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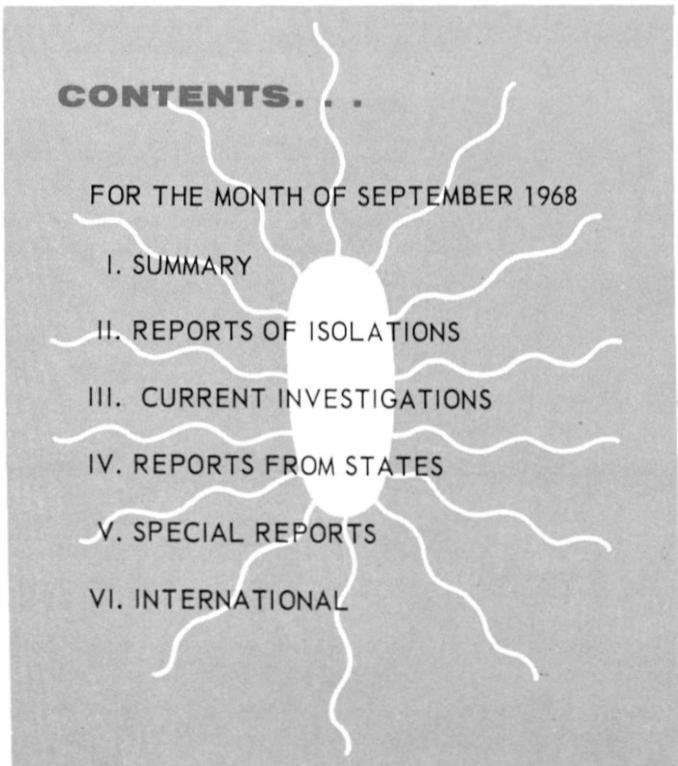
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# SALMONELLA

## SURVEILLANCE



# PREFACE

Summarized in this report is information received from State and City Health Departments, university and hospital laboratories, the National Animal Disease Laboratory (USDA, ARS), Ames, Iowa, and other pertinent sources, domestic and foreign. Much of the information is preliminary. It is intended primarily for the use of those with responsibility for disease control activities. Anyone desiring to quote this report should contact the original investigator for confirmation and interpretation.

Contributions to the Surveillance Report are most welcome. Please address

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November 4, 1968

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III. CURRENT INVESTIGATIONS

NONE

IV. REPORTS FROM THE STATES

NONE

V. SPECIAL REPORTS

NONE

VI. INTERNATIONAL

Federal Republic of Germany and West Berlin

Isolations of Salmonellae from Nonhuman Sources in the Federal Republic of Germany and West Berlin, 1967

Reported by Drs. von Eberhard Bulling and von Otfried Pietzsch, Ministry of Health, Federal Republic of Germany

In 1967, a total of 8,879 isolations of salmonellae were reported from nonhuman sources in the Federal Republic of Germany and West Berlin. This represents an increase of 2.8 percent over the 8,630 isolations reported in 1966. A total of 121 different salmonella serotypes was identified. The ten most common serotypes isolated are listed in the table below. As in 1966, Salmonella typhi-murium and S. dublin were the two most common serotypes isolated. However, the percent of isolations of S. typhi-murium decreased from 60.1 percent in 1966 to 43.7 percent in 1967 and the percent of isolations of S. dublin increased from 16.1 percent to 33.1 percent. The most common sources of nonhuman isolations were cattle and poultry, accounting for 56.6 percent and 20.9 percent respectively of the total isolations.

The Ten Most Common Serotypes Isolated From Nonhuman Sources

in the Federal Republic of Germany - 1967

<u>Serotype</u>	<u>Number</u>	<u>Percent</u>
<u>S. typhi-murium</u> (including var. <u>copenhagen</u> )	3880	43.7
<u>S. dublin</u>	2941	33.1
<u>S. gall.-pullorum</u>	336	3.8
<u>S. enteritidis</u>	169	1.9
<u>S. bareilly</u>	167	1.9
<u>S. heidelberg</u>	122	1.4
<u>S. thompson</u>	76	0.9
<u>S. abortus-ovis</u>	73	0.8
<u>S. anatum</u>	65	0.7
<u>S. panama</u>	65	0.7
TOTAL	7894	88.9
Total all serotypes	8879	

## I. SUMMARY

In September 1968, 2,090 isolations of salmonellae were reported from humans, an average of 523 isolations per week (Tables I, II, and V-A). This number represents an increase of 38 (7.8 percent) over the weekly average of August 1968 and an increase of 46 (9.6 percent) over the weekly average of September 1967.

Reports of 819 nonhuman isolations of salmonellae were received during September 1968 (Tables III, IV, and V-B).

A total of 70 isolations of Salmonella enteritidis were reported from Massachusetts in September, an increase of 44 from the 26 isolations reported in August. The cause of this increase is not yet apparent.

## II. REPORTS OF ISOLATIONS

The ten most frequently reported serotypes during September:

HUMAN				NONHUMAN		
Serotype	Number	Percent	Rank Last Month	Serotype	Number	Percent
1 <u>typhi-murium</u> *	520	24.9	1	<u>typhi-murium</u> *	116	14.2
2 <u>enteritidis</u>	211	10.1	2	<u>infantis</u>	59	7.2
3 <u>newport</u>	159	7.6	5	<u>heidelberg</u>	50	6.1
4 <u>heidelberg</u>	144	6.9	3	<u>derby</u>	45	5.5
5 <u>infantis</u>	122	5.8	6	<u>eimsbuettel</u>	43	5.3
6 <u>saint-paul</u>	108	5.2	4	<u>senftenberg</u>	34	4.2
7 <u>thompson</u>	100	4.8	7	<u>montevideo</u>	33	4.0
8 <u>typhi</u>	65	3.1	8	<u>anatum</u>	30	3.7
9 <u>javiana</u>	60	2.9	9	<u>cubana</u>	28	3.4
10 <u>blockley</u>	45	2.2	>10	<u>thompson</u>	28	3.4
Total	1534	73.4		Total	466	56.9
TOTAL (all serotypes)	2090			TOTAL (all serotypes)	819	
*Includes <u>var. copenhagen</u>	39	1.9		*Includes <u>var. copenhagen</u>	17	2.1

TABLE I. COMMON SALMONELLA REPORTED FROM HUMAN SOURCES, SEPTEMBER 1968

SEROTYPE	GEOGRAPHIC DIVISION AND REPORTING CENTER																																
	NEW ENGLAND						MIDDLE ATLANTIC				EAST NORTH CENTRAL					WEST NORTH CENTRAL					SOUTH ATLANTIC												
	ME	NH	Vt	MAS	RI	CON	NYA	NYB	NYC	NJ	PA	OHI	IND	ILL	MIC	WIS	MIN	IOW	MO	ND	SD	NEB	KAN	DEL	MD	DC	VA	WV	NC	SC	GA	FLA	
<i>anatum</i>																3		1														1	
<i>bareilly</i>								1		1	2							1														1	
<i>blockley</i>					4			2	1	1	2						3	2	5											1	2		
<i>braenderup</i>				4				2									1	1													1	1	
<i>bredeney</i>				1				1	1																							2	
<i>chester</i>																	1															1	
<i>cholerae-suis v kum</i>																		2														1	
<i>cubana</i>																																	
<i>derby</i>				1														1	2	1											3	1	
<i>enteritidis</i>	1		70		2		11	5	15	13	5	2	18	5	7	7			2					2	6	1	2	3	9	1			
<i>give</i>																	1														1		
<i>heidelberg</i>		9	2	1	1	3	6	5	10	1	5	21	4	2					1					3	2	7	2	3	3	4	6		
<i>indiana</i>							1																						9				
<i>infantis</i>	1		8			1	3	1	7	7	10	6	6	2	2	1			1	1				11		1			7	11			
<i>java</i>						1				4			2															1			3		
<i>javiana</i>			2			3											1												2	1	4	11	
<i>litchfield</i>																													1	1	3		
<i>livingstone</i>								1			1							1															
<i>manhattan</i>							1	1											1	1	1						1			1	1		
<i>miami</i>																															1		
<i>mississippi</i>																	1																
<i>montevideo</i>		4						3	2		3						3	1	1	1										1	4		
<i>muenchen</i>							1		2	1							1	1												5	1		
<i>newington</i>			2	1	1		3	2	1			1	9	1	7				1					3	2	1	9	8	23				
<i>newport</i>																																	
<i>oranienburg</i>							1	2	2	6			2						1												1	2	
<i>panama</i>		1		1				1		1				1					1	1													
<i>paratyphi B</i>		2																															1
<i>reading</i>																																1	
<i>saint-paul</i>		2		1		4	6	1	11	2	1	11	2	6					1					3	7	7	1	1	9				
<i>san-diego</i>							1			1							1																
<i>schwarzengrund</i>		1							1		1								1													1	
<i>sentftenberg</i>																			1													1	
<i>tennessee</i>																																1	
<i>thompson</i>		5		2	1	3	2	1	11				16	3	3				3						3	6	1	9	11				
<i>typhi</i>	1		1	1	1	2				3	1	4		1					14							3		1	1	6			
<i>typhimurium</i>		3	34	1	19	1	32	30	12	36	10	11	29	19	18	4	1	6	2		10	2	6	1	12	2	10	23	28				
<i>typhimurium v cop</i>		7		10					1				4				2																
<i>weltevreden</i>																																	
<i>worthington</i>																																	
<b>TOTAL</b>	3	-	3	154	4	51	5	71	65	52	111	32	27	133	52	56	17	3	36	1	4	-	37	5	45	5	39	2	35	-	90	136	
<b>ALL OTHER*</b>	-	5	-	2	3	3	34	-	1	2	1	-	1	7	1	5	-	2	6	2	-	-	1	-	-	8	1	-	-	3	4	13	
<b>TOTAL</b>	3	5	3	156	7	54	39	71	66	54	112	32	28	140	53	61	17	5	42	3	4	-	38	5	45	13	40	2	35	3	94	149	

Note: NYA - New York, Albany; NYB - Beth Israel Hospital; NYC - New York City.  
Beth Israel Hospital laboratory is a reference laboratory and this month serotyped  
a total of 141 cultures.

\* See Table II.

TABLE I - Continued

GEOGRAPHIC DIVISION AND REPORTING CENTER																				TOTAL	% OF TOTAL	CUMULATIVE TOTAL	% OF CUMULATIVE TOTAL	SEROTYPE					
EAST S. CENTRAL				WEST S. CENTRAL				MOUNTAIN						PACIFIC															
KY	TEN	ALA	MIS	ARK	LA	OKL	TEX	MON	IDA	WYO	COL	NM	ARI	UTA	NEV	WAS	ORE	CAL	ALK	HAW									
1						2											1		2		14	0.7	165	1.1	<i>anatum</i>				
		3		1	3		2										1	4	1		7	0.3	43	0.3	<i>bareilly</i>				
	1		1														1	2	2		45	2.2	359	2.5	<i>blockley</i>				
																	1	2	1		16	0.8	116	0.8	<i>braenderup</i>				
																	1				8	0.4	143	1.0	<i>bredeney</i>				
																					6	0.3	43	0.3	<i>chester</i>				
																					—	—	20	0.1	<i>cholerae-suis v kun</i>				
1	1				1	1											1	2			5	0.2	38	0.3	<i>cubana</i>				
1	3			2	1	1	6										1	5	5		29	1.4	309	2.1	<i>derby</i>				
																	1	3	5		211	10.1	1,216	8.5	<i>enteritidis</i>				
1	2	3		4	6	3											1	14		2	144	6.9	1,021	7.1	<i>heidelberg</i>				
3				1	2	1	3										1	5	9		11	0.5	75	0.5	<i>indiana</i>				
1		8															2		2		8	122	5.8	707	4.9	<i>infantis</i>			
																	2		22		22	1.1	141	1.0	<i>java</i>				
1	1	1			6	13	15										1	1			60	2.9	325	2.3	<i>javiana</i>				
					1		1										1				12	0.6	75	0.5	<i>litchfield</i>				
1	1	1			5		1										1	1		3	25	1.2	144	1.0	<i>manhattan</i>				
																	1				10	0.5	75	0.5	<i>miami</i>				
2	2	1			5		2										1				6	0.3	41	0.3	<i>mississippi</i>				
2	5			4	23	3	26										1				38	1.8	195	1.4	<i>montevideo</i>				
																	1	1			15	0.7	136	0.9	<i>muenchen</i>				
																	1				1	0.0	27	0.2	<i>newington</i>				
																	11	2			159	7.6	846	5.9	<i>newport</i>				
1	1				1	1	1										1	5		1	30	1.4	226	1.6	<i>oranienburg</i>				
					1		2										1	3		16	30	1.4	159	1.1	<i>panama</i>				
					6	1											1			15	0.7	88	0.6	<i>paratyphi B</i>					
2	1			2		2											1	2	18	3	108	5.2	836	5.8	<i>reading</i>				
																	1				3	0.1	28	0.2	<i>saint-paul</i>				
																	2				7	0.3	89	0.6	<i>san-diego</i>				
1				1	1	1											1			8	0.4	36	0.3	<i>schwarzengrund</i>					
				1		1	1										1	1		8	0.4	43	0.3	<i>senftenberg</i>					
2	4			4		2											1	2	6	2	9	0.4	68	0.5	<i>tennessee</i>				
																	2				100	4.8	470	3.3	<i>thompson</i>				
1	2			4	5	2	1										1	8		5	65	3.1	449	3.1	<i>typhi</i>				
2	9	5	1	6	29	2	11	3									1	1	38	5	481	23.0	3,718	25.8	<i>typhimurium</i>				
					9		1										1			39	1.9	236	1.6	<i>typhimurium v cop</i>					
																	1		2		3	0.1	58	0.4	<i>weltevreden</i>				
																	6				1	0.0	13	0.1	<i>worthington</i>				
10	37	24	3	27	124	11	86	10	—	—	11	5	13	6	1	12	16	153	—	55	1,878	89.9	12,846	89.3	TOTAL				
—	4	—	4	3	11	1	40	1	—	—	1	17	2	—	2	—	8	12	—	1	212		1,541		ALL OTHER*				
10	41	24	7	30	135	12	126	11	—	—	12	22	15	6	3	12	24	165	—	56	2,090		14,387		TOTAL				

TABLE II. OTHER SALMONELLAES REPORTED FROM HUMAN SOURCES, SEPTEMBER 1968

SEROTYPE	REPORTING CENTER																							
	ARI	ARK	CAL	COL	CON	DC	FLA	GA	HAW	ILL	IND	IOW	KAN	LA	MAS	MIC	MIS	MO	MON	NEV	NH	NJ	NM	NYA
agona															1									
alabama			2																					
alachua																								
albany																								
bertha																								
bovis-morbificans								1		2														
california											1													
cerro																								
cholerae-suis																								
duesseldorf							1																	
essen		1																						
florida								1																
fresno											1													
gaminara	1						1																	
glostrup																	5							
hartford										2														
johannesburg										2														
kaapstad																								
kentucky			1																					
kottbus				1																				
lawndale																		1						
loma-linda			1																					
london																								
madelia		1																						
meleagridis												1												
muenster													1					1						1
norwich		1																1						
orion																		1						
oslo			1																					
poona	1		2							2			2								1	1		
rubislaw				1						1														
saphra																								
stanley										2														
tallahassee																			1					
urbana																			1					1
virchow														1										
wandsworth																								
willemsstad				1																				
TOTAL	2	3	9	1	1	-	13	4	1	7	1	1	1	11	1	1	1	6	1	2	-	2	-	-
NOT TYPED*	-	-	3	-	2	8	-	-	-	-	-	1	-	-	1	-	3	-	-	-	5	-	17	34
TOTAL	2	3	12	1	3	8	13	4	1	7	1	2	1	11	2	1	4	6	1	2	5	2	17	34

\* See Table V-A

TABLE II - Continued

REPORTING CENTER														TOTAL	CUMULATIVE TOTAL	SEROTYPE
NYC	ND	OKL	ORE	PA	RI	SC	TEN	TEX	VA	WIS						
														1	1	<i>agona</i>
														1	1	<i>alabama</i>
														4	17	<i>alachua</i>
														3	15	<i>albany</i>
														1	23	<i>bertha</i>
														1	2	<i>bovis-morbificans</i>
														2	18	<i>california</i>
														1	6	<i>cerro</i>
														1	12	<i>cholerae-suis</i>
														1	2	<i>duesseldorf</i>
														1	2	<i>essen</i>
														1	1	<i>florida</i>
														1	1	<i>fresno</i>
														6	14	<i>gaminara</i>
														1	1	<i>glostrup</i>
														2	13	<i>hartford</i>
														3	9	<i>johannesburg</i>
														1	3	<i>kaapstad</i>
														2	14	<i>kentucky</i>
														2	5	<i>kottbus</i>
														1	1	<i>lawndale</i>
														1	1	<i>loma-linda</i>
														1	1	<i>london</i>
														2	2	<i>madelia</i>
														1	3	<i>meleagridis</i>
		1												4	26	<i>muenster</i>
														11	25	<i>norwich</i>
														1	1	<i>orion</i>
1														1	10	<i>oslo</i>
														15	63	<i>poona</i>
														3	22	<i>rubislaw</i>
														7	10	<i>saphra</i>
														1	6	<i>stanley</i>
														2	5	<i>tallahassee</i>
														2	17	<i>urbana</i>
														1	4	<i>virchow</i>
														1	1	<i>wandsworth</i>
														1	2	<i>willestad</i>
1	-	1	-	1	-	-	4	14	1	2				93	508	<b>TOTAL</b>
-	2	-	8	-	3	3	-	26	-	3				119	1,033	<b>NOT TYPED*</b>
1	2	1	8	1	3	3	4	40	1	5				212	1,541	<b>TOTAL</b>

Cumulative Totals include isolations of all serotypes (except those listed in Table I) reported this year.

TABLE III. COMMON SALMONELLAES REPORTED FROM NONHUMAN SOURCES, SEPTEMBER 1968

SEROTYPE	DOMESTIC ANIMALS AND THEIR ENVIRONMENT						ANIMAL FEEDS				
	CHICKENS	TURKEYS	SWINE	CATTLE	HORSES	OTHER	SUBTOTAL	TANKAGE	VEGETABLE PROTEIN	OTHER	SUBTOTAL
<i>anatum</i>	1	6	4			3	14	5			5
<i>bareilly</i>							—				—
<i>blockley</i>	7	1	11			1	20	3			3
<i>braenderup</i>	1						1				—
<i>bredeney</i>	2	2					4	1		1	2
<i>chester</i>			1				1				—
<i>cholerae-suis v kun</i>			17				17				—
<i>cubana</i>							—	5		3	8
<i>derby</i>	1	2	36				39	1			1
<i>enteritidis</i>	3	1				1	5				—
<i>give</i>							—				—
<i>heidelberg</i>	30	2	8	3		1	44	3			3
<i>indiana</i>	2	1	2	1		1	7			2	2
<i>infantis</i>	4	2	30				36	1		1	2
<i>java</i>			1				1	1			1
<i>javiana</i>						2	2				—
<i>litchfield</i>			1				1				—
<i>livingstone</i>			1				1		15		15
<i>manhattan</i>	3		6				9				—
<i>miami</i>							—				—
<i>mississippi</i>							—				—
<i>montevideo</i>	1	2					3	10		12	22
<i>muenchen</i>				1			1	1			1
<i>newington</i>		1	10				11				—
<i>newport</i>			17	3		1	21				—
<i>oranienburg</i>	1		2				3	1			1
<i>panama</i>			22				22				—
<i>paratyphi B</i>				1			—				—
<i>reading</i>							—	2			2
<i>saint-paul</i>	2	14	1	1	1		19	2			2
<i>san-diego</i>		4					4				—
<i>schwarzengrund</i>	1		7				8	2			2
<i>senftenberg</i>	2	6	5				13	3		15	18
<i>tennessee</i>		3					3	8		9	17
<i>thompson</i>	19	1				1	21			1	1
<i>typhi</i>							—				—
<i>typhimurium</i>	5	7	29	20	4	9	74	3			3
<i>typhimurium v cop</i>	6	2	1	6		1	16				—
<i>weltevreden</i>						1	1				—
<i>worthington</i>							—	4			4
<b>TOTAL</b>	91	57	212	35	5	22	422	71	—	44	115
<b>ALL OTHER*</b>	14	3	3	8	1	3	32	45	—	14	59
<b>TOTAL</b>	105	60	215	43	6	25	454	116	—	58	174

\* See Table IV

TABLE III - Continued

WILD ANIMALS AND BIRDS	REPTILES AND ENVIRON- MENT	HUMAN DIETARY ITEMS						MISCEL- LA- NEOUS	TOTAL	CUMU- LATIVE TOTAL	SEROTYPE
		EGGS AND PRODUCTS	POULTRY	RED MEAT	DAIRY PRODUCTS	OTHER	SUBTOTAL				
2	1					1	—	8	30	433	<i>anatum</i> <i>bareilly</i> <i>blockley</i> <i>braenderup</i> <i>bredeney</i>
					4		—	1	1	24	
							—	2	25	180	
							—		1	23	
							4	2	12	101	
2							—		3	43	<i>chester</i>
							—		17	94	<i>cholerae-suis v kun</i>
4					13		13	7	28	265	<i>cubana</i>
					1		1		45	219	<i>derby</i>
							—		5	114	<i>enteritidis</i>
2							—			42	<i>give</i>
1							—	1	50	535	<i>heidelberg</i>
3		5				11	16	2	59	342	<i>indiana</i>
	1						—		3	17	<i>infantis</i>
							—				<i>java</i>
							—		2	12	<i>javiana</i>
							—		1	2	<i>litchfield</i>
							—	2	18	100	<i>livingstone</i>
							—		9	21	<i>manhattan</i>
							—			10	<i>miami</i>
1	1	1		1			—		1	1	<i>mississippi</i>
1							2	5	33	382	<i>montevideo</i>
2							9		13	44	<i>muenchen</i>
5					2		2	1	14	83	<i>newington</i>
					1		1		27	179	<i>newport</i>
1							—	1	6	137	<i>oranienburg</i>
							—		22	49	<i>panama</i>
							—			6	<i>paratyphi B</i>
1		2					—		2	19	<i>reading</i>
							2		24	320	<i>saint-paul</i>
							—		4	37	<i>san-diego</i>
							—		10	67	<i>schwarzengrund</i>
					1	4	—	3	34	263	<i>senftenberg</i>
					6		6	1	27	149	<i>tennessee</i>
					1	5	5	1	28	222	<i>thompson</i>
9	2	10		1			—			—	<i>typhi</i>
1							11		99	890	<i>typhimurium</i>
							—		17	214	<i>typhimurium v cop</i>
							2		3	10	<i>weltevreden</i>
							—	1	5	98	<i>worthington</i>
34	5	23	—	2	21	29	75	37	688	5,762	<b>TOTAL</b>
—	2	1	—	1	1	29	32	6	131	1,344	<b>ALL OTHER*</b>
34	7	24	—	3	22	58	107	43	819	7,106	<b>TOTAL</b>

TABLE IV. OTHER SALMONELLAEE REPORTED FROM NONHUMAN SOURCES, SEPTEMBER 1968

SEROTYPE	DOMESTIC ANIMALS AND THEIR ENVIRONMENT						ANIMAL FEEDS				
	CHICKENS	TURKEYS	SWINE	CATTLE	HORSES	OTHER	SUBTOTAL	TANKAGE	VEGETABLE PROTEIN	OTHER	SUBTOTAL
albany	1						1				1
binza		1					1	3			3
california	3						3				1
cerro	1						1	2			2
drypool							—	20			20
dublin							9				—
eimsbuettel	4		1	8			4	3		7	10
gallinarum	1						1				—
habana							—	1			—
illinois							—		1		2
johannesburg			1				1			1	1
kentucky	1						1	2		1	3
lexington						1	—				—
manila							1			2	1
meleagridis			1				1				2
minneapolis			1				1				—
minnesota	1						1				—
muenstein			1				1				—
ohio	1						1				—
oslo						1	1				—
pomona							—	1			1
poona							—				—
pullorum							1				—
rubislaw							—	1			—
siegburg					1		—				1
taksomy							—	2			2
urbana							—				—
westerstede							1			2	—
zanzibar	1						—				2
TOTAL	14	3	3	8	1	2	31	35	—	14	49
NOT TYPED*	—	—	—	—	—	1	1	10	—	—	10
TOTAL	14	3	3	8	1	3	32	45	—	14	59

\* See Table V-B

TABLE IV - Continued

WILD ANIMALS AND BIRDS	REPTILES AND ENVIRON-MENT	HUMAN DIETARY ITEMS						MISCEL-LA-NEOUS	TOTAL	CUMU-LATIVE TOTAL	SEROTYPE
		EGGS AND PRODUCTS	POULTRY	RED MEAT	DAIRY PRODUCTS	OTHER	SUBTOTAL				
							-	1	1	11	<i>albany</i>
							-	5	5	57	<i>binza</i>
							-	2	5	67	<i>california</i>
							-	3	106	106	<i>cerro</i>
							-	20	36	36	<i>drypool</i>
		1				28	-	9	46	46	<i>dublin</i>
							29	43	230	230	<i>eimsbuettel</i>
						1	-	1	8	8	<i>gallinarum</i>
							1	1	3	3	<i>habana</i>
							-	2	9	9	<i>illinois</i>
			1				-	3	14	14	<i>johannesburg</i>
							-	4	91	91	<i>kentucky</i>
							-	1	23	23	<i>lexington</i>
							-	1	11	11	<i>manila</i>
							-	3	27	27	<i>meleagrisidis</i>
							-	1	33	33	<i>minneapolis</i>
							-	1	69	69	<i>minnesota</i>
							-	1	10	10	<i>muenster</i>
							-	1	10	10	<i>ohio</i>
							-	2	3	3	<i>oslo</i>
	1						-	1	9	9	<i>pomona</i>
							-	1	14	14	<i>poona</i>
							-	1	48	48	<i>pullorum</i>
							-	1	19	19	<i>rubislaw</i>
							1	2	49	49	<i>siegburg</i>
	1						-	2	14	14	<i>taksony</i>
							-	1	12	12	<i>urbana</i>
							-	1	1	1	<i>westerstede</i>
							-	2	2	2	<i>zanzibar</i>
-	2	1	-	1	1	29	32	6	120	1,277	TOTAL
-	-	-	-	-	-	-	-	-	11	67	NOT TYPED*
-	2	1	-	1	1	29	32	6	131	1,344	TOTAL

TABLE V. SALMONELLA REPORTED BY GROUP IDENTIFICATION ONLY, SEPTEMBER 1968

## A. HUMAN SOURCES

REPORTING CENTER	GROUP												TOTAL			
	B		C		C <sub>1</sub>		C <sub>2</sub>		D		E		O		UNK	
CALIFORNIA	2												1		3	
CONNECTICUT	1												1		2	
DISTRICT OF COLUMBIA	4		1				1						2		8	
IOWA													1		1	
MASSACHUSETTS	1														1	
MISSISSIPPI	3														3	
NEW HAMPSHIRE	4														5	
NEW MEXICO	11		1		1		1		3						17	
NEW YORK - A															34	
NORTH DAKOTA													2		2	
OREGON	5					1		2		1					8	
RHODE ISLAND							1								3	
SOUTH CAROLINA	1					1		6					1		3	
TEXAS	5									2			12		26	
WISCONSIN													3		3	
<b>TOTAL</b>	<b>37</b>		<b>2</b>		<b>3</b>		<b>11</b>		<b>6</b>		<b>3</b>		<b>1</b>		<b>56</b>	<b>119</b>

## B. NONHUMAN SOURCES

SOURCES	GROUP												TOTAL			
	B		C		C <sub>1</sub>		C <sub>2</sub>		D		E		O		UNK	
DOMESTIC ANIMALS AND THEIR ENVIRONMENT	1														1	
ANIMAL FEEDS								2			2			6	10	
WILD ANIMALS AND BIRDS															-	
REPTILES AND ENVIRONMENT															-	
HUMAN DIETARY ITEMS															-	
MISCELLANEOUS															-	
<b>TOTAL</b>	<b>1</b>		<b>-</b>		<b>-</b>		<b>2</b>		<b>-</b>		<b>2</b>		<b>-</b>		<b>6</b>	<b>11</b>

## STATE EPIDEMIOLOGISTS AND STATE LABORATORY DIRECTORS

Key to all disease surveillance activities are the physicians who serve as State epidemiologists. They are responsible for collecting, interpreting, and transmitting data and epidemiological information from their individual States; their contributions to this report are gratefully acknowledged. In addition, valuable contributions are made by State Laboratory Directors; we are indebted to them for their valuable support.

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