Haugum et al., Supplemental material, 20140507

Table S1. PCR primers used in the study.

Primer	Sequence (5'-3' direction)	Target gene	Amplicon size	Reference
SLTI 1	AAA TCG CCA TTC GTT GAC TAC TTC T	*stx1*	368 bp	Brian et al. 1992
SLTI Rnew	CCA TTC TGG CAA CTC GCG ATG CA			This study
SLTI TaqMan	FAM-AAC CTC ACT GAC GCA GTC TGT GGC AAG AGC-BHQ1			This study
SLTIIFnew	CAG TCG TCA CTC ACT GGT TTC ATC	*stx2*	283 bp	This study
SLTIIRnew	GGA TAT TCT CCC CAC TCT GAC AC			This study
SLTII TaqMan	HEX-CTG TCA CGG CAG AAG CCT TAC GCT TCA GGC-BHQ1			This study
eae-Fny	TTC ATT GAT CAG GAT TTT TCT GG	*eae*	105 bp	This study
eae-Rny	GCT CAT GCG GAA ATA GCC			This study
eae-P	FAM-ATA GTC TCG CCA GTA TTC GCC ACC AAT ACC			Nielsen et al. 2003
efa1-F	ATC AGA AGC CCG ACT ACG	*efa-1/lifA*	193 bp	This study
efa1-R	AAC ATT TGC CAG ACC AAG G			This study

Table S2. Number of virulence genes identified in various STEC serotypes by PCR analysis of 138 HUS-associated and non-HUS STEC strains diagnosed at St. Olavs Hospital, Trondheim, Norway during the period 1996-2011.

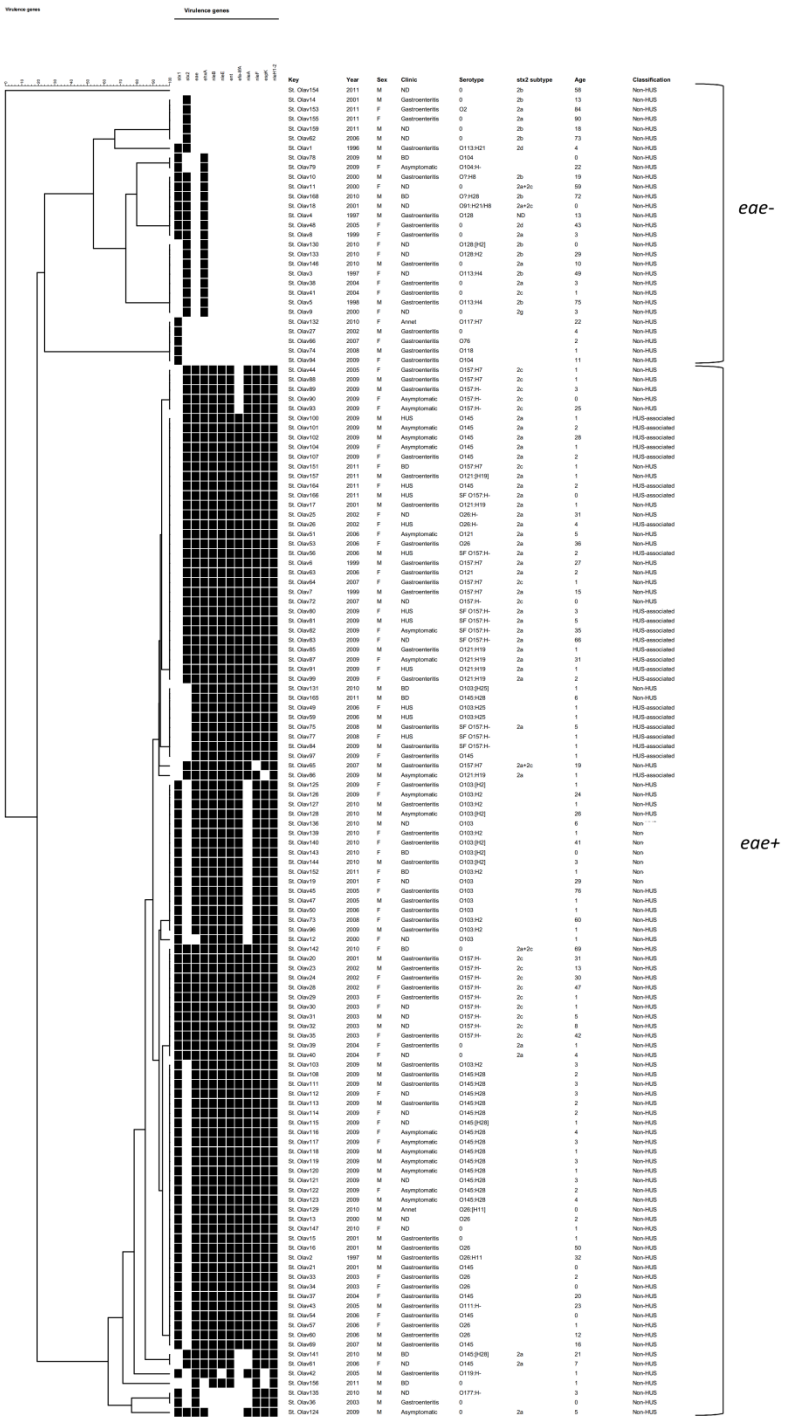
Serogroup	***stx1***	***stx2***	***stx2* subtype**	***eae***	***ehxA***	***nleB***	***nleE***	***ent***	***efa-1/lifA***	***nleA***	***nleF***	***nleH1-2***	***espK***	**HUS-associated**	**non-HUS**	**Total**
O145	18	8	2a	28	28	28	28	28	26	26	28	28	28	7	21	28
O103	18	0	0	20	21	21	21	21	21	4	21	21	21	2	19	21
O157	9	20	2a (n=2), 2a+2c (n=1), 2c (n=17)	20	20	20	20	20	15	20	19	20	20	0	20	20
O26	8	3	2a	11	11	11	11	11	11	11	11	11	11	1	10	11
O121	0	9	2a	9	9	9	9	9	9	9	9	9	8	5	4	9
SF O157	0	6	2a	9	9	9	9	9	9	9	9	9	9	9	0	9
O111	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1

Others	24	25	2a (n=8), 2a+2c (n=3), 2b (n=10), 2c (n=1), 2d (n=2), 2g (n=1)	10	24	7	6	7	5	7	10	10	8	0	39	39
Total	78	71	-	108	123	106	105	106	97	87	108	109	106	24	114	138

Table S3. Comparison of potential virulence genes in 138 STEC strains diagnosed in patients where STEC was analyzed irrespective of symptoms (patients <2 years old) and on specific suspicion of STEC disease (patients ≥2 years old) at St. Olavs Hospital, Trondheim, Norway during the period 1996-2011.

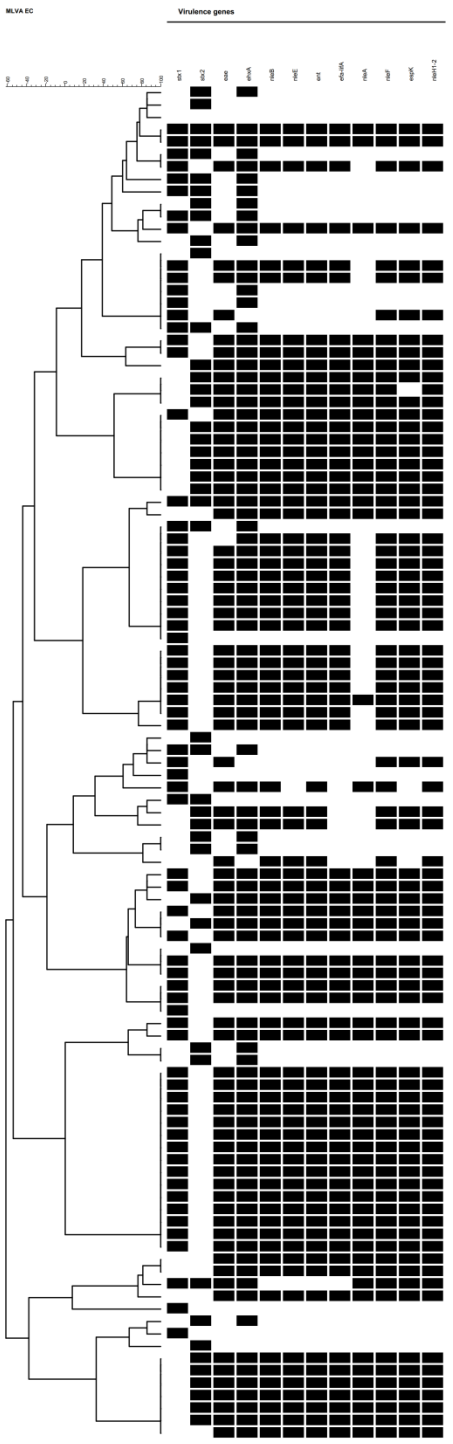
Gene	Age <2 years n=50		Age ≥2 years n=88		P
	No. of strains	(%)	No. of strains	(%)	
stx2	20	(40)	51[1]	(58)	0.05
stx2a	9	(18)	28	(31.8)	0.1
stx1	27	(54)	51	(58)	0.7
eae	44	(88)	64	(72.7)	0.05
ehxA	47	(94)	76	(86.4)	0.3
nleB	44	(88)	62	(70.5)	0.02
nleE	43	(86)	62	(70.5)	0.06
ent	44	(88)	62	(70.5)	0.02
efa-1/lifA	39	(78)	58	(65.9)	0.2
nleA	34	(68)	53	(60.2)	0.5
nleF	45	(90)	63	(71.6)	0.02
nleH1-2	45	(90)	64	(72.7)	0.02
espK	42	(84)	64	(72.7)	0.1

[1]This number does not include one SF O157:H- strain (St. Olav75, see Table 1) previously found to be positive for *stx2a* and one strain of unknown serotype (St. Olav154, see Table 1) previously found to be positive for *stx2b*.



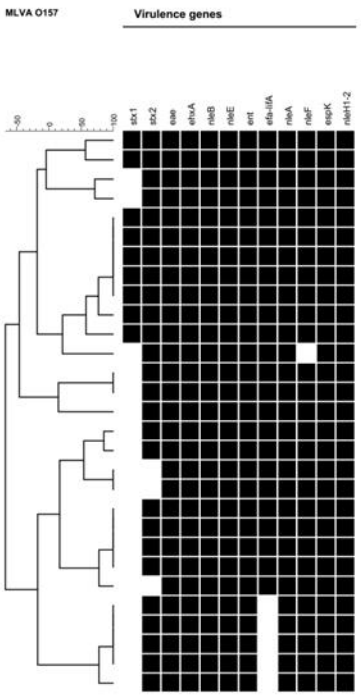
Key	Year	Sex	Clinic	Serotype	stx2 subtype	Age	Classification
St. Olav154	2011	M	ND	0	2b	58	Non-HUS
St. Olav14	2001	M	Gastroenteritis	0	2b	13	Non-HUS
St. Olav153	2011	F	Gastroenteritis	O2	2a	84	Non-HUS
St. Olav155	2011	F	Gastroenteritis	0	2a	90	Non-HUS
St. Olav159	2011	M	ND	0	2b	18	Non-HUS
St. Olav62	2006	M	ND	0	2b	73	Non-HUS
St. Olav1	1996	M	Gastroenteritis	O113:H21	2d	4	Non-HUS
St. Olav78	2009	M	BD	O104		0	Non-HUS
St. Olav79	2009	F	Asymptomatic	O104:H-		22	Non-HUS
St. Olav10	2000	M	Gastroenteritis	O7:H8	2b	19	Non-HUS
St. Olav11	2000	F	ND	0	2a+2c	59	Non-HUS
St. Olav168	2010	M	BD	O7:H28	2b	72	Non-HUS
St. Olav18	2001	M	ND	O91:H21/H8	2a+2c	0	Non-HUS
St. Olav4	1997	M	Gastroenteritis	O128	ND	13	Non-HUS
St. Olav48	2005	F	Gastroenteritis	0	2d	43	Non-HUS
St. Olav8	1999	F	Gastroenteritis	0	2a	3	Non-HUS
St. Olav130	2010	F	ND	O128:[H2]	2b	0	Non-HUS
St. Olav133	2010	F	ND	O128:H2	2b	29	Non-HUS
St. Olav148	2010	M	Gastroenteritis	0	2a	10	Non-HUS
St. Olav3	1997	F	ND	O113:H4	2b	49	Non-HUS
St. Olav38	2004	F	Gastroenteritis	0	2a	3	Non-HUS
St. Olav41	2004	F	Gastroenteritis	0	2c	1	Non-HUS
St. Olav5	1998	M	Gastroenteritis	O113:H4	2b	75	Non-HUS
St. Olav9	2000	F	ND	0	2g	3	Non-HUS
St. Olav152	2010	F	Annet	O117:H7		22	Non-HUS
St. Olav27	2002	M	Gastroenteritis	0		4	Non-HUS
St. Olav66	2007	F	Gastroenteritis	O76		2	Non-HUS
St. Olav74	2008	M	Gastroenteritis	O118		1	Non-HUS
St. Olav94	2009	F	Gastroenteritis	O104		11	Non-HUS
St. Olav44	2005	F	Gastroenteritis	O157:H7	2c	1	Non-HUS
St. Olav88	2009	M	Gastroenteritis	O157:H7	2c	1	Non-HUS
St. Olav89	2009	M	Gastroenteritis	O157:H-	2c	3	Non-HUS
St. Olav90	2009	F	Asymptomatic	O157:H-	2c	0	Non-HUS
St. Olav93	2009	F	Asymptomatic	O157:H-	2c	25	Non-HUS
St. Olav100	2009	M	HUS	O145	2a	1	HUS-associated
St. Olav101	2009	M	Asymptomatic	O145	2a	2	HUS-associated
St. Olav102	2009	M	Asymptomatic	O145	2a	28	HUS-associated
St. Olav104	2009	F	Asymptomatic	O145	2a	1	HUS-associated
St. Olav107	2009	F	Gastroenteritis	O145	2a	2	HUS-associated
St. Olav151	2011	F	BD	O157:H7	2c	1	Non-HUS
St. Olav157	2011	M	Gastroenteritis	O121:[H19]	2a	1	Non-HUS
St. Olav164	2011	F	HUS	O145	2a	2	HUS-associated
St. Olav166	2011	M	HUS	SF O157:H-	2a	0	HUS-associated
St. Olav17	2001	M	Gastroenteritis	O121:H19	2a	1	Non-HUS
St. Olav25	2002	F	ND	O26:H-	2a	31	Non-HUS
St. Olav26	2002	F	HUS	O26:H-	2a	4	HUS-associated
St. Olav51	2006	F	Asymptomatic	O121	2a	5	Non-HUS
St. Olav53	2006	F	Gastroenteritis	O26	2a	36	Non-HUS
St. Olav56	2006	M	HUS	SF O157:H-	2a	2	HUS-associated
St. Olav6	1999	M	Gastroenteritis	O157:H7	2a	27	Non-HUS
St. Olav63	2006	F	Gastroenteritis	O121	2a	2	Non-HUS
St. Olav64	2007	F	Gastroenteritis	O157:H7	2c	1	Non-HUS
St. Olav7	1999	M	Gastroenteritis	O157:H7	2a	15	Non-HUS
St. Olav72	2007	M	ND	O157:H-	2c	0	Non-HUS
St. Olav80	2009	F	HUS	SF O157:H-	2a	3	HUS-associated
St. Olav81	2009	M	HUS	SF O157:H-	2a	5	HUS-associated
St. Olav82	2009	F	Asymptomatic	SF O157:H-	2a	35	HUS-associated
St. Olav83	2009	F	ND	SF O157:H-	2a	66	HUS-associated
St. Olav85	2009	M	Gastroenteritis	O121:H19	2a	1	HUS-associated
St. Olav87	2009	F	Asymptomatic	O121:H19	2a	31	HUS-associated
St. Olav91	2009	F	HUS	O121:H19	2a	1	HUS-associated
St. Olav99	2009	F	Gastroenteritis	O121:H19	2a	2	HUS-associated
St. Olav131	2010	M	BD	O103:[H25]		1	Non-HUS
St. Olav165	2011	M	BD	O145:H28		6	Non-HUS
St. Olav49	2006	F	HUS	O103:H25		1	HUS-associated
St. Olav59	2006	M	HUS	O103:H25		1	HUS-associated
St. Olav75	2008	M	Gastroenteritis	SF O157:H-	2a	5	HUS-associated
St. Olav77	2008	F	HUS	SF O157:H-		1	HUS-associated
St. Olav84	2009	M	Gastroenteritis	SF O157:H-		1	HUS-associated
St. Olav97	2009	F	Gastroenteritis	O145		1	HUS-associated
St. Olav65	2007	M	Gastroenteritis	O157:H7	2a+2c	19	Non-HUS
St. Olav86	2009	M	Asymptomatic	O121:H19	2a	1	HUS-associated
St. Olav125	2009	F	Gastroenteritis	O103:[H2]		1	Non-HUS
St. Olav126	2009	F	Asymptomatic	O103:H2		24	Non-HUS
St. Olav127	2010	M	Gastroenteritis	O103:H2		1	Non-HUS
St. Olav128	2010	M	Asymptomatic	O103:[H2]		26	Non-HUS
St. Olav136	2010	M	ND	O103		6	Non
St. Olav139	2010	F	Gastroenteritis	O103:H2		1	Non
St. Olav140	2010	F	Gastroenteritis	O103:[H2]		41	Non
St. Olav143	2010	F	BD	O103:[H2]		0	Non
St. Olav144	2010	M	Gastroenteritis	O103:[H2]		3	Non
St. Olav152	2011	F	BD	O103:H2		1	Non
St. Olav19	2001	F	ND	O103		29	Non
St. Olav45	2005	F	Gastroenteritis	O103		76	Non-HUS
St. Olav47	2005	M	Gastroenteritis	O103		1	Non-HUS
St. Olav50	2006	F	Gastroenteritis	O103		1	Non-HUS
St. Olav73	2008	F	Gastroenteritis	O103:H2		60	Non-HUS
St. Olav96	2009	M	Gastroenteritis	O103:H2		1	Non-HUS
St. Olav12	2000	F	ND	O103		1	Non-HUS
St. Olav142	2010	F	BD	0	2a+2c	69	Non-HUS
St. Olav20	2001	M	Gastroenteritis	O157:H-	2c	31	Non-HUS
St. Olav23	2002	M	Gastroenteritis	O157:H-	2c	13	Non-HUS
St. Olav24	2002	F	Gastroenteritis	O157:H-	2c	30	Non-HUS
St. Olav28	2002	F	Gastroenteritis	O157:H-	2c	47	Non-HUS
St. Olav29	2003	F	Gastroenteritis	O157:H-	2c	1	Non-HUS
St. Olav30	2003	F	ND	O157:H-	2c	1	Non-HUS
St. Olav31	2003	M	ND	O157:H-	2c	5	Non-HUS
St. Olav32	2003	M	ND	O157:H-	2c	8	Non-HUS
St. Olav35	2003	F	Gastroenteritis	O157:H-	2c	42	Non-HUS
St. Olav39	2004	F	Gastroenteritis	0	2a	1	Non-HUS
St. Olav40	2004	F	ND	0	2a	4	Non-HUS
St. Olav103	2009	M	Gastroenteritis	O103:H2		3	Non-HUS
St. Olav108	2009	M	Gastroenteritis	O145:H28		2	Non-HUS
St. Olav111	2009	M	Gastroenteritis	O145:H28		3	Non-HUS
St. Olav112	2009	F	ND	O145:H28		3	Non-HUS
St. Olav113	2009	M	Gastroenteritis	O145:H28		2	Non-HUS
St. Olav114	2009	F	ND	O145:H28		2	Non-HUS
St. Olav115	2009	F	ND	O145:[H28]		1	Non-HUS
St. Olav116	2009	F	Asymptomatic	O145:H28		4	Non-HUS
St. Olav117	2009	F	Asymptomatic	O145:H28		3	Non-HUS
St. Olav118	2009	M	Asymptomatic	O145:H28		1	Non-HUS
St. Olav119	2009	M	Asymptomatic	O145:H28		3	Non-HUS
St. Olav120	2009	M	Asymptomatic	O145:H28		1	Non-HUS
St. Olav121	2009	M	ND	O145:H28		3	Non-HUS
St. Olav122	2009	F	Asymptomatic	O145:H28		2	Non-HUS
St. Olav123	2009	M	Asymptomatic	O145:H28		4	Non-HUS
St. Olav129	2010	M	Annet	O26:[H11]		0	Non-HUS
St. Olav13	2000	M	ND	O26		2	Non-HUS
St. Olav147	2010	F	ND	0		1	Non-HUS
St. Olav15	2001	M	Gastroenteritis	0		1	Non-HUS
St. Olav16	2001	M	Gastroenteritis	O26		50	Non-HUS
St. Olav2	1997	M	Gastroenteritis	O26:H11		32	Non-HUS
St. Olav21	2001	M	Gastroenteritis	O145		0	Non-HUS
St. Olav33	2003	F	Gastroenteritis	O26		2	Non-HUS
St. Olav34	2003	F	Gastroenteritis	O26		0	Non-HUS
St. Olav37	2004	F	Gastroenteritis	O145		20	Non-HUS
St. Olav43	2005	M	Gastroenteritis	O111:H-		23	Non-HUS
St. Olav54	2006	F	Gastroenteritis	O145		0	Non-HUS
St. Olav57	2006	F	Gastroenteritis	O26		1	Non-HUS
St. Olav60	2006	M	Gastroenteritis	O26		12	Non-HUS
St. Olav69	2007	M	Gastroenteritis	O145		18	Non-HUS
St. Olav141	2010	M	BD	O145:[H28]	2a	21	Non-HUS
St. Olav61	2006	F	ND	O145	2a	7	Non-HUS
St. Olav42	2005	M	Gastroenteritis	O119:H-		1	Non-HUS
St. Olav156	2011	M	BD	0		1	Non-HUS
St. Olav135	2010	M	ND	O177:H-		3	Non-HUS
St. Olav36	2003	M	Gastroenteritis	0		0	Non-HUS
St. Olav124	2009	M	Asymptomatic	0	2a	5	Non-HUS

Figure S1



Key	Year	Sex	Clinic	Serotype	stx2 subtype	Age	Classification
St. Olav146	2010	M	Gastroenteritis	0	2a	10	Non-HUS
St. Olav62	2006	M	ND	0	2b	73	Non-HUS
St. Olav154	2011	M	ND	0	2b	58	Non-HUS
St. Olav39	2004	F	Gastroenteritis	0	2a	1	Non-HUS
St. Olav40	2004	F	ND	0	2a	4	Non-HUS
St. Olav6	1999	F	Gastroenteritis	0	2a	3	Non-HUS
St. Olav152	2011	F	BD	O103:H2		1	Non-HUS
St. Olav168	2010	M	BD	O?:H28	2b	72	Non-HUS
St. Olav48	2005	F	Gastroenteritis	0	2d	43	Non-HUS
St. Olav9	2000	F	ND	0	2g	3	Non-HUS
St. Olav18	2001	M	ND	O91:H21/H8	2a+2c	0	Non-HUS
St. Olav21	2001	M	Gastroenteritis	O145		0	Non-HUS
St. Olav41	2004	F	Gastroenteritis	0	2c	1	Non-HUS
St. Olav14	2001	M	Gastroenteritis	0	2b	13	Non-HUS
St. Olav125	2009	F	Gastroenteritis	O103:[H2]		1	Non-HUS
St. Olav126	2009	F	Asymptomatic	O103:H2		24	Non-HUS
St. Olav78	2009	M	BD	O104		0	Non-HUS
St. Olav79	2009	F	Asymptomatic	O104:H-		22	Non-HUS
St. Olav135	2010	M	ND	O177:H-		3	Non-HUS
St. Olav10	2000	M	Gastroenteritis	O?:H8	2b	19	Non-HUS
St. Olav57	2006	F	Gastroenteritis	O26		1	Non-HUS
St. Olav60	2006	M	Gastroenteritis	O26		12	Non-HUS
St. Olav26	2002	F	HUS	O26:H-	2a	4	HUS-associated
St. Olav85	2009	M	Gastroenteritis	O121:H19	2a	1	HUS-associated
St. Olav86	2009	M	Asymptomatic	O121:H19	2a	1	HUS-associated
St. Olav87	2009	F	Asymptomatic	O121:H19	2a	31	HUS-associated
St. Olav43	2005	M	Gastroenteritis	O111:H-		23	Non-HUS
St. Olav51	2006	F	Asymptomatic	O121	2a	5	Non-HUS
St. Olav63	2006	F	Gastroenteritis	O121	2a	2	Non-HUS
St. Olav157	2011	M	Gastroenteritis	O121:[H19]	2a	1	Non-HUS
St. Olav17	2001	M	Gastroenteritis	O121:H19	2a	1	Non-HUS
St. Olav91	2009	F	HUS	O121:H19	2a	1	HUS-associated
St. Olav99	2009	F	Gastroenteritis	O121:H19	2a	2	HUS-associated
St. Olav142	2010	F	BD	0	2a+2c	69	Non-HUS
St. Olav165	2011	M	BD	O145:H28		6	Non-HUS
St. Olav11	2000	F	ND	0	2a+2c	59	Non-HUS
St. Olav12	2000	F	ND	O103		1	Non-HUS
St. Olav19	2001	F	ND	O103		29	Non-HUS
St. Olav45	2005	F	Gastroenteritis	O103		76	Non-HUS
St. Olav47	2005	M	Gastroenteritis	O103		1	Non-HUS
St. Olav50	2006	F	Gastroenteritis	O103		1	Non-HUS
St. Olav128	2010	M	Asymptomatic	O103:[H2]		26	Non-HUS
St. Olav127	2010	M	Gastroenteritis	O103:H2		1	Non-HUS
St. Olav73	2008	F	Gastroenteritis	O103:H2		60	Non-HUS
St. Olav94	2009	F	Gastroenteritis	O104		11	Non-HUS
St. Olav140	2010	F	Gastroenteritis	O103:[H2]		41	Non-HUS
St. Olav96	2009	M	Gastroenteritis	O103:H2		1	Non-HUS
St. Olav143	2010	F	BD	O103:[H2]		0	Non-HUS
St. Olav144	2010	M	Gastroenteritis	O103:[H2]		3	Non-HUS
St. Olav103	2009	M	Gastroenteritis	O103:H2		3	Non-HUS
St. Olav139	2010	F	Gastroenteritis	O103:H2		1	Non-HUS
St. Olav136	2010	M	ND	O103		6	Non-HUS
St. Olav155	2011	F	Gastroenteritis	0	2a	90	Non-HUS
St. Olav4	1997	M	Gastroenteritis	O128	ND	13	Non-HUS
St. Olav36	2003	M	Gastroenteritis	0		0	Non-HUS
St. Olav132	2010	F	Annet	O117:H7		22	Non-HUS
St. Olav42	2005	M	Gastroenteritis	O119:H-		1	Non-HUS
St. Olav1	1996	M	Gastroenteritis	O113:H21	2d	4	Non-HUS
St. Olav61	2006	F	ND	O145	2a	7	Non-HUS
St. Olav141	2010	M	BD	O145:[H28]	2a	21	Non-HUS
St. Olav3	1997	F	ND	O113:H4	2b	49	Non-HUS
St. Olav5	1998	M	Gastroenteritis	O113:H4	2b	75	Non-HUS
St. Olav156	2011	M	BD	0		1	Non-HUS
St. Olav147	2010	F	ND	0		1	Non-HUS
St. Olav129	2010	M	Annet	O26:[H11]		0	Non-HUS
St. Olav53	2006	F	Gastroenteritis	O26	2a	36	Non-HUS
St. Olav13	2000	M	ND	O26		2	Non-HUS
St. Olav25	2002	F	ND	O26:H-	2a	31	Non-HUS
St. Olav2	1997	M	Gastroenteritis	O26:H11		32	Non-HUS
St. Olav159	2011	M	ND	0	2b	18	Non-HUS
St. Olav33	2003	F	Gastroenteritis	O26		2	Non-HUS
St. Olav34	2003	F	Gastroenteritis	O26		0	Non-HUS
St. Olav15	2001	M	Gastroenteritis	0		1	Non-HUS
St. Olav16	2001	M	Gastroenteritis	O26		50	Non-HUS
St. Olav66	2007	F	Gastroenteritis	O76		2	Non-HUS
St. Olav54	2006	F	Gastroenteritis	O145		0	Non-HUS
St. Olav69	2007	M	Gastroenteritis	O145		16	Non-HUS
St. Olav130	2010	F	ND	O128:[H2]	2b	0	Non-HUS
St. Olav133	2010	F	ND	O128:H2	2b	29	Non-HUS
St. Olav37	2004	F	Gastroenteritis	O145		20	Non-HUS
St. Olav115	2009	F	ND	O145:[H28]		1	Non-HUS
St. Olav108	2009	M	Gastroenteritis	O145:H28		2	Non-HUS
St. Olav111	2009	M	Gastroenteritis	O145:H28		3	Non-HUS
St. Olav112	2009	F	ND	O145:H28		3	Non-HUS
St. Olav113	2009	M	Gastroenteritis	O145:H28		2	Non-HUS
St. Olav114	2009	F	ND	O145:H28		2	Non-HUS
St. Olav116	2009	F	Asymptomatic	O145:H28		4	Non-HUS
St. Olav117	2009	F	Asymptomatic	O145:H28		3	Non-HUS
St. Olav118	2009	M	Asymptomatic	O145:H28		1	Non-HUS
St. Olav119	2009	M	Asymptomatic	O145:H28		3	Non-HUS
St. Olav120	2009	M	Asymptomatic	O145:H28		1	Non-HUS
St. Olav121	2009	M	ND	O145:H28		3	Non-HUS
St. Olav122	2009	F	Asymptomatic	O145:H28		2	Non-HUS
St. Olav123	2009	M	Asymptomatic	O145:H28		4	Non-HUS
St. Olav49	2006	F	HUS	O103:H25		1	HUS-associated
St. Olav59	2006	M	HUS	O103:H25		1	HUS-associated
St. Olav124	2009	M	Asymptomatic	0	2a	5	Non-HUS
St. Olav131	2010	M	BD	O103:[H25]		1	Non-HUS
St. Olav27	2002	M	Gastroenteritis	0		4	Non-HUS
St. Olav38	2004	F	Gastroenteritis	0	2a	3	Non-HUS
St. Olav74	2008	M	Gastroenteritis	O118		1	Non-HUS
St. Olav153	2011	F	Gastroenteritis	O2	2a	84	Non-HUS
St. Olav100	2009	M	HUS	O145	2a	1	HUS-associated
St. Olav101	2009	M	Asymptomatic	O145	2a	2	HUS-associated
St. Olav102	2009	M	Asymptomatic	O145	2a	28	HUS-associated
St. Olav104	2009	F	Asymptomatic	O145	2a	1	HUS-associated
St. Olav107	2009	F	Gastroenteritis	O145	2a	2	HUS-associated
St. Olav164	2011	F	HUS	O145	2a	2	HUS-associated
St. Olav97	2009	F	Gastroenteritis	O145		1	HUS-associated

Figure S2



Key	Year	Sex	Clinic	Serotype	stx2 subtype	Age	Classification
St. Olav24	2002	F	Gastroenteritis	O157:H-	2c	30	Non-HUS
St. Olav35	2003	F	Gastroenteritis	O157:H-	2c	42	Non-HUS
St. Olav64	2007	F	Gastroenteritis	O157:H7	2c	1	Non-HUS
St. Olav72	2007	M	ND	O157:H-	2c	0	Non-HUS
St. Olav23	2002	M	Gastroenteritis	O157:H-	2c	13	Non-HUS
St. Olav28	2002	F	Gastroenteritis	O157:H-	2c	47	Non-HUS
St. Olav29	2003	F	Gastroenteritis	O157:H-	2c	1	Non-HUS
St. Olav30	2003	F	ND	O157:H-	2c	1	Non-HUS
St. Olav32	2003	M	ND	O157:H-	2c	8	Non-HUS
St. Olav31	2003	M	ND	O157:H-	2c	5	Non-HUS
St. Olav20	2001	M	Gastroenteritis	O157:H-	2c	31	Non-HUS
St. Olav65	2007	M	Gastroenteritis	O157:H7	2a+2c	19	Non-HUS
St. Olav6	1999	M	Gastroenteritis	O157:H7	2a	27	Non-HUS
St. Olav7	1999	M	Gastroenteritis	O157:H7	2a	15	Non-HUS
St. Olav151	2011	F	BD	O157:H7	2c	1	Non-HUS
St. Olav166	2011	M	HUS	SF O157:H-	2a	0	HUS-associated
St. Olav56	2006	M	HUS	SF O157:H-	2a	2	HUS-associated
St. Olav75	2008	M	Gastroenteritis	SF O157:H-	2a	5	HUS-associated
St. Olav77	2008	F	HUS	SF O157:H-		1	HUS-associated
St. Olav80	2009	F	HUS	SF O157:H-	2a	3	HUS-associated
St. Olav81	2009	M	HUS	SF O157:H-	2a	5	HUS-associated
St. Olav82	2009	F	Asymptomatic	SF O157:H-	2a	35	HUS-associated
St. Olav83	2009	F	ND	SF O157:H-	2a	66	HUS-associated
St. Olav84	2009	M	Gastroenteritis	SF O157:H-		1	HUS-associated
St. Olav88	2009	M	Gastroenteritis	O157:H7	2c	1	Non-HUS
St. Olav89	2009	M	Gastroenteritis	O157:H-	2c	3	Non-HUS
St. Olav90	2009	F	Asymptomatic	O157:H-	2c	0	Non-HUS
St. Olav93	2009	F	Asymptomatic	O157:H-	2c	25	Non-HUS
St. Olav44	2005	F	Gastroenteritis	O157:H7	2c	1	Non-HUS

Figure S3

17

18

Figure legends

Figure 1. Cluster analysis of potential virulence genes in STEC. *eae* negative and *eae* positive STEC were mainly separated in two clusters. One exception was one eae negative strain that clustered among the *eae* positive strains due to the presence of some of the potential virulence genes. All HUS-associated strains clustered among *eae* positive strains and harbored all the potential virulence genes investigated in the study. For further details (serotype, *stx2* subtype etc.), please see Figure S1.

Figure S1. Cluster analysis of potential virulence genes in STEC. *eae* negative and *eae* positive STEC were mainly separated in two clusters. One exception was one *eae* negative strain that clustered among the *eae* positive strains due to the presence of some of the potential virulence genes. All HUS-associated strains clustered among *eae* positive strains and harbored all the potential virulence genes investigated in the study. Strains with serotype 0 did not belong to any of the serotypes tested for in the study.

Figure S2. MLVA dendrograms of the 109 non-O157 STEC strains, using seven repeat loci. The strains were distributed in 48 distinct MLVA genotypes. The virulence gene profile of each strain is displayed.

Figure S3. MLVA dendrograms of O157 and SF O157 with the virulence gene profile displayed. The strains were distributed in 17 distinct MLVA genotypes. The virulence gene profile of each strain is displayed.