

Supplementary Material

Table S1. Distribution of cases of EAEC and subtypes based on age groups among children less than 5 years of age with and without diarrhea.

EAEC (no. of isolates)	Age groups (month)	Diarrheal cases		Non-diarrheal cases		OD ratio (95% CI)	P-value
		n	(%)	n	(%)		
t-EAEC (186)	< 6	36	(19.3)	6	(16.2)	1.01 (0.40 - 2.34)	>0.9999
	7-12	76	(40.9)	16	(43.3)	0.75 (0.41 - 1.38)	0.4119
	>12	74	(39.8)	15	(40.5)	0.79 (0.42 - 1.5)	0.5063
a-EAEC (254)	< 6	40	(15.8)	3	(8.1)	2.36 (0.78 - 7.47)	0.1774
	7-12	108	(42.5)	10	(27.0)	2.08 (1.05 - 4.26)	0.0369
	>12	106	(41.7)	24	(64.9)	0.66 (0.39 - 1.12)	0.1488
all EAEC (440)	< 6	76	(17.3)	9	(12.2)	1.48 (0.73 - 3.08)	0.3947
	7-12	184	(41.8)	26	(35.1)	1.33 (0.78 - 2.23)	0.3080
	>12	180	(40.9)	39	(52.7)	0.62 (0.38 - 1.00)	0.0748

Table S2. Distribution of EAEC cases according to the season and age groups. D = diarrheal cases; ND = non-diarrheal cases.

Pathogen	Variable	Warm-humid*		Cold-dry		OD ratio (95% CI)	<i>p</i> -value
		n	(%)	n	(%)		
EAEC	D (440)	216	(49.1)	224	(50.9)	0.6575 (0.3926 - 1.095)	0.1039
	ND (74)	44	(59.5)	30	(40.5)		
	a-EAEC	130	(51.2)	124	(48.8)	1.219 (0.8398 - 1.776)	0.3346
	t-EAEC	86	(46.2)	100	(53.8)		
Age groups (months)							
a-EAEC (254)	< 6	19	(7.5)	21	(8.3)	0.9323 (0.4958 - 1.830)	0.8695
	7-12	53	(20.9)	55	(21.7)	0.9991 (0.6484 - 1.557)	>0.9999
	>12	58	(22.8)	48	(18.9)	1.346 (0.8596 - 2.076)	0.2199
t-EAEC (186)	< 6	12	(6.5)	24	(12.9)	0.4902 (0.2452 to 0.9791)	0.056
	7-12	39	(21.0)	37	(19.9)	1.114 (0.6887 to 1.809)	0.7061
	>12	35	(18.8)	39	(21.0)	0.9173 (0.5566 to 1.497)	0.7991

Table S3. Prevalence of virulence genes combinations among EAEC isolates

Genotypes	Diarrheal isolates (n=440)		Non-diarrheal isolates (n=74)		Total	
	n	%	n	%	n	%
<i>aap irp pic</i>	32	7.3	2	2.7	34	6.6
<i>aap irp pic aggR</i>	27	6.1	3	4.1	30	5.8
<i>aap irp pic astA</i>	25	5.7	3	4.1	28	5.4
<i>aap irp</i>	18	4.1	5	6.8	23	4.5
<i>aap irp aggR</i>	20	4.5	1	1.4	21	4.1
<i>aap irp pic astA aggR</i>	17	3.9	2	2.7	19	3.7
<i>aap</i>	15	3.4	3	4.1	18	3.5
<i>irp</i>	13	3.0	4	5.4	17	3.3
<i>aap irp pic astA aggR aafA pet</i>	15	3.4	1	1.4	16	3.1
<i>aap aggR</i>	8	1.8	5	6.8	13	2.5
<i>aap irp pic astA aggA</i>	11	2.5	1	1.4	12	2.3
<i>aap irp astA aggR aggA</i>	9	2.0	2	2.7	11	2.1
<i>aap irp astA</i>	10	2.3	1	1.4	11	2.1

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<i>aap irp pic astA aafA pet</i>	9 2.0	1 1.4	10 1.9
<i>aap irp pic astA aggR aafA</i>	9 2.0	1 1.4	10 1.9
<i>aap irp pic astA aggR aggA</i>	10 2.3	0 0.0	10 1.9
<i>pic</i>	3 0.7	6 8.1	9 1.7
<i>aap irp astA aggA</i>	7 1.6	2 2.7	9 1.7
<i>aap irp pic astA aggR pet</i>	6 1.4	2 2.7	8 1.6
<i>aap pic</i>	6 1.4	2 2.7	8 1.6
<i>aap irp pic astA pet</i>	7 1.6	1 1.4	8 1.6
<i>aap irp pic aggA</i>	8 1.8	0 0.0	8 1.6
<i>aap irp astA aggR</i>	5 1.1	2 2.7	7 1.4
<i>irp pic</i>	5 1.1	2 2.7	7 1.4
<i>aap irp aggA</i>	7 1.6	0 0.0	7 1.4
<i>aap irp pic pet</i>	7 1.6	0 0.0	7 1.4
<i>irp pic astA</i>	5 1.1	1 1.4	6 1.2
<i>aap pic aggR</i>	3 0.7	2 2.7	5 1.0
<i>aap pic astA</i>	4 0.9	1 1.4	5 1.0
<i>aap pic astA aggR</i>	4 0.9	1 1.4	5 1.0
<i>irp pic aggR</i>	4 0.9	1 1.4	5 1.0
<i>aap irp aafA</i>	5 1.1	0 0.0	5 1.0
<i>aap irp aggR aggA</i>	5 1.1	0 0.0	5 1.0

<i>irp astA</i>	5	1.1	0	0.0	5	1.0
<i>aap irp pic aggR aggA</i>	4	0.9	0	0.0	4	0.8
<i>aap irp pic aggR pet</i>	4	0.9	0	0.0	4	0.8
<i>irp aggR</i>	4	0.9	0	0.0	4	0.8
<i>aap astA aggR</i>	1	0.2	2	2.7	3	0.6
<i>aap pic aggR aggA</i>	1	0.2	2	2.7	3	0.6
<i>aap aggR aggA</i>	3	0.7	0	0.0	3	0.6
<i>aap astA</i>	3	0.7	0	0.0	3	0.6
<i>aap irp pic astA aafA</i>	3	0.7	0	0.0	3	0.6
<i>irp astA aggA</i>	3	0.7	0	0.0	3	0.6
<i>irp pic astA aggR</i>	3	0.7	0	0.0	3	0.6
<i>irp pic astA aggR aafA</i>	3	0.7	0	0.0	3	0.6
<i>irp pic astA aggR aafA pet</i>	3	0.7	0	0.0	3	0.6
<i>aap aggA</i>	1	0.2	1	1.4	2	0.4
<i>irp astA aggR</i>	1	0.2	1	1.4	2	0.4
<i>pic aggR</i>	1	0.2	1	1.4	2	0.4
<i>aap aafA</i>	2	0.5	0	0.0	2	0.4
<i>aap astA aafA pet</i>	2	0.5	0	0.0	2	0.4
<i>aap irp aggR aafA</i>	2	0.5	0	0.0	2	0.4
<i>aap irp astA aggR aafA pet</i>	2	0.5	0	0.0	2	0.4
<i>aap irp pic aggR aafA pet</i>	2	0.5	0	0.0	2	0.4

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<i>aap irp pic astA aafA aggA pet</i>	2 0.5	0 0.0	2 0.4
<i>aap pic aggA</i>	2 0.5	0 0.0	2 0.4
<i>astA aggA</i>	2 0.5	0 0.0	2 0.4
<i>irp astA aafA</i>	2 0.5	0 0.0	2 0.4
<i>irp pet</i>	2 0.5	0 0.0	2 0.4
<i>irp pic astA aggR aggA</i>	2 0.5	0 0.0	2 0.4
<i>aap pic astA aggR</i>	0 0.0	1 1.4	1 0.2
<i>aap irp astA aggR aafA</i>	0 0.0	1 1.4	1 0.2
<i>aap irp aggR pet</i>	0 0.0	1 1.4	1 0.2
<i>aap irp pic astA aggR aafA aggA</i>	0 0.0	1 1.4	1 0.2
<i>aap irp pic astA aggR aafA aggA pet</i>	0 0.0	1 1.4	1 0.2
<i>aap irp pic astA aggR aggA pet</i>	0 0.0	1 1.4	1 0.2
<i>irp pic astA aggR pet</i>	0 0.0	1 1.4	1 0.2
<i>pic irp aggR</i>	0 0.0	1 1.4	1 0.2
<i>aafA</i>	1 0.2	0 0.0	1 0.2
<i>aap aggR aafA pet</i>	1 0.2	0 0.0	1 0.2
<i>aap astA aafA</i>	1 0.2	0 0.0	1 0.2
<i>aap astA aggA</i>	1 0.2	0 0.0	1 0.2
<i>aap irp astA aggR</i>	1 0.2	0 0.0	1 0.2
<i>aap irp astA aggR aafA aggA pet</i>	1 0.2	0 0.0	1 0.2

<i>aap irp aafA aggA</i>	1 0.2	0 0.0	1 0.2
<i>aap irp aggR aafA pet</i>	1 0.2	0 0.0	1 0.2
<i>aap irp astA aggR aafA aggA</i>	1 0.2	0 0.0	1 0.2
<i>aap irp pic aafA</i>	1 0.2	0 0.0	1 0.2
<i>aap irp pic aafA pet</i>	1 0.2	0 0.0	1 0.2
<i>aap pic aafA</i>	1 0.2	0 0.0	1 0.2
<i>aap pic aggR aggA pet</i>	1 0.2	0 0.0	1 0.2
<i>aggR</i>	1 0.2	0 0.0	1 0.2
<i>astA</i>	1 0.2	0 0.0	1 0.2
<i>irp aafA</i>	1 0.2	0 0.0	1 0.2
<i>irp astA aggR aggA</i>	1 0.2	0 0.0	1 0.2
<i>irp pic aggA</i>	1 0.2	0 0.0	1 0.2
<i>irp pic astA aafA</i>	1 0.2	0 0.0	1 0.2
<i>irp pic astA pet</i>	1 0.2	0 0.0	1 0.2
<i>irp pic pet</i>	1 0.2	0 0.0	1 0.2
<i>pic aggA</i>	1 0.2	0 0.0	1 0.2
Negative	14 3.2	1 1.4	15 3.1

Table S4. Primers used in this study.

Multiplex	Target Gene	Primer Sequence (5' to 3')	Amplicon Size (bp)	Ref.
	<i>aatA</i> (<i>pCVD432</i>)	F: CTGGCGAAAGACTGTATCAT R: CAATGTATAGAAATCCGCTGTT	630	[1]
	<i>aggR</i>	F: CGT TCG TGA ATG CAA AG R: GAG GCA TCA CCA ATA TG	308	[2]
	<i>astA</i>	F: CCATCAACACAGTATATCCGA R: GGTCGCGAGTGACGGCTTTGT	111	[1]
I-EAEC	<i>pic</i>	F: TTCAGCGGAAAGACGAA R: TCTGCGCATTTCATACCA	517	[3]
	<i>irp2</i>	F: AAGGTTTCGCTGTTACCGGAC R: TCGTCGGGCAGCGTTTCTTCT	267	[4]
	<i>aggA</i>	F: GCTAACGCTGCGTTAGAAAGACC R: GGAGTATCATTCTATATTCGCC	421	[3]
	<i>aafA</i>	F: GACAACCGCAACGCTGCGCTG R: GATAGCCGGTGTAATTGAGCC	233	[3]
II-EAEC	<i>pet</i>	F: TCATTTCCAGCACTTCCTGT R: CTCCGACAGTATTGCTCGT	442	[5]
	<i>aap</i>	F: CTTTTCTGGCATCTTGGGT R: GTAACAACCCCTTTGGAAGT	232	[1]

References

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