

Supplementary Information

Supplementary Table 1. Additional illness characteristics across age categories for *Campylobacter* and nontyphoidal *Salmonella* infections and acute gastroenteritis (Australia, Canada, United States combined)

	Age categories (years)						
	Total	<5	5–24	25–64	65–74	75–84	≥85
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
<i>Campylobacter</i>							
Anorexia ^a	469 (52)	29 (34)	101 (50)	290 (58)	32 (49)	15 (37)	2 (29)
Bloating ^a	333 (37)	17 (24)	56 (27)	225 (44)	23 (33)	10 (25)	2 (29)
Chills ^a	558 (57)	21 (25)	110 (49)	373 (68)	33 (45)	17 (40)	4 (57)
Dehydration ^a	369 (42)	15 (17)	68 (37)	228 (46)	34 (51)	19 (53)	5 (63)
Headache ^{a,b}	1,002 (52)	18 (16)	311 (62)	597 (55)	50 (36)	24 (28)	2 (13)
Malaise ^a	874 (63)	55 (47)	196 (62)	521 (67)	62 (65)	30 (47)	10 (67)
Muscle pain ^{a,b}	630 (44)	8 (12)	169 (46)	404 (49)	28 (26)	20 (30)	1 (11)
Nausea ^{a,b}	1,076 (54)	30 (23)	295 (59)	641 (58)	70 (49)	33 (36)	7 (44)
Chronic GI ^b	66 (12)	No cases	9 (5)	42 (14)	9 (23)	4 (18)	2 (100)
Antibiotic ^{a,b}	615 (35)	44 (31)	122 (28)	380 (39)	38 (29)	25 (33)	6 (35)
Proton pump inhibitor ^{c,b}	364 (20)	5 (4)	27 (6)	275 (25)	34 (30)	22 (37)	1 (11)
<i>Salmonella</i>							
Achy joints ^d	411 (57)	23 (22)	111 (53)	235 (71)	23 (58)	18 (50)	1 (20)
Anorexia ^e	278 (43)	41 (41)	79 (42)	130 (45)	15 (50)	11 (41)	2 (17)
Bloating ^e	197 (33)	16 (20)	51 (29)	117 (41)	8 (29)	4 (15)	1 (9)
Chills ^e	867 (60)	76 (33)	259 (62)	465 (72)	38 (55)	26 (37)	3 (18)
Dehydration ^e	378 (39)	26 (16)	121 (41)	190 (45)	21 (53)	16 (44)	4 (31)
Fatigue ^d	357 (86)	45 (75)	101 (89)	182 (88)	13 (87)	14 (82)	2 (100)
Headache ^e	652 (49)	30 (17)	252 (59)	322 (55)	30 (44)	15 (26)	3 (16)
Malaise ^e	631 (64)	76 (55)	192 (62)	308 (68)	27 (63)	19 (53)	9 (60)
Muscle pain ^e	168 (27)	6 (9)	54 (28)	100 (34)	5 (16)	2 (7)	1 (8)
Nausea ^d	1,138 (59)	115 (38)	371 (64)	555 (65)	53 (57)	36 (45)	8 (35)
Tired ^f	323 (82)	72 (67)	90 (83)	117 (92)	24 (89)	18 (86)	2 (67)
Chronic GI ^{e,d}	30 (3)	1 (1)	5 (2)	19 (5)	3 (12)	2 (7)	0 (0)
Antibiotic ^d	524 (27)	79 (22)	142 (25)	239 (29)	19 (22)	31 (35)	14 (50)
Proton pump inhibitor ^d	244 (20)	8 (3)	35 (9)	153 (28)	23 (43)	20 (43)	5 (56)
Acute GI illness							
Anorexia ^g	548 (70)	64 (77)	113 (7)	322 (68)	33 (72)	15 (71)	1 (33)
Chills ^g	322 (41)	45 (55)	67 (43)	194 (41)	12 (27)	4 (19)	0 (0)
Headache ^g	333 (44)	22 (38)	80 (51)	206 (44)	18 (33)	7 (35)	0 (0)
Muscle pain ^g	275 (37)	14 (26)	57 (37)	190 (40)	10 (21)	3 (15)	1 (33)
Nausea ^g	479 (62)	42 (59)	103 (67)	292 (61)	28 (60)	13 (62)	1 (33)
Chronic GI ^g	95 (12)	2 (2)	3 (2)	75 (16)	9 (19)	5 (24)	1 (33)
Antibiotic ^g	51 (15)	4 (19)	8 (19)	30 (13)	8 (24)	1 (8)	0 (0)
Proton pump inhibitor ^g	61 (18)	1 (5)	0 (0)	44 (19)	11 (31)	5 (39)	0 (0)

^aData source FoodNet Canada *Campylobacter* surveillance

^bOzFoodNet *Campylobacter* case-control study

^cUS FoodNet *Campylobacter* case-control study

^dUS FoodNet 2002–03 *Salmonella* Enteritidis, Newport, and selected serotypes (Javiana, Infantis, and I 4,[5],12:i:-) case-control studies

^eFoodNet Canada *Salmonella* surveillance

^fUS FoodNet 2002–03 *Salmonella* selected serotypes (Javiana, Infantis, and I 4,[5],12:i:-)

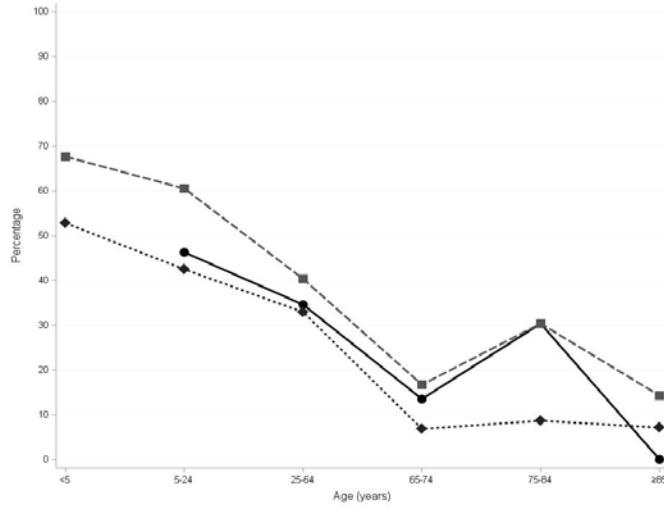
^gAustralian National Gastrointestinal illness Survey (NGSI and NSGII)

Supplementary Table 2. Missing illness characteristics across age categories *Campylobacter* and nontyphoidal *Salmonella* infections, and acute gastroenteritis (Australia, Canada, United States combined)

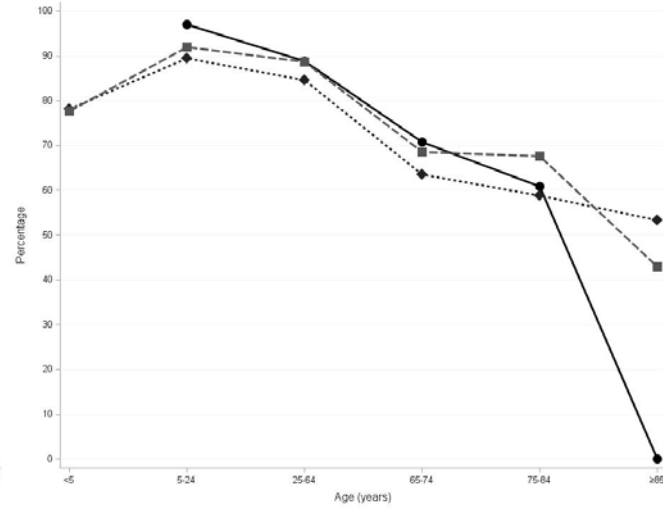
	Age categories (years)			
	<5	5–24	25–64	≥65
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
<i>Campylobacter</i>				
<i>Total cases</i>	348	860	2,088	406
Bloody diarrhea	27 (8)	129 (15)	299 (14)	52 (13)
Abdominal cramps	41 (12)	78 (9)	201 (10)	51 (13)
Fever	31 (9)	80 (9)	206 (10)	45 (11.1)
Vomiting	57 (16)	66 (8)	153 (7)	38 (9.4)
Hospitalization	39 (11)	96 (11)	206 (10)	40 (10)
<i>Salmonella</i>				
<i>Total cases</i>	360	593	838	177
Bloody diarrhea	19 (5)	56 (9)	94 (11)	22 (12)
Abdominal cramps	51 (14)	42 (7)	57 (7)	16 (9)
Fever	8 (2)	34 (6)	61 (7)	19 (11)
Vomiting	18 (5)	29 (5)	38 (5)	14 (8)
Hospitalization	6 (2)	42 (7)	42 (5)	4 (2)
Acute GI Illness				
<i>Total cases</i>	482	1,088	4,631	676
Bloody diarrhea	1 (0.2)	9 (1)	44 (1)	8 (1)
Abdominal cramps	37 (8)	25 (2)	10 (0.2)	4 (1)
Fever	2 (0.4)	4 (0.4)	36 (1)	6 (1)
Vomiting	0 (0)	0 (0.0)	3 (0.1)	1 (0.1)
Hospitalization	253 (53)	588 (54)	2,593 (56)	295 (44)

Supplementary Figure 1. Comparison of *Campylobacter* surveillance and studies by illness characteristic across age categories in Australia, Canada, and the United States^{a,b}

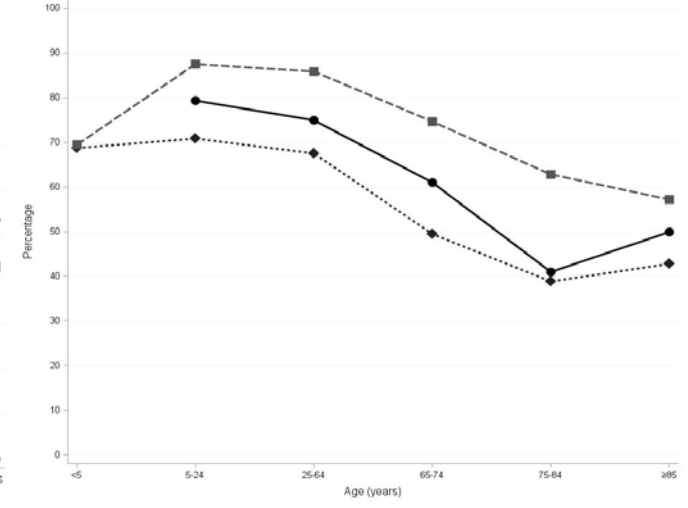
1a. Percentage of cases reporting bloody diarrhea



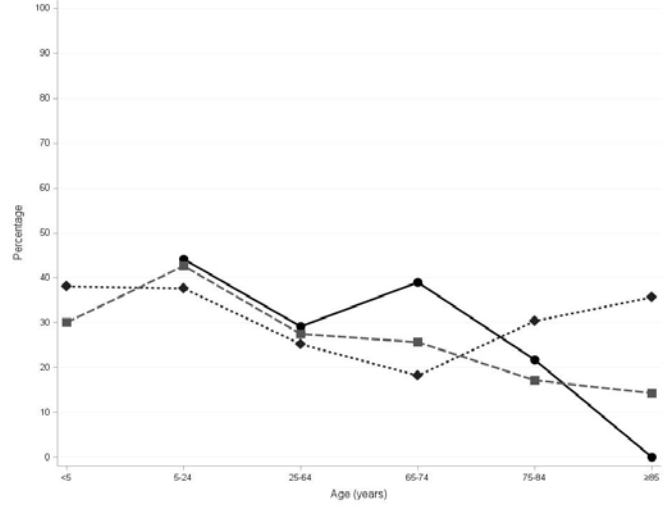
1b. Percentage of cases reporting abdominal cramps



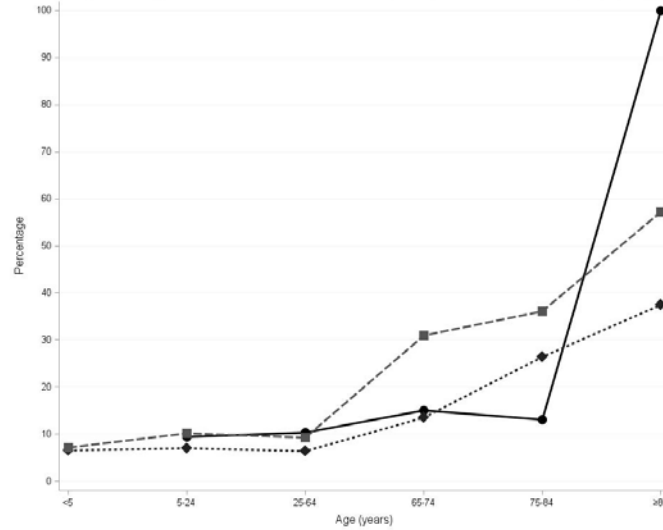
1c. Percentage of cases reporting fever



1d. Percentage of cases reporting vomiting



1e. Percentage of cases hospitalized



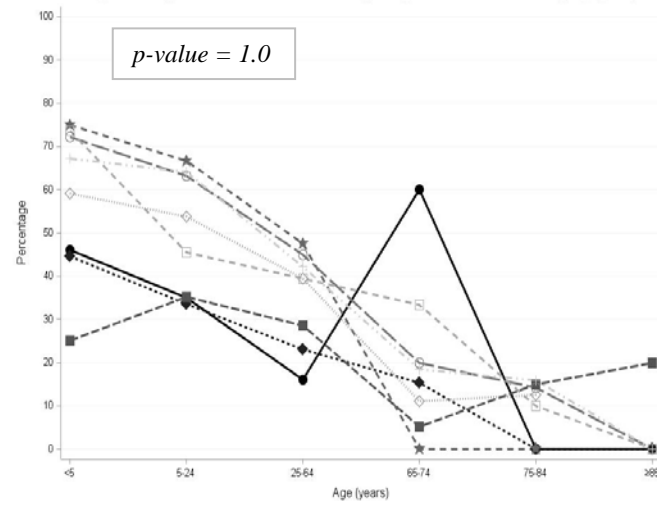
AU OzFoodNet *Campylobacter* case-control study 2001-02
 CA FoodNet surveillance *Campylobacter* 2006-13
 US FoodNet *Campylobacter* case-control study 1998

^a Data for aged under 5 years not available from OzFoodNet *Campylobacter* case-control study

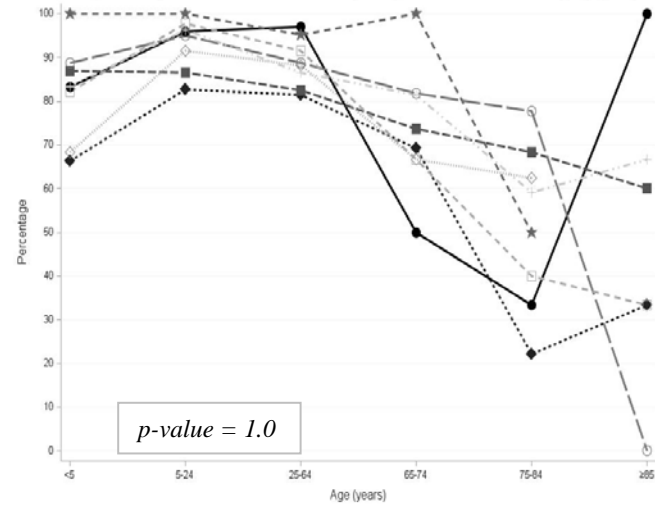
^b p-values not reported because statistical models did not converge for *Campylobacter* studies

Supplementary Figure 2. Comparison of nontyphoidal *Salmonella* surveillance and studies by illness characteristic across age categories in Australia, Canada, and the United States^{a,b}

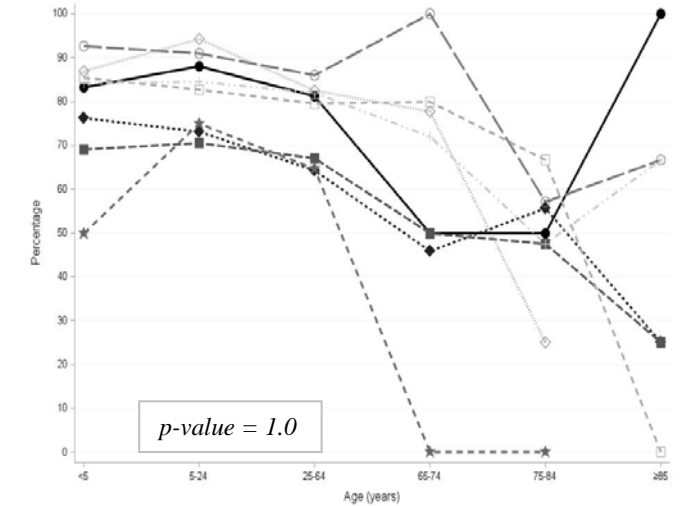
2a. Percentage of cases reporting bloody diarrhea



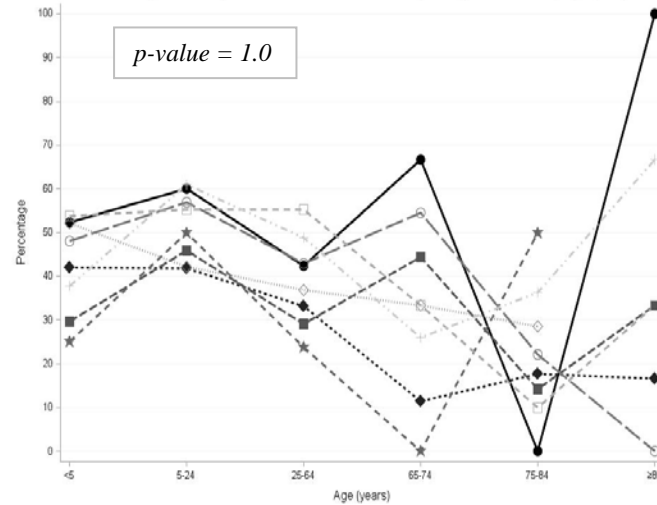
2b. Percentage of cases reporting abdominal cramps



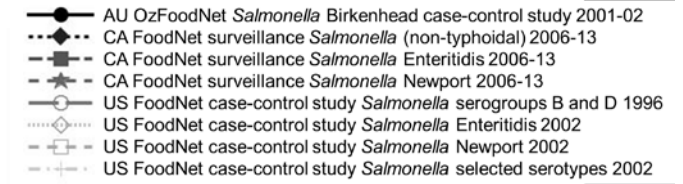
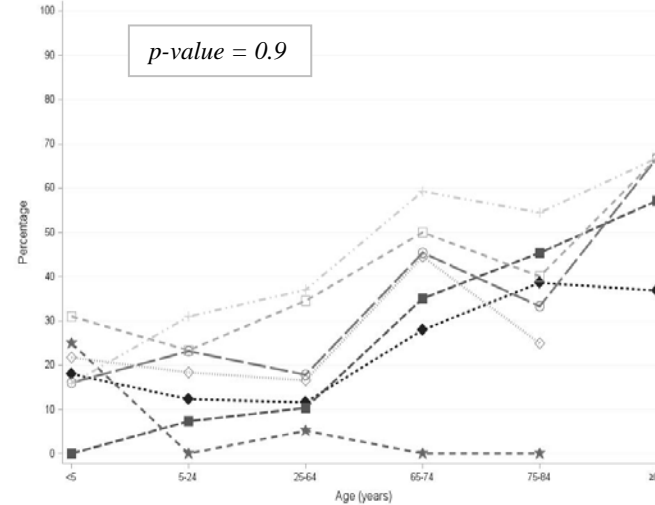
2c. Percentage of cases reporting fever



2d. Percentage of cases reporting vomiting



2e. Percentage of cases hospitalized

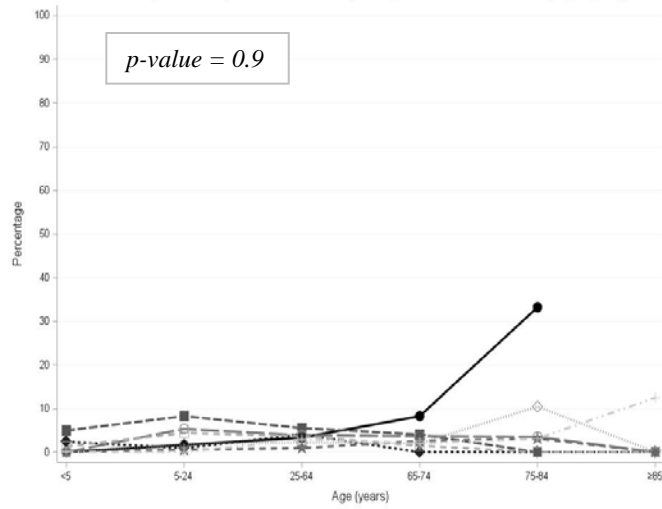


^a OzFoodNet *Salmonella* Birkenhead case-control study did not collect hospitalization

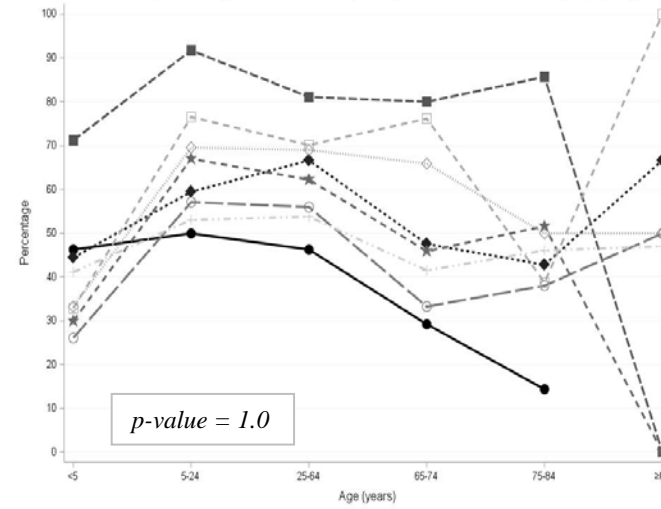
^b p-values estimated from ANOVA test to compare a generalized linear mixed model (GLMM) fit with a random intercept and slope for each study to a GLMM fit with only a random intercept

Supplementary Figure 3. Comparison of Acute gastroenteritis by illness characteristic across age categories in Australia, Canada, and the United States^{a,b}

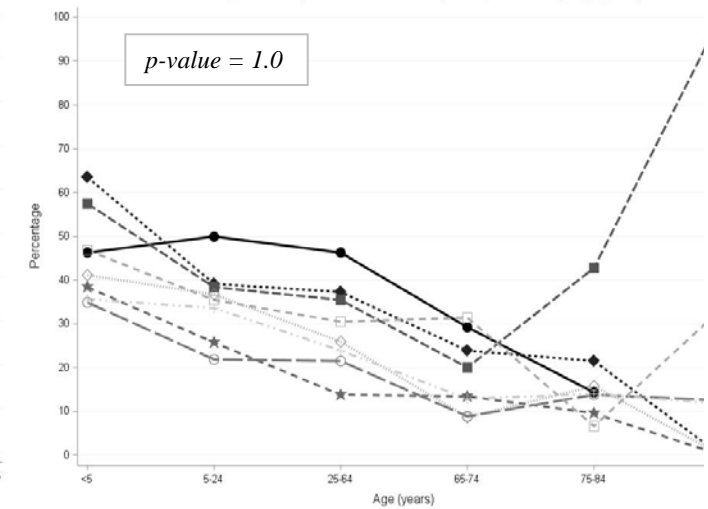
3a. Percentage of cases reporting bloody diarrhea



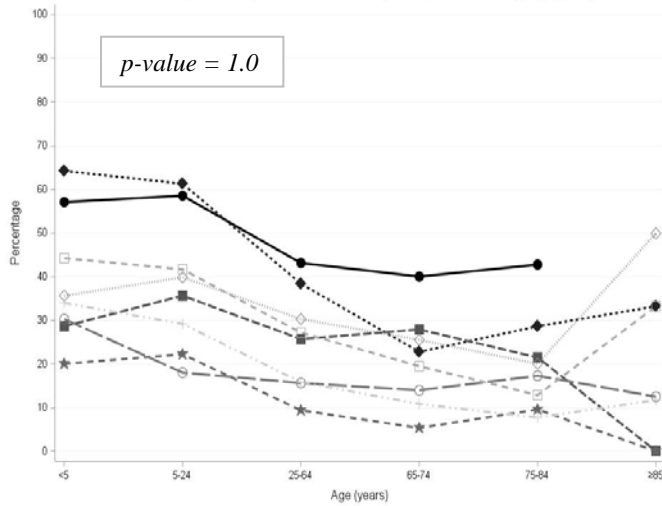
3b. Percentage of cases reporting abdominal cramps



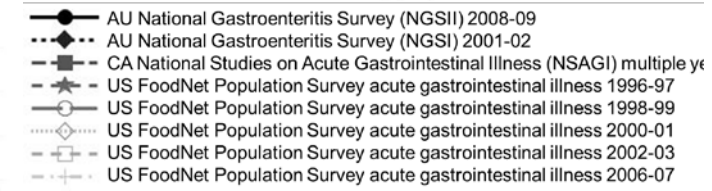
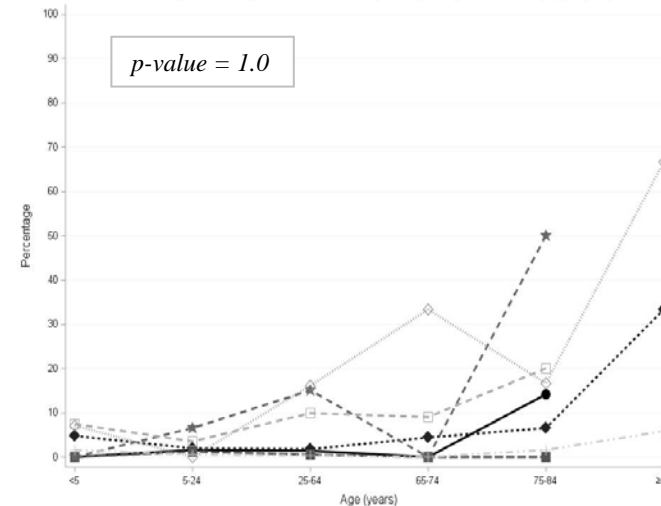
3c. Percentage of cases reporting fever



3d. Percentage of cases reporting vomiting



3e. Percentage of cases hospitalized



^a US FoodNet Population Survey 1998-99 hospitalization not available

^b p-values estimated from ANOVA test to compare a generalized linear mixed model (GLMM) fit with a random intercept and slope for each study to a GLMM fit with only a random intercept