues such as *Salmonella* serotyping and antimicrobial susceptibility testing.

There are currently 263 members from 101 different countries. If you are involved in *Salmonella* surveillance, serotyping, or antimicrobial susceptibility testing and would like to become a Global Salm-Surv member, please see the “how to join” module on the website listed below. To learn more about Global Salm-Surv, please visit the website at [www.who.int/emc/diseases/zoo/SALM-SURV](http://www.who.int/emc/diseases/zoo/SALM-SURV).

## NARMS issues

1. The new NARMS website is located at <http://www.cdc.gov/ncidod/dbmd/narms>. Of particular importance is the NARMS Member Site, which is password protected (username: narms; password: falcons99). The member site will have log sheets, isolate submission guidelines, submitted conference abstracts (after they have been accepted, they will be posted in the Publications & Presentations section), participant lists, and conference call packets (initially these will be posted electronically and a hard copy will be faxed). Take a look around our website and let us know what we can do to make it more helpful to you.
2. The 1999 NARMS Annual Report is finished. Copies are being sent to the sites (and probably have arrived by now). There is also an electronic copy on our website.
3. The status of the 2000 isolates was discussed. If there is a \* by the site, the isolates were received frozen and data is not yet available.
4. In order to distribute the 2000 Annual Report in a more timely fashion, **we agreed to have ALL 2000 isolates submitted by February 28, 2000.**
5. We discussed the ICAAC (Toronto, Sept. 2000) abstract titled “Emerging resistance to clinically important antimicrobial agents among human *Salmonella* isolates in the United States, 1996-1999,” which was distributed with the fax packet. The sites were also asked if they wanted to present NARMS data at the upcoming ASM conference. Submission deadlines are in November.
6. CDC has been investigating a highly fluoroquinolone-resistant *Salmonella* Senftenberg. This strain has been associated with a nosocomial outbreak in Florida and has been isolated in Pennsylvania and Georgia. There is an ongoing PFGE study to compare the FL, PA, and GA isolates. Of interest, *S. Senftenberg* is the fourth most common *Salmonella* strain in India and fluoroquinolone resistance is common. The case in GA was a child who was adopted from India and had been hospitalized there before his adoption.
7. The Public Health Action Plan to combat Antimicrobial Resistance was discussed. This plan has 11 top priority items, one of which is increased surveillance. There is the possibility that NARMS would receive additional resources. These resources could be used to either expand NARMS into a nationwide surveillance system or to enhance the

current NARMS sites, allowing them to do their own sensitivity testing. NARMS participants were queried about which direction they would prefer.

**Status of Isolates in NARMS 1998-2000  
as of September 11, 2000**

<b>Isolate</b>	<b>Rec'd CDC 2000 (N)</b>	<b>Survived (N) (%)</b>	<b>Tested by CDC (N) (%)</b>	<b>Not Tested (N) (%)</b>
<i>Salmonella (non-typhoidal)</i>	493	493 (100)	400 (81)	93 (19)
<i>Salmonella (Typhi)</i>	102	102 (100)	54 (53)	48 (47)
<i>Shigella</i>	183	183 (100)	163 (89)	20 (11)
<i>E. coli O157</i>	131	131 (100)	97 (74)	34 (26)
<i>Campylobacter (human)</i>	220	220 (100)	92 (42)	128 (58)

<b>Isolate</b>	<b>Rec'd CDC 1999 (N)</b>	<b>Survived (N) (%)</b>	<b>Tested by CDC (N) (%)</b>	<b>Not Tested (N) (%)</b>
<i>Salmonella (non-typhoidal)</i>	1514	1499 (99)	1499 (100)	0 (0)
<i>Salmonella Typhi</i>	249	207 (83)	207 (100)	0 (0)
<i>Shigella</i>	377	375 (99)	375 (100)	0 (0)
<i>E. coli O157</i>	296	292 (99)	292 (100)	0 (0)
<i>Campylobacter (human)</i>	319	319 (100)	319 (100)	0 (0)

<b>Isolate</b>	<b>Rec'd CDC 1998 (N)</b>	<b>Survived (N) (%)</b>	<b>Tested by CDC (N) (%)</b>	<b>Not Tested (N) (%)</b>
<i>Salmonella</i>	1476	1466 (99)	1466 (100)	0 (0)
<i>E. coli O157</i>	315	315 (100)	315 (100)	0 (0)
<i>Campylobacter (human)</i>	382	346 (91)	346 (100)	0 (0)
<i>Campylobacter (poultry)</i>	142	140 (98)	139 (99)	1 (1)



**2000 NARMS *Salmonella* Typhi isolates sent to CDC  
by Site and Month (as of October 3, 2000)  
(N=106)**

Site	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PHLIS
CA	9	2	2	0	0	3	2							
CO	2	0	0	0	1	0	1							
CT	4	2	0	0	0	1	1							
FL	4	0	0	0	0	2	2							
GA	7	3	0	0	0	3	1							
KS	1	0	0	0	0	0	0	1						
LX	7	2	2	3										
MA	11	1	6	2	1	1								
MD	0*													
MN	0													
NJ	12	0	2	0	6	4								
NYC	35	3	7	4	8	7	0	6						
NYS	9	0	2	0	2	5								
OR	4	2	2											
TN	0													
WA	0													
WV	1	0	0	0	0	0	1							
<b>Total</b>	<b>106</b>													

\*Isolates received frozen. Data not yet available.

**2000 NARMS *Shigella* isolates sent to CDC  
by Site and Month (as of October 3, 2000)  
(N=207)**

Site	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PHLIS
CA	2	0	0	0	1	0	0	1						
CO	7	1	0	1	2	1	1	1						
CT	3	0	0	1	1	0	1							
FL	4	0	2	1	0	1								
GA	14	3	3	3	1	2	1	1						
KS	7	1	0	0	1	1	2	2						
LX	8	5	2	1										
MA	8	1	2	1	2	1	1							
MD	0*													
MN	35	2	2	0	2	8	9	12						
NJ	13	1	2	2	4	3	1							
NYC	47	3	7	10	13	4	8	2						
NYS	16	0	3	10	1	1	1							
OR	4	3	1											
TN	21	1	2	4	4	4	4	2						
WA	16	16												
WV	2	0	1	0	0	1								
<b>Total</b>	<b>207</b>													

\*Isolates received frozen. Data not yet available.

**2000 NARMS *E. coli* O157:H7 isolates sent to CDC  
by Site and Month (as of October 3, 2000)  
(N=163)**

Site	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PHLIS
CA	9	1	1	2	0	0	4	1						
CO	12	1	0	1	1	1	2	6						
CT	15	2	0	2	2	1	3	3	2					
FL	7	0	0	1	0	1	2	3						
GA	28	4	0	1	3	4	4	12						
KS	2	0	0	0	0	0	1	1						
LX	1	1												
MA	11	1	0	2	1	3	4							
MD	0													
MN	20	3	1	5	0	1	3	7						
NJ	6	0	0	1	2	3								
NYC	9	0	0	1	1	2	4	1						
NYS	23	8	0	2	5	4	4							
OR	3	1	1	1										
TN	5	0	1	0	1	1	2							
WA	13	0	1	2	3	5	2							
WV	3	1	0	0	1	1								
<b>Total</b>	<b>163</b>													

\* Isolates received frozen. Data not yet available.

**2000 NARMS *Campylobacter* isolates sent to CDC  
by Site and Month (as of October 3, 2000)  
(N=253)**

Site	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	PHLIS
CA	34	4	4	4	0	8	5	5	4					
CO	17	0	0	3	3	4	4	3						
CT	31	3	4	3	5	6	5	4	1					
GA	81	1	9	10	13	3	10	16	10	9				
MD	0*													
MN	31	4	4	5	4	5	4	5						
NYS	24	5	3	3	5	5	2	1						
OR	25	1	1	5	2	3	7	4	1	1				
TN	10	1	1	2	0	3	3							
<b>Total</b>	<b>253</b>													

\*Isolates received frozen. Data not yet available.

## Salmonella senftenberg

Patient	State Isolate number /CDC number	State	Hospital	Age	Sex	Diagnosis	Admission date	Date of positive culture	Serotype	Resistance Pattern	PFGE
1	13549 / H9152	Fla.	A	48	M	MVA victim	7/10/99	7/17/99	Senftenberg	AMOX, AMP, CEPHAL (INT), CHLORA (INT), CIPRO, GENT, KAN, NAL, SULFA, BACTRM	
2	12769 / H9153	Fla.	A	54	F	MVA victim	4/03/99	8/22/99	Senftenberg	AMOX (INT), AMP, CHLOR (INT), CIPRO, GENT, KAN, NAL, STREPT, SULFA, BACTRM	
3	12573 / H9151	Fla.	A	63	F	MVA victim	8/21/99	9/05/99	Senftenberg	AMIK, AMOX, AMP, APR (INT), CEFTIO, CEFTX, CEPHAL, CIPRO, GENT, KAN, NAL, STREPT, SULFA, BACTRM	
4.	13151 / H9150	Fla.	A	71	F	ARF	10/01/99	10/21/99	Senftenberg	AMOX, AMP, CIPRO, KAN, NAL, STREPT, SULFA	
5.	13570 / H9154	Fla.	A	45	M	Pancreatitis	11/06/99	11/21/99	Senftenberg	AMOX, AMP, CEFTIO, CEPHAL, CHLOR (INT), CIPRO, GENT, KAN, NAL, STREP, SULFA, BACTRM	
6.	13627 / H9148	Fla.	A	58	M	Chron's dis.	10/02/99	11/27/99	Senftenberg	AMOX, AMP, CHLOR (INT), CIPRO, FLOR, KAN, NAL, STREPT, SULFA	
7.		Fla.	A	60	F	COPD	3/20/99	12/12/99	Senftenberg		
8		Fla.	A	62	F	COPD	8/14/98	4/1/00	Senftenberg		
9		Fla.	A	47	F	Vasc. surgery	3/6/00	4/22/00	Senftenberg		
10		Fla.	A	53	F	Endocarditis	5/16/00	6/6/00	Senftenberg		
11		Fla.	A&B						Not determined	AMOX, AMP, CHLOR (INT), CIPRO, GENT (INT), KAN, NAL, STREPT, SULFA, BACTRM	
12	H9685	PA	C		M	MVA victim			Senftenberg	AMOX, AMP, CEFOX, CEFTIO, CEFTX, CEPHAL, CHLOR, CIPRO, GENT, KAN, NAL, STREPT, SULFA, TET	
13.	AM08208	GA	D		M			6/15/00	Senftenberg		