



Sam-n-Ella's Cafe



Appetizer

Oysters á la red tide
Shrimp cholera—tura
Tuna au histamine

Rolls compliments of *Aspergillus*

Vegetable

Canned green beans extrudere

Entree

Turkey inhabited with playful *Sal*
Stuffed yesterday with a delightful mixture of
Amanita, *Claviceps*—crumbs, seasoned
with MSG by *Corynebacterium*
glutamicum & *Brevibacterium flavum*

Dessert

Pumpkin pie with *aureus* whipped cream



Answer the following questions for each of the case histories. Use one page for each case history.

1. Identify the etiologic agent of the outbreak.
2. Was it a food infection or intoxication?
3. How did the food get contaminated and what item was contaminated?
4. Briefly explain how you arrived at your conclusion.

Hints:

- Make a table of onset of symptoms.
- Make a summary table of persons not ill.

Case History 1: Food Poisoning, New Mexico

Background

The New Mexico Health Department was consulted by an Albuquerque physician regarding two patients, a husband and wife, who had become ill within 45 minutes of eating dinner. Their symptoms included nausea, vomiting, diarrhea, headache, fever, flushing, and rapid pulse rate. An investigation found that the couple had shared a meal of grilled mahi mahi, pasta, salad, water, and wine. In a hospital emergency room, both patients were treated with antihistamines and ipecac. Their symptoms resolved within 36 hours of the onset of illness.

The fish had been imported from Taiwan through California and shipped frozen to the Albuquerque distributor, where it was thawed and sold from iced refrigerator cases. The patients had frozen the fish after they bought it. Later, they thawed it for three hours at room temperature and then grilled the still icy fish.

Data

Food Eaten	Husband	Wife	Daughter	Dog
Fish	x	x		x
Pasta	x	x	x	
Salad	x	x	x	
Wine	x	x	x	
Water	x	x	x	x
Ill	Yes	Yes	No	Yes

Case History 2: The New York Brunch

Background

On May 23, a woman was admitted to a hospital with diarrhea and vomiting. An investigation was started to trace her contacts. During the investigation, it became apparent that the symptoms were due to a brunch shared by 32 persons on May 22 (11 a.m. to 3 p.m.). Symptoms experienced by people at the brunch included:

All fresh food items were delivered to the cooking area the morning of May 22. The menu consisted of:

- O** = Omelets. Grade A eggs from a local farm were beaten, mixed with pasteurized milk, salt, pepper, and diced onions. The egg batter was sautéed in small batches and served from warming trays heated by alcohol burners.
- B** = Bacon. Bacon was purchased from a meat whole seller. The bacon was fried on a large griddle and served from warming trays.
- F** = Fruit salad. Fresh apples, banana, and oranges were cut—up and mixed with commercially canned peaches and pears.
- P** = Pastries. Muffins and other breads were purchased from a bakery and served with butter.

Data

Person	Foods eaten	Beverage	Time ate, Sun	Symptoms	Onset of symptoms
1	OBFP	CJ	1100	DVNC	2400 Sun
2	BFP	MJ	1200		
3	OBFP	C	1200	NC	0200 Mon
4	OBFP	C	1100	DNC	
5	P	T	1100		
6	B	CJ	1200		
7	FP	CJ	1300		
8	P	CH	1300		
9	OBFP	C	1100	DVNC	1100 Mon
10	P	T	1200		
11	P	M	1300		
12	OBFP	M	1300	DNC	1400 Mon
13	P	C	1200		
14	BFP	CJ	1500		
15	OBP	T	1500	DNC	2400 Mon
16	P	MJ	1100		
17	BFP	C	1100		
18	P	C	1200	N	1300 Sun
19	PB	T	1200	DVNC	1700 Mon
20	FP	CJ	1200		
21	OB	M	1300	DNC	0200 Mon
22	P	M	1400	C	0800 Tue
23	P	MJ	1400		
24	OBFP	C	1100	DC	1500 Mon
25	OBP	C	1100	VNC	0100 Mon
26	FP	T	1200		
27	P	T	1200		
28	OBFP	C	1200	DC	0200 Mon
29	BP	M	1300		
30	P	CJ	1400		
31	BFP	C	1100		
32	OBFP		1200	DC	1200 Mon

D = Diarrhea

V = Vomiting

N = Nausea

C = Abdominal cramps

Case History 3: The Unfortunate Alaskan Fishing Trip Background

Background

The Alaska Department of Public Health was notified that foodborne illness had occurred in fishermen aboard a fishing boat off the Alaska peninsula. The fishermen had eaten baked fish, steamed clams and mussels, boiled rice, boiled potatoes, and green salad. No alcohol was consumed.

Data

Case	Symptoms	Onset (hr)	Foods Eaten					
			Clams	Mus-sels	Salmon	Halibut	Rice	Pota-toes
1	None	—	1			x		x
2	Vomiting; numbness around mouth;	2 1/2	4—5			x	x	
3	None	—			x			x
4	Numbness of tongue and jaw; tingling	2	5			x		x
5	Numbness and tingling of face and							
6	None	—		1 raw		x	x	
7	None	—	1			x	x	
8	None	—		1 raw	x			x
9	Numbness and tingling around mouth,	1/2	25—30			x		
10	Vomiting; numbness of lips and fingers;	2		4—5		x		x
11	Vomiting; numbness of throat, toes, and	1		12			x	x
12	Lower back pain	2	6—7		x		x	
13	Nausea	1/2	2			x	x	
14	Numbness of face; paralysis of legs	1	20—25					x
15	Vomiting; numbness and tingling of	1		18—24				x
16	None	—	1					x
17	None	—				x		x
18	Vomiting; numbness of mouth; tingling	2	3—4		x			x
19	Vomiting; tingling of mouth, face, and	2	6—7				x	x
20	Numbness of face and hands; dizziness	1 1/2	10				x	
21	Paralysis of right arm; lower back pain	1 1/2	15—20					x

Case History 4: An Outbreak of Food Poisoning, San Francisco

Background

An outbreak of food poisoning occurred, affecting half the members of five families who ate at a restaurant in San Francisco at 3 p.m. on June 20th.

On June 20th, a woman was admitted to a hospital with "chilliness," nausea, abdominal cramps, and watery diarrhea. The next morning, she complained of limb numbness and difficulty swallowing and breathing. Examination was unremarkable except for slight weakness of the upper extremities and diminished deep tendon reflexes. Laboratory analysis yielded no viral or bacterial infection.

An investigation was started to trace her contacts. During the investigation, it became apparent that the symptoms were due to a meal shared by 32 persons on June 20th. Rice was purchased from a produce market in a 50 kg bag. The rice was boiled the morning of the dinner and kept warm in foil—covered pots. Chicken was purchased from a supermarket. The chicken was cut up, browned in oil, boiled for two hours, and the flesh pulled from the bones. The chicken was mixed with rice noodles. A whole, gutted pig was roasted in a conventional hot air oven until the meat was white. Rice noodles were purchased from a supermarket, boiled, and pan—fried. Whole, ungutted jackfish were purchased from a seaman who caught the fish at Midway Island. The fish were frozen in the ship's freezer until return to the Port of Oakland on June 19; they were gutted and cut into steaks, which were deep—fried and served in vinegar/herb sauce. The fish heads and viscera were boiled with vegetables for 15 minutes to make chowder (escabeche).

Data			Symptoms						Foods Eaten							Symptom onset		Duration		
Case	Age	Sex	C	M	n v	A	B	R	N	V	1	2	3	4	5	6	7	Date	Hr	Days
1	66	M	x	x	x	x	x				x	x	x	x	x	x		20	7p	1
2	32	M		x	x	x						x		x	x	x	x	20	6p	1.5
3	29	F									x	x	x	x	x	x	x			
4	55	F											x	x	x	x	x			
5	39	F									x	x			x	x	x			
6	25	M									x	x			x	x	x			
7	32	M										x	x			x	x			
8		F		x		x		x		x	x				x	x		20	8p	1
9	25												x	x			x			
10	9	M		x	x	x		x			x		x	x		x	x			
11	10	M	x					x	x		x	x		x	x			21	8p	1
12	20	F										x	x	x		x	x	20	5p	14
13	34	F										x	x	x	x		x			
14	42	F									x		x	x						
15	13	F											x	x			x			
16	12	M												x	x	x	x			
17	66	F	x	x		x		x			x	x	x	x	x	x	x	20	6p	1
18	49	M		x	x	x	x					x		x	x	x		20	7p	1
19	32	F	x					x	x		x	x		x		x	x	20	5p	14
20	33	M	x	x		x		x			x	x	x		x		x	20	6p	1.5
21	25	M		x	x		x	x	x			x	x	x	x			21	6a	1.5
22	25	F	x		x	x				x	x	x	x	x	x	x	x	20	5p	0.5

Data			Symptoms									Foods Eaten							Symptom onset		Duration
Case	Age	Sex	C	M	n v	A	B	R	N	V	1	2	3	4	5	6	7	Date	Hr	Days	
23	40	F								x			x	x		x		22	11a	1	
24	43	M	x	x	x	x	x	x	x	x	x	x		x		x	x	20	5p	14	
25	30	F				x					x		x	x	x			20	5p	1	
26	44	M		x	x	x		x			x	x		x	x	x	x	20	5p	3	
27	49	F										x	x	x		x					
28	50	F										x	x	x	x	x					
29	32	M										x		x	x	x					
30	33	M	x		x			x	x		x	x			x		x	20	5p	14	
31	52	F			x	x					x	x			x	x	x	20	7p	2	
32	36	F	x	x	x	x					x	x		x		x	x	20	9p	1	

C=Chilly sensation.
M=Malaise.
nv=nausea, vomiting, diarrhea.
A=Abdominal pain.
B=Breathing difficulty.
N=Numbness and tingling of lips and extremities.
V=Vertigo

1=Fried fish
2=Chowder
3=Port
4=Chicken/noodles
5=Rice
6=Fresh fruit
7=Chocolate cake

Case History 5: The Louisiana Dinner

Background

An outbreak of food poisoning occurred the last week of June, affecting two—thirds of the 1700 persons who attended a dinner in Port Allen, Louisiana. A questionnaire to obtain information concerning the illness was administered to 122 persons. Of this sample, 82 (67.2%) reported illness. Physicians treated 32 patients (26.2%); 9 (7.4%) required hospitalization. Dinner was at 6 P.M. Sunday.

Laboratory analysis yielded positive cultures of the etiological agents from the leftover shrimp, potatoes, corn, and hogshead cheese, and from 7 of 15 stool samples from patients. The person who collected the food stored all of it in one container.

Potatoes were purchased from a farmer. They had been stored in a root cellar and were transported loose in a pickup truck. The morning of the dinner the potatoes were washed, peeled, and boiled until tender. The pots were covered with aluminum foil and transported unrefrigerated 50 miles to the dinner.

Corn was purchased from a produce market. The night before the dinner, the corn was shucked and kept in the wooden boxes in which it had been purchased. The day of the dinner, the corn was boiled. For transport, it was wrapped in aluminum foil.

Hogshead cheese was purchased the morning of the dinner along with the salt meat. The headcheese and salt meat were kept refrigerated by the delicatessen. After purchase, they were stored unrefrigerated until dinner. (Read labels in the deli section of your grocery store to ascertain the ingredients in headcheese.)

Raw shrimp was purchased at one location and shipped to a second location in standard wooden seafood boxes. It was boiled on the morning of the dinner and placed back into the boxes. After being covered with aluminum foil, it was transported 40 miles in an unrefrigerated truck to the dinner. An inspection of the wholesale seafood establishment was undertaken six days later. The investigation revealed that the shrimp had been boiled in 300—lb. batches in the following manner: A batch was

placed in a container until the water came to a rolling boil; then the gas was turned off, and the shrimp kept in the hot water for 15 minutes.

<p>Symptoms: D = Diarrhea C = Cramps W = Weakness N = Nausea c = Chills H = Headache F = Fever V = Vomiting</p>	<p>Foods Eaten: 1 = Boiled shrimp 2 = Headcheese 3 = Boiled potatoes 4 = Boiled corn 5 = Boiled salt meat 6 = Bread and butter 7 = Watermelon</p>
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Data

Case	Age	Sex	Symptoms								Foods Eaten							Onset		Duration (Days)	
			D	C	W	N	c	H	F	V	1	2	3	4	5	6	7	Day	HR		
1	13	F	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	S	11p	1	
2	21	F	+	+	+	+	+	+	+	+	+		+				+	+	M	12n	4
3	64	F	+	+	+	+	+			+		+	+	+	+	+	+	M	1	3	
4	32	M	+	+	+	+	+	+	+	+	+	+	+	+			+	M	5	2	
5	41	F	+	+	+	+	+	+			+	+	+		+		+	T	8a	4	
6	42	M	+	+	+	+	+	+	+	+	+	+	+	+			+	M	8a	6	
7	30	M	+	+	+	+						+		+	+		+	S	12m	7	
8	50	M							+				+	+		+	+	W	8a		
9	55	M	+	+	+	+			+	+		+	+	+			+	S	11p	1	
10	60	F	+									+	+	+		+		T	7p	3	
11	61	M	+		+			+	+	+		+	+	+	+		+	M	12n	4	
12	19	M	+	+				+	+	+		+					+	S	10p	4	
13	22	F																			
14	70	F											+	+		+	+	M	1p	6	
15	69	F	+	+	+			+	+	+		+	+	+	+		+	M	9a	6	
16	68	M	+	+	+			+					+	+	+	+	+	M	12n	5	
17	34	F	+	+	+			+				+	+	+			+	M	12n	5	
18	40	F			+	+	+					+	+		+	+	+	M	pm	7	
19	41	F	+	+	+	+	+	+	+			+	+		+	+	+	S	pm	5	
20	59	M											+			+	+				
21	78	M	+	+	+	+	+	+	+			+				+	+	T	am	5	
22	73	F	+	+	+			+				+		+			+	M	3p	4	
23	46	F	+	+	+			+				+			+			M	4a	3	
24	57	M	+	+	+							+	+	+	+		+	M	9a	2	
25	34	M	+	+	+	+						+		+			+	M	9p	8	
26	72	M	+	+	+							+		+	+		+	T	1a	8	
27	32	M	+	+	+	+	+	+	+	+		+		+			+	T	am	7	

Case	Age	Sex	Symptoms								Foods Eaten							Onset		Duration (Days)
			D	C	W	N	g	H	F	V	1	2	3	4	5	6	7	Day	HR	
28	61	F	+	+	+	+	+	+	+	+	+			+				S	12m	1
29	36	F	+	+	+	+	+	+	+	+	+			+	+		+	M	1a	2
30	59	M	+	+	+	+	+	+	+	+	+			+		+		M	pm	2
31	74	M	+	+	+	+	+	+	+	+	+			+		+		M	10a	4
32	50	M													+	+				
33	54	M	+	+		+									+	+	+	M	am	5
34	?	M	+	+	+	+									+	+		T	am	6
35	39	M	+	+	+	+									+		+	S	pm	8
36	40	M	+	+	+	+			+						+		+	M	10a	1
37	78	F	+	+	+	+									+	+	+	M	9a	8
38	57	F	+		+	+									+	+	+	M	8a	7
39	14	M	+		+	+									+	+	+	M	pm	4
40	15	M		+	+	+									+	+		M	10a	2
41	60	F	+	+	+	+	+	+	+	+	+				+	+		M	11a	4
42	63	M	+	+	+	+	+	+	+	+	+				+	+		S	11p	5
43	81	F	+	+	+	+	+	+	+	+	+				+	+	+	T	11a	6
44	57	F	+	+	+	+	+	+	+	+	+					+	+	T	12n	7
45	32	M	+	+	+	+	+	+	+	+	+							M	12n	6
46	?	F	+	+	+	+	+	+	+	+	+				+	+	+	M	8a	7
47	20	F	+	+	+	+	+	+	+	+	+				+	+		M	9a	2
48	25	M	+	+	+	+										+		S	10	2
49	32	F	+	+	+	+									+	+		S	12n	3
50	38	M	+	+	+	+									+	+		M	10a	4
51	40	F	+	+	+	+									+	+		M	12n	5
52	45	M	+	+	+	+									+		+	T	12n	5
53	18	F	+	+	+	+									+	+		M	12n	3
54	10	M	+	+	+	+	+	+	+	+	+				+	+	+	M	11a	2
55	20	F	+	+	+	+	+	+	+	+	+							T	1a	2
56	60	F	+	+	+	+	+	+	+	+	+				+	+	+	M	11a	3
57	63	M	+	+	+	+									+	+	+	T	11a	4
58	57	M	+	+	+										+	+		S	pm	4
59	46	F													+	+	+			
60	45	M	+	+	+										+	+		M	am	3
61	60	M	+	+	+		+	+	+	+	+				+	+	+	M	8a	1
62	14	M	+	+	+										+	+	+	M	6p	5
63	39	M	+	+	+										+	+	+	M	5a	3

Case	Age	Sex	Symptoms								Foods Eaten							Onset		Duration (Days)
			D	C	W	N	g	H	F	V	1	2	3	4	5	6	7	Day	HR	
64	48	M	+	+	+						+	+	+		+	+	+	T	1a	2
65	33	F	+	+	+	+	+	+	+	+	+	+	+			+	+	T	11p	3
66	50	F	+	+	+						+	+	+		+	+		M	3p	7
67	17	F	+	+	+	+	+	+	+	+	+	+	+	+			+	M	2a	3
68	59	M	+	+	+	+	+	+	+	+	+		+			+		M	11a	4
69	46	F	+	+	+	+	+	+	+	+	+		+	+		+	+	S	10p	6
70	34	F	+	+	+						+		+	+	+		+	T	3a	1
71	35	M	+	+	+						+		+		+		+	T	4a	2
72	50	F	+	+	+								+	+		+	+	M	9a	8
73	56	M	+	+	+	+					+		+			+		M	9p	8
74	45	M	+	+	+	+					+		+			+		M	1a	5
75	?	F	+	+	+	+	+	+	+	+	+		+					T	2a	7
76	63	M	+	+	+	+	+	+	+	+	+				+	+	+	S	12m	3
77	54	F	+	+	+								+	+	+		+	S	11p	4
78	35	F	+	+	+	+	+	+	+		+		+		+		+	M	12n	4
79	38	M	+	+	+	+	+	+	+		+		+				+	M	4a	5
80	33	M											+	+		+				
81	32	F										+	+		+		+			
82	47	F	+	+	+	+	+	+	+		+		+	+		+	+	M	4a	7
83	49	M						+			+		+		+		+	S	9p	
84	38	F	+	+	+	+	+	+	+		+		+	+			+	M	3p	1
85	42	F	+	+	+	+	+	+	+		+	+			+		+	M	5a	5
86	45	M	+	+	+	+	+	+	+		+		+				+	M	2a	5
87	49	M	+	+	+	+	+	+	+		+		+	+	+			T	3a	6
88	71	F	+	+	+	+	+	+	+	+	+				+	+	+	M	10a	3
89	75	F	+	+	+	+	+	+	+		+				+		+	M	2p	8
90	39	M	+	+	+	+	+	+	+		+		+				+	S	11p	2
91	70	F	+	+	+										+	+	+	M	5a	4
92	48	F	+	+	+	+	+	+	+		+		+		+	+		M	6p	6
93	21	F	+	+		+					+	+		+	+		+	M	2a	5
94	24	F	+			+					+	+	+	+	+	+	+	M	11p	7
95	25	M	+		+	+					+					+		M	9a	5
96	40	M	+	+	+	+	+	+	+		+	+	+	+	+	+	+	M	8a	2
97	36	F	+	+	+						+					+		T	2a	4
98	58	M	+	+	+						+	+	+	+	+	+	+	S	10p	1
99	?	F	+	+	+	+	+	+	+		+	+		+		+	+	T	1a	7

Case	Age	Sex	Symptoms								Foods Eaten							Onset		Duration (Days)
			D	C	W	N	g	H	F	V	1	2	3	4	5	6	7	Day	HR	
100	41	F	+	+	+	+	+	+	+		+	+		+		+	+	M	3p	5
101	55	F	+	+	+	+	+	+	+		+	+	+			+	+	S	9p	3
102	42	M	+	+	+	+	+	+	+		+	+	+		+		+	T	2p	4
103	27	M	+	+	+	+	+	+	+		+		+	+		+		M	3a	3
104	25	F	+	+	+	+	+	+	+		+			+			+	M	11a	6
105	20	M											+		+	+	+			
106	18	F									+		+	+		+				
107	43	M	+	+	+	+							+		+		+	M	2a	5
108	33	F	+	+							+		+		+	+	+	M	5p	6
109	65	M										+		+			+			
110	14	F	+	+	+	+	+	+	+		+	+				+	+	M	6a	1
111	13	M	+	+	+	+						+			+	+		M	3p	7
112	50	F	+	+	+	+	+	+	+		+	+	+	+		+	+	S	1p	7
113	?	F	+	+	+	+							+		+		+	M	2a	5
114	12	F	+	+	+	+	+	+	+		+		+		+	+		T	3a	4
115	18	M	+	+	+	+							+	+	+			S	10p	6
116	70	M	+	+	+	+	+	+	+	+	+		+		+			T	1a	3
117	33	M	+	+	+	+							+		+	+		M	11	2
118	60	F	+	+	+	+	+				+	+	+			+	+	M	6a	5
119	50	M	+	+	+	+	+				+		+			+		T	2a	5
120	48	F	+	+	+	+	+		+		+			+	+	+		M	3p	7
121	13	F	+	+	+	+	+								+			M	4a	4
122	19	F	+	+	+	+	+		+		+	+		+		+	+	S	10p	6

Case History 6: The Headache

Background

On October 15, a 40—year—old man was admitted to the hospital. He had a "splitting" headache, his legs were unsteady, and his vision was blurred. During examination, it was apparent that there was something wrong with his throat. It wasn't sore, but it felt stiff and tight, and it was almost impossible for him to speak.

Over the next seven days, 28 persons with similar symptoms were admitted to the hospital. Twelve of these patients required ventilatory support; no deaths were reported. During the investigation, it became apparent that the illnesses were due to meals consumed between October 14 and 16 at one restaurant. Detailed food histories were obtained from the patients. An additional case—control study was conducted on well people who had consumed food at the restaurant during the same three—day period. Repeated news media announcements aided health personnel in locating 18 other people who had eaten virtually the same foods at the restaurant.

The meals consisted of the following foods:

1=Patty Melt. Frozen hamburger patties purchased from a restaurant distributor. Patties were removed from the freezer and fried as ordered. Presliced pasteurized American cheese purchased

from a distributor was kept refrigerated, and a slice was melted on each cooked hamburger patty. Meat and cheese were served on rye bread purchased from a local bakery.

2=Sauteed Onions. Onions were purchased fresh from a farmer. Fresh whole onions were sliced and then sauteed with margarine, paprika, garlic salt, and a chicken—based powder. After the initial cooking, the onions were held uncovered in a pan on a warm stove (<60°C) along with a large volume of melted margarine; they were not reheated before serving.

3=French—Fried Potatoes. Precut frozen potatoes were deep—fried in two— or three—serving batches as needed.

4=Potato Salad. Potatoes were purchased from a farmer. They had been stored in a root cellar and were transported loose in a pickup truck. The potatoes were washed, peeled, diced, and boiled. Cooled, drained potato cubes were mixed with oil, vinegar, dry mustard, and garlic salt, and kept refrigerated. Individual servings were removed from the container as needed.

5=Lettuce and Tomato Salad. Produce was delivered every other day. Lettuce and tomatoes were cut in the morning, refrigerated, and mixed with oil and vinegar for serving.

Symptoms: W = Weakness, lassitude, D = Diarrhea, N = Nausea, vomiting, C = Constipation, Dd = Diplopia, Dy = Dysphagia, dysphonia, M = Muscle weakness, Rd = Respiratory difficulty

Case	Sex	Age	Date at Restaurant	Date hospitalized	Ventilated?	Symptoms							Foods eaten					
						W	D	N	C	D d	D y	M	R d	1	2	3	4	5
1	M	25	26	20	N	X			X	X		X	X	X	X			X
2	F	20	14	15	Y	X			X	X	X	X	X	X	X	X		
3	M	40	15	17	Y	X				X	X	X	X	X	X		X	
4	M	55	14	17	Y	X			X		X	X	X	X	X	X		
5	F	72	15	16	N	X			X	X	X	X	X	X			X	
6	M	43	15	17	N	X					X	X		X	X	X	X	
7	F	37	16	17	Y	X					X	X		X	X			X
8	F	51	15	16	Y	X			X		X	X	X	X	X			X
9	F	25	14	16	N	X			X	X	X	X		X	X		X	X
10	M	40	16	—	—	X			X	X				X				X
11	F	35	14	—	—		X							X		X		
13	M	54	15	18	N		X							X	X	X		X
14	F	34	15	18	Y	X		X	X		X	X	X	X	X	X		
15	M	45	14	16	Y	X			X		X	X	X	X	X		X	
16	M	27	16	—	—									X	X			X
17	F	37	14	15	Y	X			X	X	X	X	X	X	X			X
18	M	34	14	—	—									X			X	
19	M	30	15	—	—				X					X		X		
20	F	22	16	20	Y				X					X		X		
21	F	39	14	17	N	X			X	X	X	X		X	X			X
22	M	45	16	—	—	X								X	X			X
23	M	53	14	—	—				X					X	X		X	

Case	Sex	Age	Date at Restaurant	Date hospitalized	Ventilated?	Symptoms								Foods eaten				
						W	D	N	C	D d	D y	M	R d	1	2	3	4	5
24	F	41	15	20	N	X	X			X							X	
25	F	42	14	16	N	X				X	X	X		X	X		X	
26	F	54	16	18	Y	X			X	X	X	X	X	X	X	X		
27	M	42	16	—	—	X			X					X	X		X	X
28	F	43	16	19	N	X		X		X	X	X				X		
29	M	42	15	—	—	X					X	X		X	X			X
30	F	65	15	—	—	X			X					X	X	X		
31	F	33	16	21	N	X				X		X		X	X	X	X	
32	M	52	14	—	—			X	X					X		X		
33	F	26	14	—	—	X	X			X	X			X	X	X		
34	F	40	15	18	N	X			X	X		X					X	
35	F	22	15	19	Y	X			X		X	X	X	X	X	X		
36	M	63	16	20	N	X			X	X				X	X		X	X
37	M	35	15	—	—									X	X		X	X
38	M	56	15	17	Y	X			X	X		X	X	X	X			X
39	F	60	15	17	N	X			X	X				X	X	X		
40	M	37	15	—	—			X						X			X	
41	F	28	15	19	N	X				X				X	X			X
42	M	19	15	—	—									X	X			X
43	F	28	15	—	—			X						X			X	X
44	F	55	15	17	N	X					X			X			X	
45	M	28	15	—	—									X			X	
46	F	45	15	18	N	X					X			X	X	X		