Pathotyping of *Escherichia coli* isolated from community toilet wastewater and stored drinking water in a slum in Bangladesh

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RUNNING HEADLINE: *E. coli* pathotyping in a slum

SIGNIFICANCE AND IMPACT OF STUDY

Sanitary wastewater from an urban slum was heavily contaminated with pathogenic *Escherichia coli*. It is worth noting a great health risk of accidental exposure to pathogenically contaminated wastewater improperly discharged in and around urban slums. The distinct difference in pathotypes between wastewater and drinking water and the significantly smaller positive proportion of the human-specific *E. coli* genetic biomarker (H8) in drinking water indicate that drinking water contamination could be derived from not only human but also other sources. This highlights that pathotyping in association with the H8 marker provides an indication of pathogen contamination sources of environmental transmission media.

ABSTRACT

This study investigated the occurrence of *Escherichia coli* pathotypes in sanitary wastewater and drinking water in a Bangladeshi urban slum and the potential associations between these sources. We examined 621 *E. coli* isolates from sanitary wastewater and stored drinking water by multiplex PCR and dual index sequencing, classifying them into eight pathotypes based on 14 virulence genes and additionally evaluating the possession of the human-specific *E. coli* genetic biomarker H8. The proportions of pathogenic *E. coli* were significantly different ($P < 0.001$) between wastewater (18.6%) and drinking water (1.7%). *StIb*-positive enterotoxigenic *E. coli* (ETEC) were predominant in wastewater, indicating that people in the site carried ETEC. In contrast, no ETEC was present in drinking water and the proportion of H8-positive isolates was significantly smaller (7.8%) than that in wastewater (16.3%) ($P = 0.001$). Our findings indicate that sanitary wastewater from the slum was heavily contaminated with pathogenic *E. coli*, posing a great health risk. Furthermore, *E. coli* contamination of drinking water could be derived from not only human but also other sources.

KEYWORDS: *E.coli* pathotype; multiplex PCR; urban slum; microbial source tracking; biomarker; environmental transmission; Bangladesh

INTRODUCTION

Diarrhea is a leading health burden in developing countries and is responsible for an estimated 1.87 million deaths annually among children aged under five years, accounting for approximately 19% of total child deaths (Boschi-Pinto 2008). Although most *Escherichia coli* strains are commensal, certain strains are pathogenic. O'Ryan et al. (2005) reported that intestinal pathogenic/diarrheagenic *E. coli* (InPEC/DEC) accounts for 30–40% of acute diarrhea cases in developing countries. Owing to its widespread association with human disease, various studies have focused on pathogenic *E. coli* detection from stool samples of diarrhea patients in urban slums (Aminul et al., 2007; Kyobutungi et al., 2008; Mondal et al., 2012).

However, limited studies exist on the various *E. coli* pathotypes and their occurrence in the living environment of urban slums, where human excreta are typically not disposed of appropriately and drinking water is also typically contaminated (UNWWAP, 2017). Thus, understanding the occurrence of pathogenic *E. coli* in sanitary wastewater and drinking water and comparing the pathotypes between these sources will improve the current knowledge of the role of environmental transmission media to humans and will provide crucial information on pathogenic *E. coli* discharge to the environment.

A previous study classified *E. coli* strains into the eight pathotypes—enterohemorrhagic *E. coli* (EHEC), enteropathogenic *E. coli* (EPEC), Shiga toxin (Stx)-producing but non-enterohemorrhagic *E. coli* (STEC), enteroinvasive *E. coli* (EIEC), enteroaggregative *E. coli* (EAEC), enterotoxigenic *E. coli* (ETEC), diffusely adherent *E. coli* (DAEC), and extra-intestinal pathogenic *E. coli* (ExPEC)—based on the presence of 14 virulence genes: *stx1*, *stx2*, *eaeA*, *ipaH*, *aggR*, *StIb*, *LtI*, *daaE*, *afa/dra*, *kpsMT II*, *iutA*, *papA*, *papC*, and *sfa/foc* (Gomi et al., 2015). Using this approach, we analyzed the pathotypes of *E. coli* strains isolated from sanitary wastewater and drinking water in a slum of Khulna city, Bangladesh. In addition, we used a microbial source-tracking technique with the H8 human-specific *E. coli* genetic biomarker (Gomi et al., 2014; Warish et al., 2015) to gain a better understanding of the potential sources of the pathogenic *E. coli*.

RESULTS AND DISCUSSION

E. coli detection from water sources

Two types of daily water sources were analyzed for *E. coli* concentration. *E. coli* was not detected in samples from deep tube well water used for drinking (0/4). However, 17/18 (94.4%) samples of stored drinking water that were originally collected from the deep tube wells tested positive for *E. coli* (median = 6 cfu $100ml^{-1}$, max=100 cfu $100ml^{-1}$). These results suggest that the stored drinking water was contaminated during storage.

Assay performance

The presence of 14 virulence genes was examined in the 621 *E. coli* isolates through multiplex PCR and dual-index sequencing. Each isolate was then classified into one of the eight aforementioned pathotypes according to the associated target genes for each pathotype (Table 1). Numbers of sequence reads mapped against the target genes are summarized in Supporting Information Table S1. All target genes of positive control strains were appropriately detected.

Additionally, we examined the presence of the H8 marker in 264 *E. coli* isolates obtained from wastewater samples from a community toilet. Among them, 43 (16.3%) tested positive, which was relatively low considering that H8 host sensitivity was previously found to be 30% and 45% in sanitary wastewater samples from Japan (Gomi et al., 2015) and Australia (Warish et al., 2015), respectively. Although we cannot exclude the possibility of accidental inclusion of the small animals' excreta (e.g. mice) into the community toilet, the toilet was basically closed and majority of excreta should be derived from human. This relatively low positive proportion may be attributable to differences in human distal gut microbiota between Bangladesh and other countries.

Pathotypes of *E. coli* isolates from sanitary wastewater

Tables 2 and 3 summarize the presence of virulence genes in and pathotypes of the 621 *E. coli* isolates. Among the wastewater isolates, pathogenic *E. coli* accounted for 18.6% (95% confidence interval (CI): 14.2–23.9). This proportion was significantly higher than that in a previous study on river water in Japan using the same analytical method (13.1%, Gomi et al. (2015)) ($P = 0.046$). Out of 264 wastewater isolates, 62 (23.5%) possessed at least one of virulence genes. These result indicated that sanitary wastewater from the slum was heavily contaminated with pathogenic *E. coli*. Furthermore, these findings highlight that in places where a large amount of sanitary wastewater is discharged without proper treatment, a great health risk exists.

StIb was the most frequently detected (16.3%; 95% CI: 12.2–21.4) and its prevalence was significantly greater than that of other virulence genes ($p < 0.001$). Accordingly, *StIb*-positive ETEC was the dominant pathotype (16.3%; 95% CI: 12.2–21.4). ETEC was defined by the presence of heat-stable enterotoxin (*StIb*) and/or heat-labile enterotoxin (*LtI*). In the present study, all ETEC strains were *StIb*-positive (Table 2 and 3). *StIb*-positive ETEC strains are commonly associated with symptomatic cases of diarrhea, whereas *LtI*-only ETEC strains are not (Croxen, 2013). Because the community toilet was shared among approximately 30% of the total households, *StIb*-positive ETEC was probably carried by a significant population in the site, underscoring the need for increased attention to the prevalence of this pathotype.

ETEC is a major *E. coli* pathotype causing diarrhea in developing countries and has been isolated from both symptomatic and asymptomatic carriers (Wennerås and Erling, 2004; Croxen, 2013). A review study reported ETEC isolates in 2–36% of specimens from diarrhea patients among 19 studies in low- and medium-income countries (Gupta et al., 2008). Two studies of urban slums in Dhaka, Bangladesh detected ETEC in 17% of specimens from children with symptomatic diarrhea (Mondal et al., 2012) and in 8% and 3% from symptomatic and asymptomatic children, respectively (Stanton et al., 1989). Similar to these previous studies using human specimens, the present study using sanitary wastewater from a community toilet also reported high prevalence of ETEC in sanitary wastewater, indicating that a number of people in the community carry ETEC.

Two isolates possessed Stx genes (*stx1* or *stx2*), which are associated with EHEC or STEC. Owing to the absence of *eaeA*, which is associated with bacterial attachment, these two isolates were determined as STEC (refer to Table 1). In developing countries, *stx1* and *stx2* are rarely isolated from diarrhea patients (World Health Organization, 1999). For example, studies in India (Khan et al., 2002) and Bangladesh (Islam, 2007) reported that *stx1* and *stx2* were present in 0.8% and 2.2% of diarrhea patients, respectively. Although the present study detected Stx genes in isolates from sanitary wastewater from a community toilet, similarly to diarrhea patient specimens, these genes were rare in sanitary wastewater from the urban slum.

Some ExPEC-associated genes, such as *kpsMT II* and *iutA*, were detected at relatively high frequencies among the wastewater isolates. At least one ExPEC-associated gene was detected in 8.3% of isolates from sanitary wastewater samples; however, only two isolates (0.8%) were determined to be ExPEC on the basis of the required detection of two or more ExPEC-associated genes (refer to Table 1). Furthermore, although EAEC is recognized as a major cause of persistent diarrhea in developing countries, only two isolates were classified as such (0.8%).

Pathotypes of *E. coli* isolates from stored drinking water

Of 357 isolates from stored drinking water, six (1.7%; 95% CI: 0.7–3.8) were pathogenic. EPEC accounted for the largest proportion (1.1%; 95% CI: 0.4–3.0), followed by ExPEC (0.3%; 95% CI: 0.0–1.8) and EIEC (0.3%; 95% CI: 0.0–1.8); however, the pathogenic proportions of the last two pathotypes were not significant. As the stored drinking water in the present study was consumed without any further treatment, this finding is indicative of a high infection risk, especially caused by EPEC.

In contrast, no isolates from sanitary wastewater were identified as EPEC, although people in the community were ingesting water contaminated with EPEC. Because of the lack of a clear association between the wastewater and drinking water samples, no unambiguous explanation could be obtained for this inconsistency. It was not confirmed whether the households using water contaminated by pathogenic *E. coli* used the community toilet on the sampling date or not; they possibly use another community toilet in the site or any toilet outside the community.

Comparison of *E. coli* pathotypes and H8-positive proportion

The occurrence of some virulence genes was significantly different between isolates from wastewater and those from drinking water: *StIb* ($p < 0.001$), *LtI* ($p = 0.001$), *kpsMT II* ($p < 0.001$), and *iutA* ($p < 0.001$) (Table 2). Pathogenic *E. coli* ratios were also significantly different between the two sample types ($p < 0.001$). These differences primarily stem from differences among *E. coli* pathotypes in different transmission media, even in a small community.

Notably, although ETEC constituted 16.3% (CI = 12.2 – 21.4) of the isolates from sanitary wastewater, it was not detected among any of 357 isolates from the 18 stored drinking water samples. Although die-off rates of *E. coli* are possibly different in strains and under storage conditions (Michael et al., 2011; Van Elsas et al., 2011), the absence of ETEC in drinking water imply that a source other than sanitary wastewater is the major contamination pathway for the stored drinking water.

This implication is supported by the results of microbial source tracking shown in Table 4. Although the proportion of *E. coli* isolates positive for the H8 marker among pathogenic *E.*

coli was not significantly different between drinking water and wastewater due to the limited sample size, that proportion among all *E. coli*, including pathogenic and non-pathogenic ones, was significantly smaller for the stored water (7.8%) than for the wastewater (16.3%) (P = 0.001). This result suggests that together with humans, other *E. coli* sources significantly contributed to the contamination of the stored drinking water. Regarding potential sources of drinking water contamination, goats and ducks were notably widespread in the community. Harris et al. (2016) reported the significant contribution of ruminants to the fecal contamination of urban household environments in Dhaka. Thus, animals living in this community may be a source of the *E. coli* contamination in drinking water.

Furthermore, although stored water was sampled from a limited number of households (n = 18), the present results suggest that the drinking water was probably not a major exposure route of ETEC, which was likely carried by a significant fraction of the population. It is widely recognized that ETEC exposure is typically from contaminated food and drinking water (Croxen et al., 2013). Considering the absence of ETEC from all 18 stored drinking water samples, ingestion of contaminated food is suspected to be a major route of ETEC exposure. In addition, high ETEC prevalence has been observed in surface water samples from rural and urban areas of Bangladesh (Begum, 2005). Because there were two heavily contaminated ponds located at 220 m and 370 m from the community, used for various purposes including swimming and bathing, accidental ingestion of contaminated surface water is a possible route of ETEC exposure.

Thus, the present study successfully characterized and compared pathotypes of *E. coli* isolates obtained from sanitary wastewater and stored drinking water and provided an indication of the sources of drinking water contamination. Our findings provide essential insights into the occurrence of pathogenic *E. coli* in the living environment of a slum. It was found that the sanitary wastewater was heavily contaminated by pathogenic *E. coli*, especially ETEC, highlighting the great health risk due to improper wastewater management in slums, where a large fraction of the population carries pathogenic *E. coli*. We also showed that *E. coli* pathotyping enables the identification of pathotypes to be prioritized in an area, thereby facilitating better preparedness/countermeasure for potential infection since vulnerable groups and typical infection pathways are different in pathotypes. Furthermore, our results indicate the potential relevance of pathotype comparison across environmental transmission media for identification of contamination sources and transmission routes in cooperation with a human-specific source tracking biomarker of *E. coli*. However, sound associations between samples are required to allow clear associations among contamination sources and transmission media; other sources, such as animal excreta, foods, and surface water, should be analyzed in future studies to enable a more holistic understanding of the occurrence and potential sources of various pathogenic *E. coli*.

MATERIALS AND METHODS

Study area

The study site is located in Khulna city, Bangladesh, which is the country's third most populous city, with approximately 1.5 million people. The current study focused on a small urban slum community called the Camp No. 1 slum in Khalishpur, Khulna (22°51'7.11"N, 89°32'37.15"E), a densely populated area (1.4 ha; 2,500 inhabitants; 460 households; Supporting Information Figure S1). The community uses two community toilets (one in the north part and another in the south part of the community) with 36 toilet pans in total, shared by approximately 350 households. Water for drinking and cooking is sourced from deep-tube wells (seven community and five private wells) and is temporarily stored in water pots (Supporting Information Figure S2) in each house before use. Overall, the sanitary conditions were poor in the slum.

E. coli strain isolation

Approximately 100 ml of sanitary wastewater settled as slurry in the outlet pipe of a community toilet located in the south part of the community was sampled with a ladle on September 3, 4, and 7, 2014. The sampled community toilet served approximately 30% of the population (140 households) in the site. Approximately 2 liters of stored drinking water was sampled from water pots of 18 households during September 1–26, 2014. These sanitary wastewater and stored drinking water samples were used for isolation of *E. coli* for pathotyping. In addition, 1-liter water samples were collected from four community deep tube wells on August 14 and October 21–23, 2014 to investigate the concentration of *E. coli*. All samples were placed on ice in the dark and processed within 6 h.

Each of the three sanitary wastewater samples was mixed carefully, and 1 ml of each was used to make a 1,000-fold dilution in PBS. The dilution was streaked onto XM-G agar (Nissui, Tokyo, Japan). After an overnight incubation at 37°C, 264 *E. coli* colonies with the appropriate color profile were isolated for pathotyping. The 18 stored drinking water samples were collected at the households located in the south part of the community and within distance between 10 m and 80 m from the sampled community toilet. Similarly to sanitary wastewater, the drinking water samples were filtered through 0.45-μm membrane filters and cultured on XM-G agar. After counting of the colonies for determining *E. coli* concentration, 357 isolates were obtained. *E. coli* concentrations in the samples of the four deep-tube wells located in the south part of the community were measured through the same procedure.

Detection of virulence genes

Virulence genes were detected in each isolate by multiplex PCR and dual index sequencing as described by Gomi et al. (2015). Briefly, multiplex PCR was performed with 14 primer sets to simultaneously amplify and add adapter sequences to the 14 virulence genes (*stx1*, *stx2*, *eaeA*, *ipaH*, *aggR*, *StIb*, *LtI*, *daaE*, *afa/dra*, *kpsMT II*, *iutA*, *papA*, *papC*, *sfa/foc*). All PCRs were carried out in a 96-well Hi-Plate for Real Time (Takara, Otsu, Japan) using the Thermal Cycler Dice Real Time System 2 (Takara). The PCR products were diluted 100-fold in ultrapure water for use as the template in a subsequent PCR to add P5 and P7 amplification primer sequences with dual indices (Index1 and Index2) to the adapters. After the second PCR, 2 μl of each PCR product was pooled in a single tube. After electrophoresis of the mixture (15 μl), agarose slices containing the target DNA fragments (250–1000 bp) were excised using a sterile razor blade and purified with Quantum Prep Freeze ’N Squeeze DNA Gel Extraction Spin Columns (Bio-Rad, Hercules, CA, USA) and AMPure XP beads (Beckman Coulter, Brea, CA, USA). The purified product was sequenced on the MiSeq platform (Illumina, San Diego, CA, USA) for 500 cycles and the generated reads were analyzed with the CLC Genomics Workbench (CLC Bio, Aarhus, Denmark). Reads were initially sorted for each sample based on the Index1 and Index2 sequences and trimmed to remove short or low-quality reads. Trimmed reads were mapped against reference sequences of the 14 virulence genes. The average number of mapped reads (ANMR) was determined for each gene using the data from positive controls. The number of mapped reads was determined for each sample. As some sequence reads were incorrectly mapped to genes not harbored by control strains, a read count >ANMR/10 was determined to be positive for the target gene (Gomi et al. 2015). *E. coli* pathotypes were defined as shown in Table 1.

H8 marker analysis

Real-time PCR assays were performed on each isolate to detect the human-specific *E. coli* marker H8 (Gomi et al. 2014). The PCR mixture (15 μl) comprised 7.5 μl of 2× QuantiFast SYBR Green PCR MasterMix (Qiagen, Hilden, Germany), 0.3 μl each of forward (5′-ACAGTCAGCGAGATTCTTC-3′) and reverse (5′-GAACGTCAGCACCACCAA-3′) primers (50 μmol l^{-1}), and 6.9 μl of cell suspension. The reactions were initiated by incubation at 95°C for 5 min, followed by 40 cycles of 95°C for 10 s and 60°C for 30 s. Melting curve analysis following PCR amplification was conducted to confirm the correct real-time PCR products.

Statistical analysis

The 95% CI of the proportions of virulence genes and pathotypes and H8-positive isolates were calculated using the one-sample proportions test. Differences in proportions of virulence genes, pathotypes, and H8-positive isolates among sample types. $P < 0.05$ was determined as statistically significant.

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CONFLICT OF INTEREST

No conflict of interest declared.

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SUPPORTING INFORMATION

Table S1. Counts of sequence reads mapped against each target virulence gene and the H8 marker.

Figure S1 The selected study site. This map was developed on the basis of GIS data from thematicmapping.org and data from a survey conducted in 2013 by Michiya Kodera, Kyoto University.

Figure S2 An example of a drinking water storage pot (photo credit: Shotaro Goto). Water pots are sometimes covered with a dish.

TABLES

Table 1. Target virulence genes and pathotypes

E. coli pathotype	Combinations of target virulence genes to define each pathotype
EHEC	*stx1* and/or *stx2* and *eaeA*
EPEC	*eaeA* without *stx1* or *stx2*
STEC	*stx1* or/and *stx2*
EIEC	*ipaH*
EAEC	*aggR*
ETEC	*StIb* and/or *LtI*
DAEC	*daaE*
ExPEC	Two or more of *papA* and/or *papC*; *afa/dra*; *kpsMT II*; *iutA*; and *sfa/foc*

Table 2. Occurrence of virulence genes in 621 *E. coli* isolates

Gene	Sanitary wastewater (*n* = 264)			Stored drinking water (*n* = 357)			*P*-value
	no.	%	95% CI	no.	%	95% CI	
stx1	1	0.4	0.0–2.4	0	0.0	0.0–1.3	n.s.
stx2	1	0.4	0.0–2.4	0	0.0	0.0–1.3	n.s.
eaeA	0	0.0	0.0–1.8	4	1.1	0.3–3.0	n.s.
ipaH	0	0.0	0.0–1.8	1	0.3	0.0–1.8	n.s.
aggR	2	0.8	0. –3.0	0	0.0	0.0–1.3	n.s.
StIb	43	16.3	12.2–21.4	0	0.0	0.0–1.3	<0.001
LtI	8	3.0	1.4–6.1	0	0.0	0.0–1.3	0.001
StIb and *LtI*	8	3.0	1.4–6.1	0	0.0	0.0–1.3	n.s.
daaE	0	0.0	0.0–1.8	0	0.0	0.0–1.3	n.s.
afa/dra	0	0.0	0.0–1.8	0	0.0	0.0–1.3	n.s.
kpsMT II	12	4.5	2.5–8.0	1	0.3	0.0–1.8	<0.001
iutA	11	4.2	2.2–7.5	0	0.0	0.0–1.3	<0.001
papA	1	0.4	0.0–2.4	0	0.0	0.0–1.3	n.s.
papC	1	0.4	0.0–2.4	1	0.3	0.0–1.8	n.s.

sfa/foc	0	0.0	0.0–1.8	1	0.3	0.0–1.8	n.s.

Note: The 95% confidence intervals of the proportions of virulence genes were analyzed using the one-sample proportions test. Differences in proportions of virulence genes between sanitary wastewater and stored drinking water were analyzed using the Fisher’s exact test for count data. n.s. indicates non-significant differences ($P \geq 0.05$).

Table 3. Pathotypes of 621 *E. coli* isolates

Pathotype	Sanitary wastewater (n = 264)			Stored drinking water (n = 357)			*P*-value
	no.	%	95% CI	no.	%	95% CI	
ETEC	43	16.3	12.2–21.4	0	0.0	0.0–1.3	<0.001
EPEC	0	0.0	0.0–1.8	4	1.1	0.4–3.0	n.s.
ExPEC	2	0.8	0.13–3.01	1	0.3	0.0–1.8	n.s.
STEC	2	0.8	0.13–3.01	0	0.0	0.0–1.3	n.s.
EAEC	2	0.8	0.13–3.01	0	0.0	0.0–1.3	n.s.
EIEC	0	0.0	0.0–1.8	1	0.3	0.0–1.8	n.s.
DAEC	0	0.0	0.0–1.8	0	0.0	0.0–1.3	n.s.
EHEC	0	0.0	0.0–1.8	0	0.0	0.0–1.3	n.s.
Total	49	18.6	14.2–23.9	6	1.7	0.7–3.8	<0.001

Note: The 95% confidence intervals of the proportions of pathotypes were analyzed using 1-sample proportions test. Differences in proportions of pathotypes between sanitary wastewater and stored drinking water were analyzed using the Fisher's exact test for count data. n.s. indicates non-significant differences ($P \geq 0.05$).

Table 4. *E. coli* isolates positive for H8

	Sanitary wastewater				Stored drinking water				
	n	Positive no.	%	95% CI	no.	Positive no.	%	95% CI	*P*-value
All *E. coli*	264	43	16.3	12.2 – 21.4	28	28	7.8	7.2 – 15.1	0.001
Pathogenic *E. coli*	49	8	16.3	7.8 – 30.2	6	0	0.0	0.0 – 40.2	n.s.

Note: The 95% confidence intervals of the proportions of H8-positive isolates were calculated through the one-sample proportions test. Differences in the proportion of H8-positive isolates between sanitary wastewater and stored drinking water were analyzed using the Fisher's exact test for count data. n.s. indicates non-significant differences ($P \geq 0.05$).

Table S1 Counts of sequence reads mapped against each target virulence gene and H8 marker [a, b]

Sample ID	Date collected	Sample type[c]	read count														patho-type	H8
			stx1	*stx2*	*eaeA*	*ipaH*	*aggR*	*StIb*	*LtI*	*daaE*	*afa/ dra*	*kpsMT II*	*iutA*	*papA*	*papC*	*sfa/ foc*		
1	1-Sep-14	SW	2	0	0	0	0	0	0	0	0	0	0	0	1	0	-	
2	1-Sep-14	SW	1	0	0	0	0	0	0	0	0	0	0	0	2	0	-	
3	1-Sep-14	SW	2	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
4	1-Sep-14	SW	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-	
5	1-Sep-14	SW	2	0	2	0	0	0	1	0	0	2884	0	1	14279	6816	ExPEC	
5	1-Sep-14	SW	2	0	0	0	0	0	0	0	0	0	0	0	4	0	-	
6	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	-	
7	1-Sep-14	SW	0	2	0	0	0	0	0	0	0	0	2	0	0	2	-	
8	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
10	1-Sep-14	SW	4	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
11	1-Sep-14	SW	2	1	0	0	0	0	0	0	0	0	0	0	0	0	-	
12	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
13	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	1	0	0	0	-	
14	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
15	1-Sep-14	SW	0	2	0	0	0	2	0	0	0	0	0	0	0	0	-	
16	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
17	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	-	
18	1-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
19	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
20	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	2	0	0	0	-	
21	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
22	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
23	1-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
24	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
25	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	
26	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
27	1-Sep-14	SW	0	0	0	0	0	9	0	0	0	0	1	0	0	0	-	
28	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
29	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
30	1-Sep-14	SW	0	0	0	0	0	8	0	0	0	0	0	0	0	0	-	
31	1-Sep-14	SW	0	0	0	0	0	7	0	0	0	0	0	0	4	0	-	
32	1-Sep-14	SW	0	0	0	0	0	10	0	0	0	3	0	0	2	0	-	
33	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
34	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
35	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
36	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
37	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
38	1-Sep-14	SW	0	0	0	2	0	5	0	0	0	0	2	0	0	0	-	
39	1-Sep-14	SW	0	0	0	2	0	2	0	0	0	0	2	0	0	0	-	
40	1-Sep-14	SW	0	0	0	1	0	4	0	0	0	0	0	0	0	0	-	
41	1-Sep-14	SW	0	0	0	4	0	1	0	0	2	0	0	0	0	0	-	
42	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	2	0	0	0	-	
43	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	2	0	4	0	-	
44	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	1	2	0	1	0	-	
45	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
46	1-Sep-14	SW	0	0	0	2	0	2	0	0	0	0	0	0	0	0	-	
47	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	2	0	0	0	-	
48	1-Sep-14	SW	0	0	0	2	0	3	0	0	0	0	0	0	0	0	-	
49	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
50	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
51	1-Sep-14	SW	0	0	0	0	1	0	0	0	0	0	2	0	0	0	-	
52	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
53	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
54	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
55	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
56	1-Sep-14	SW	0	0	0	0	0	1	0	0	0	2	0	0	0	0	-	
57	1-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
58	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	

59	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
60	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
61	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	1	0	-	
62	1-Sep-14	SW	0	0	2	0	0	0	0	0	0	0	0	0	0	0	-	
63	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
64	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	1	0	-	
65	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
66	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	2	0	0	0	0	-	
67	1-Sep-14	SW	0	0	0	0	0	17	1	0	0	8	0	0	0	0	-	
68	1-Sep-14	SW	0	0	0	0	0	7	0	0	0	0	0	0	0	0	-	
69	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	2	0	0	0	0	-	
70	1-Sep-14	SW	0	0	0	0	2	0	0	0	0	0	0	0	0	0	-	
71	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
72	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
73	1-Sep-14	SW	0	0	0	0	0	11	0	0	0	0	0	0	0	0	-	
74	1-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
75	1-Sep-14	SW	0	0	0	0	0	8	0	0	0	0	0	0	0	0	-	
76	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
77	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
78	1-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
79	1-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
80	1-Sep-14	SW	0	0	0	0	0	20	0	0	0	0	0	0	1	0	-	
81	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
82	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
83	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	2	0	0	0	0	-	
84	1-Sep-14	SW	0	0	0	0	0	10	0	0	0	0	1	0	0	0	-	
85	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
86	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
87	1-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
88	1-Sep-14	SW	1	6	0	0	0	3	0	0	0	0	0	0	4	0	-	
89	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
90	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
91	1-Sep-14	SW	0	0	0	0	0	4	1	0	0	0	1	0	0	0	-	
92	1-Sep-14	SW	0	0	0	0	0	9	1	0	0	0	0	0	0	0	-	
93	1-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
94	1-Sep-14	SW	0	0	0	0	0	9	0	0	0	0	0	0	7	0	-	
95	1-Sep-14	SW	0	0	98	0	0	0	0	0	0	0	0	0	0	0	EPEC	
96	1-Sep-14	SW	0	0	2609	0	0	0	0	0	0	0	0	0	0	0	EPEC	
97	1-Sep-14	SW	0	0	2412	0	0	1	0	0	0	0	0	0	0	0	EPEC	
98	1-Sep-14	SW	0	0	629	0	0	2	0	0	0	0	0	0	0	0	EPEC	
99	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-	
100	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
101	1-Sep-14	SW	387	90	0	0	0	0	0	0	0	0	0	0	0	0	-	
102	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	55	57	0	0	0	-	
103	1-Sep-14	SW	0	0	0	48	0	1	0	0	0	0	0	0	0	0	EIEC	
104	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
105	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
106	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
107	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
108	1-Sep-14	SW	0	0	1	0	0	1	0	0	0	0	0	0	0	0	-	+
109	1-Sep-14	SW	1	0	0	0	0	2	0	0	0	0	0	0	0	0	-	+
110	1-Sep-14	SW	0	0	2	0	0	3	0	0	0	0	0	0	0	0	-	+
111	1-Sep-14	SW	0	1	0	0	0	3	0	0	0	0	0	0	0	0	-	
112	1-Sep-14	SW	0	1	0	0	0	2	0	0	0	0	0	0	0	0	-	
113	1-Sep-14	SW	0	144	14	0	0	0	0	0	0	0	0	0	0	0	-	
114	1-Sep-14	SW	0	0	0	0	0	6	0	0	0	29	0	0	254	13	-	
115	1-Sep-14	SW	0	0	0	0	0	336	0	0	0	0	0	0	0	0	-	+
116	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	+
117	1-Sep-14	SW	0	2	0	0	0	0	0	0	0	0	0	0	0	0	-	
118	1-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
119	1-Sep-14	SW	0	1	0	0	0	1	0	0	0	0	0	0	0	0	-	
120	1-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	
121	1-Sep-14	SW	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	

122	14-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
123	14-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	6	1	-	
124	14-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
125	14-Sep-14	SW	0	0	0	0	74	1	0	0	0	0	0	0	0	0	-	
126	14-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
127	14-Sep-14	SW	0	0	0	0	0	0	40	0	0	0	0	0	0	0	-	
128	16-Sep-14	SW	0	0	0	0	0	0	2	0	0	0	0	0	2	0	-	
129	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	2	0	0	0	-	
130	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	+
131	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
132	16-Sep-14	SW	0	0	2	0	0	8	2	0	0	0	0	0	0	0	-	
133	16-Sep-14	SW	0	0	0	0	0	4	0	1	0	0	4	0	0	0	-	+
134	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	1	0	0	0	-	
135	16-Sep-14	SW	0	0	0	0	0	3	2	0	0	0	0	0	0	0	-	
136	16-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
137	16-Sep-14	SW	0	0	0	0	0	7	0	0	6	0	118	0	0	0	-	
138	16-Sep-14	SW	2	0	0	0	0	3	2	0	0	0	2	0	0	0	-	
139	16-Sep-14	SW	0	0	0	0	0	2	0	14	0	1	0	0	0	0	-	
140	16-Sep-14	SW	0	0	0	0	0	8	0	0	0	2	0	0	0	0	-	
141	16-Sep-14	SW	0	1	0	0	0	3	0	0	0	0	0	0	0	0	-	
142	16-Sep-14	SW	0	0	0	0	0	7	0	0	0	0	0	0	0	0	-	
143	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
144	16-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	+
145	16-Sep-14	SW	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
146	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
147	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
148	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
149	16-Sep-14	SW	0	0	0	0	0	2	2	0	0	1	0	0	0	0	-	
150	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
151	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	+
152	16-Sep-14	SW	0	0	0	0	0	348	0	0	0	0	0	0	0	0	-	
153	16-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
154	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
155	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
156	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
157	16-Sep-14	SW	0	0	1	0	0	3	1	0	0	2	0	0	0	0	-	
158	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
159	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	1	0	-	
160	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
161	16-Sep-14	SW	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	+
162	16-Sep-14	SW	0	0	0	1	0	2	0	0	0	0	1	0	0	0	-	
163	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	+
164	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
165	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	+
166	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
167	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
168	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
169	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	4	0	0	0	0	-	
170	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	2	0	0	0	0	-	
171	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	2	0	0	0	0	-	
172	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
173	16-Sep-14	SW	0	0	0	0	0	6	0	0	0	4	0	0	0	0	-	
174	16-Sep-14	SW	0	0	0	0	0	11	0	0	0	2	0	0	0	0	-	
175	16-Sep-14	SW	0	0	0	0	0	7	0	0	0	6	0	0	0	0	-	
176	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
177	16-Sep-14	SW	0	0	0	0	0	3	0	0	0	4	0	0	0	0	-	+
178	16-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
179	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
180	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
181	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	1	0	0	0	-	
182	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
183	16-Sep-14	SW	0	0	0	0	0	4	0	0	0	1	0	0	0	0	-	
184	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	

185	16-Sep-14	SW	1	0	0	0	0	2	1	0	0	0	0	0	0	0	-	
186	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
187	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
188	16-Sep-14	SW	0	0	0	0	0	3	0	0	0	1	0	0	0	0	-	+
189	16-Sep-14	SW	0	1	0	0	0	5	0	0	0	0	0	0	0	0	-	
190	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
191	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
192	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
193	16-Sep-14	SW	0	0	0	0	6	1	0	0	0	0	2	0	0	0	-	
194	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
195	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
196	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
197	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
198	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
199	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
200	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	2	0	0	0	-	+
201	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
202	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	+
203	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
204	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	2	0	0	0	-	
205	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	4	-	+
206	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	2	0	0	0	-	
207	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	0	0	1	0	-	+
208	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
209	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
210	16-Sep-14	SW	0	0	0	0	0	1	1	0	0	0	2	0	0	0	-	
211	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
212	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
213	16-Sep-14	SW	0	0	0	0	0	1	2	0	0	0	4	0	0	0	-	
214	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	2	0	0	0	-	
215	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
216	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
217	16-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
218	16-Sep-14	SW	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-	
219	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
220	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
221	16-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
222	16-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
223	17-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
224	17-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
225	17-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
226	17-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
227	17-Sep-14	SW	0	2	0	0	0	0	0	0	0	0	0	0	0	0	-	
228	17-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	1	0	0	0	-	
229	17-Sep-14	SW	0	4	1	0	0	0	0	0	0	0	0	0	0	0	-	
230	17-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
231	17-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
232	17-Sep-14	SW	0	0	1	0	0	1	0	0	0	0	0	0	0	0	-	+
233	17-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
234	17-Sep-14	SW	0	2	0	0	0	3	0	0	0	0	0	0	0	0	-	+
235	17-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
236	17-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
237	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	+
238	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
239	26-Sep-14	SW	0	0	0	0	0	6	0	0	0	0	3	0	0	0	-	+
240	26-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	2	0	0	0	-	
241	26-Sep-14	SW	0	0	0	1	0	2	1	0	0	0	0	0	0	0	-	
242	26-Sep-14	SW	0	0	0	0	0	4	0	0	0	2	0	0	0	0	-	+
243	26-Sep-14	SW	4	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
244	26-Sep-14	SW	0	1	0	0	0	2	0	0	0	1	1	0	0	0	-	+
245	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
246	26-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	1	0	0	0	-	
247	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	

248	26-Sep-14	SW	4	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
249	26-Sep-14	SW	4	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
250	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
251	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	
252	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
253	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
254	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	4	0	0	0	0	-	
255	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
256	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
257	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
258	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
259	26-Sep-14	SW	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	
260	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
261	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
262	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	2	0	0	0	0	-	
263	26-Sep-14	SW	0	0	2	0	0	1	0	0	0	0	2	0	0	0	-	
264	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
265	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	+
266	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	5	0	0	0	0	-	
267	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
268	26-Sep-14	SW	0	0	0	0	0	5	0	0	0	8	0	0	0	0	-	
269	26-Sep-14	SW	0	0	0	0	0	7	0	0	0	2	0	0	0	0	-	
270	26-Sep-14	SW	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-	
271	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
272	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	4	0	0	0	0	-	+
273	26-Sep-14	SW	0	0	0	0	0	3	2	0	0	0	0	0	0	0	-	
274	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	+
275	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
276	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
277	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
278	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
279	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
280	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	1	0	0	0	-	
281	26-Sep-14	SW	0	0	0	0	0	0	1	0	0	2	0	0	0	0	-	
282	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
283	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	+
284	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
285	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
286	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
287	26-Sep-14	SW	0	1	0	0	0	2	0	0	0	0	0	0	0	0	-	
288	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
289	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
290	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
291	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	2	0	0	0	0	-	
292	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
293	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
294	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	1	2	0	0	0	-	
295	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
296	26-Sep-14	SW	1	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
297	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	3	0	0	0	0	-	
298	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
299	26-Sep-14	SW	0	0	0	0	0	0	2	0	0	2	0	0	4	0	-	
300	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
301	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	2	0	1	0	-	
302	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
303	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
304	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	6	0	0	0	0	-	
305	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	1	-	
306	26-Sep-14	SW	0	0	0	1	0	2	0	0	0	4	0	0	0	0	-	
307	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
308	26-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
309	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	2	0	0	0	0	-	
310	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	

311	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
312	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
313	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
314	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
315	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
316	26-Sep-14	SW	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	
317	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
318	26-Sep-14	SW	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
319	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
320	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
321	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	2	0	0	0	-	
322	26-Sep-14	SW	0	2	0	0	0	0	0	0	0	0	0	0	0	0	-	
323	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
324	26-Sep-14	SW	0	0	1	0	1	1	0	0	0	0	0	0	0	0	-	
325	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
326	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
327	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
328	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
329	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
330	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
331	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
332	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
333	26-Sep-14	SW	0	0	0	0	0	3	1	0	0	0	0	0	0	0	-	
334	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
335	26-Sep-14	SW	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
336	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
337	26-Sep-14	SW	0	0	0	0	0	3	1	0	0	2	0	0	0	0	-	
338	26-Sep-14	SW	1	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
339	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	2	0	0	0	0	-	
340	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-	
341	26-Sep-14	SW	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
342	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	4	2	0	0	0	-	
343	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
344	26-Sep-14	SW	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
345	26-Sep-14	SW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
346	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
347	26-Sep-14	SW	0	0	0	0	0	3	1	0	0	0	0	0	0	0	-	
348	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
349	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
350	26-Sep-14	SW	0	2	0	0	0	0	0	0	0	1	0	0	0	0	-	
351	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
352	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
353	26-Sep-14	SW	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	
354	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
355	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
356	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	4	0	1	0	-	
357	26-Sep-14	SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
358	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
359	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
360	3-Sep-14	EX	0	0	0	0	0	2	2	0	0	0	0	0	0	0	-	
361	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	+
362	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
363	3-Sep-14	EX	0	1	2	0	0	0	0	0	0	2	0	0	0	0	-	+
364	3-Sep-14	EX	2	0	0	0	0	14396	992	0	0	0	0	0	0	0	ETEC	
365	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
366	3-Sep-14	EX	0	0	2	1	0	3	0	0	0	0	0	0	0	0	-	
367	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	1	0	0	0	-	
368	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
369	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
370	3-Sep-14	EX	0	0	0	0	0	1061	0	0	0	2	0	0	0	0	ETEC	
371	3-Sep-14	EX	0	0	0	0	0	3	0	0	0	2	0	0	0	0	-	
372	3-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
373	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	22	0	0	0	0	-	

374	3-Sep-14	EX	0	0	0	0	0	9	0	0	0	8	0	0	0	0	-	
375	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
376	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
377	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
378	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	3	1	0	0	0	-	
379	3-Sep-14	EX	0	0	0	0	0	9533	3	0	0	0	0	0	0	0	ETEC	
380	3-Sep-14	EX	0	0	0	0	0	12	0	0	0	0	0	0	0	0	-	
381	3-Sep-14	EX	0	0	0	0	0	31103	0	0	0	0	0	0	0	0	ETEC	+
382	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	2	0	0	0	-	+
383	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	1	0	0	0	0	-	+
384	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	2093	2346	0	0	0	ExPEC	
385	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	+
386	3-Sep-14	EX	0	0	0	0	0	4	2	0	0	0	1	0	2	0	-	
387	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	
388	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
389	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	1112	0	0	0	-	+
390	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	1	0	-	+
391	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
392	3-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
393	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	2	0	0	0	-	
394	3-Sep-14	EX	0	0	0	0	0	8	4	0	0	0	2	0	0	0	-	
395	3-Sep-14	EX	0	0	0	0	1	46213	11790	0	0	1	0	0	0	0	ETEC	
396	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	1	0	0	0	-	
397	3-Sep-14	EX	0	0	0	0	0	5	3	0	0	0	2	0	0	0	-	
398	3-Sep-14	EX	0	0	0	0	0	2870	0	0	0	1	3	0	0	0	ETEC	
399	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
400	3-Sep-14	EX	0	2	0	0	0	11	0	0	0	1	5675	0	0	0	-	
401	3-Sep-14	EX	0	0	0	0	0	11	0	0	0	0	3202	0	0	0	-	
402	3-Sep-14	EX	0	0	0	1	0	13	2	0	0	0	1	0	0	0	-	
403	3-Sep-14	EX	0	0	0	0	0	17	9	1	0	1	8	0	0	0	-	
404	3-Sep-14	EX	0	0	0	0	0	8	0	0	0	90	0	0	0	0	-	
405	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
406	3-Sep-14	EX	0	0	0	0	0	26362	5	0	0	0	0	0	1	1	ETEC	+
407	3-Sep-14	EX	0	0	0	0	0	229	2	0	0	0	0	0	0	0	-	
408	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	38	8	0	0	0	-	
409	3-Sep-14	EX	0	0	0	0	0	31	0	0	0	0	1	0	0	0	-	
410	3-Sep-14	EX	0	0	0	0	0	17	0	0	0	0	0	0	0	0	-	+
411	3-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
412	3-Sep-14	EX	0	0	0	0	0	17	0	0	0	0	0	0	0	0	-	
413	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
414	3-Sep-14	EX	0	0	0	0	0	7	0	0	0	0	0	0	0	0	-	
415	3-Sep-14	EX	0	0	0	0	0	36277	6633	0	0	0	0	0	0	0	ETEC	
416	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
417	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	1	0	0	0	-	
418	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	+
419	3-Sep-14	EX	0	0	0	0	0	9	0	0	0	0	0	0	0	0	-	
420	3-Sep-14	EX	0	0	0	0	0	21797	0	0	0	2	2	0	2	0	ETEC	
421	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
422	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	37	2	0	0	0	-	
423	3-Sep-14	EX	0	2	0	0	0	0	0	0	0	2	2	0	0	0	-	
424	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
425	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	906	0	0	0	0	-	
426	3-Sep-14	EX	0	0	0	1	0	0	0	0	0	0	0	0	0	0	-	
427	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	463	0	0	0	-	
428	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
429	3-Sep-14	EX	0	0	2	0	0	1	0	0	0	0	0	0	0	0	-	
430	3-Sep-14	EX	0	0	0	0	0	2	2	0	0	3	2202	0	0	0	-	
431	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	8	0	0	0	0	-	
432	3-Sep-14	EX	0	0	0	0	0	11	0	0	0	3	0	0	0	0	-	
433	3-Sep-14	EX	0	0	0	0	0	12	1	0	0	5	0	0	0	0	-	
434	3-Sep-14	EX	0	0	0	0	0	32978	5366	0	0	10267	1	0	0	0	ETEC	
435	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	6319	0	0	0	0	-	
436	3-Sep-14	EX	0	0	0	0	0	31445	0	0	0	2	0	0	0	0	ETEC	

437	3-Sep-14	EX	0	0	0	0	0	6	0	0	0	2	0	0	0	0	-	
438	3-Sep-14	EX	0	0	0	0	0	19	2	0	0	2	0	0	0	0	-	
439	3-Sep-14	EX	0	0	0	0	0	27	1	0	0	6	0	0	0	0	-	+
440	3-Sep-14	EX	0	0	0	0	0	10	0	0	0	0	2	0	0	0	-	
441	3-Sep-14	EX	0	0	0	0	0	19402	0	0	0	6	0	0	0	0	ETEC	
442	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
443	3-Sep-14	EX	0	0	0	0	0	10	0	0	0	0	0	0	0	0	-	
444	3-Sep-14	EX	0	0	0	0	0	8	0	0	0	1	0	0	0	0	-	
445	3-Sep-14	EX	0	0	0	0	0	4	2	0	0	0	0	0	0	0	-	
446	3-Sep-14	EX	0	0	0	0	0	10	0	0	0	0	0	0	0	0	-	
447	3-Sep-14	EX	8	0	0	0	0	2	2	0	0	3	0	0	14	0	-	
448	3-Sep-14	EX	0	0	0	0	0	8	0	0	0	0	0	0	0	0	-	
449	3-Sep-14	EX	6	0	0	0	0	0	0	0	0	0	0	0	0	0	-	+
450	3-Sep-14	EX	0	0	0	2	0	24318	0	0	0	0	0	0	0	0	ETEC	+
451	3-Sep-14	EX	0	0	0	0	0	18	0	0	0	0	0	0	0	0	-	+
452	3-Sep-14	EX	0	0	0	0	0	6597	384	0	0	0	0	0	0	0	ETEC	
453	3-Sep-14	EX	0	0	0	0	0	18477	0	0	0	0	5	0	0	0	ETEC	+
454	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	2	0	0	0	-	
455	3-Sep-14	EX	0	0	0	0	12351	0	0	0	0	1	65	0	0	0	EAEC	
456	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	1	4	0	4	0	-	
457	3-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	6	0	0	0	-	
458	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	2	857	0	0	0	-	
459	3-Sep-14	EX	0	0	0	0	2	0	0	0	0	0	2	0	0	0	-	
460	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	23	0	0	0	-	
461	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	2	0	0	0	-	+
462	3-Sep-14	EX	0	0	0	1	0	3	0	0	0	0	4	0	0	0	-	+
463	3-Sep-14	EX	0	0	0	0	2	0	0	0	0	0	0	0	0	0	-	+
464	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
465	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	19640	0	0	0	-	
466	3-Sep-14	EX	0	0	0	0	1	2	0	0	0	0	2	0	0	0	-	
467	3-Sep-14	EX	0	0	0	0	0	3	1	0	0	2	0	0	0	0	-	
468	3-Sep-14	EX	0	0	0	0	0	1	1	0	0	0	2	0	0	0	-	+
469	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
470	3-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
471	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	
472	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	5	0	0	0	-	
473	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	16661	0	0	0	-	
474	3-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	2	0	1	0	-	
475	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
476	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	1	2	0	0	0	-	
477	3-Sep-14	EX	0	0	0	0	0	3	1	0	0	0	2	0	0	0	-	
478	3-Sep-14	EX	0	1	0	0	0	1	0	0	0	0	0	0	0	0	-	
479	3-Sep-14	EX	0	0	0	0	2	4	0	0	0	56	0	0	0	0	-	
480	3-Sep-14	EX	1	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
481	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	1	1	0	0	0	-	+
482	3-Sep-14	EX	0	0	0	0	0	4	1	0	0	3	0	0	0	0	-	
483	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
484	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
485	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
486	3-Sep-14	EX	0	0	0	1	0	1	0	0	0	0	0	0	1	0	-	
487	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	2	0	0	0	-	
488	3-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	+
489	3-Sep-14	EX	0	0	0	0	0	0	0	0	1	12	0	0	0	0	-	
490	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	+
491	3-Sep-14	EX	0	4	0	0	0	5	0	0	0	0	0	0	0	0	-	
492	3-Sep-14	EX	0	2	0	0	0	1	0	0	0	0	0	0	0	0	-	
493	3-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
494	3-Sep-14	EX	0	2	0	0	0	3	0	0	0	0	0	0	0	0	-	+
495	3-Sep-14	EX	0	6565	0	0	0	0	0	0	0	0	0	0	0	0	STEC	
496	3-Sep-14	EX	0	2	0	0	0	3	0	0	0	0	0	0	0	0	-	
497	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
498	3-Sep-14	EX	2	0	0	2	0	0	0	0	0	0	0	0	3	0	-	
499	3-Sep-14	EX	0	0	0	0	0	1277	2	0	0	1	0	0	0	0	ETEC	+

500	3-Sep-14	EX	0	0	0	0	0	1	0	0	0	1	0	0	0	0	-	
501	3-Sep-14	EX	0	1	0	0	0	5	0	0	0	0	0	0	0	0	-	
502	3-Sep-14	EX	2	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
503	3-Sep-14	EX	10760	0	0	0	0	2	1	0	0	66	5447	0	0	0	STEC	
504	4-Sep-14	EX	2	0	0	0	0	8	0	0	0	1	1	0	0	0	-	
505	4-Sep-14	EX	0	0	0	0	0	7	0	0	0	1	0	0	0	0	-	
506	4-Sep-14	EX	2	0	0	0	0	13540	0	0	0	3	0	0	0	0	ETEC	+
507	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	+
508	4-Sep-14	EX	0	0	0	0	0	4	1	0	0	0	0	0	0	0	-	
509	4-Sep-14	EX	0	0	0	0	0	25039	0	0	0	0	2	0	0	0	ETEC	
510	4-Sep-14	EX	0	0	0	0	0	9	0	0	0	0	0	0	0	0	-	
511	4-Sep-14	EX	0	0	0	0	0	17	2	0	0	0	0	0	0	0	-	
512	4-Sep-14	EX	0	0	0	0	0	5326	0	0	0	0	0	0	1	0	ETEC	+
513	4-Sep-14	EX	5	0	0	0	0	10	2	0	0	0	0	0	0	0	-	+
514	4-Sep-14	EX	0	0	0	0	0	9	0	0	0	0	0	0	0	0	-	
515	4-Sep-14	EX	0	0	0	0	0	9705	1	0	0	4	0	0	0	0	ETEC	
516	4-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
517	4-Sep-14	EX	0	0	0	0	0	5	0	0	0	27	0	0	0	0	-	
518	4-Sep-14	EX	0	0	0	0	0	9229	1	0	0	0	0	0	0	0	ETEC	
519	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
520	4-Sep-14	EX	0	0	0	0	0	4	0	0	0	1	0	0	0	0	-	
521	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
522	4-Sep-14	EX	0	0	0	1	0	5	2	0	0	1	0	0	2	0	-	
523	4-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	2	0	0	0	-	
524	4-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
525	4-Sep-14	EX	0	0	0	0	0	3	0	0	0	10	4	0	0	0	-	
526	4-Sep-14	EX	0	0	0	0	0	8	0	0	0	2	0	0	0	0	-	
527	4-Sep-14	EX	0	0	0	0	0	7	0	0	0	9556	0	0	0	0	-	
528	4-Sep-14	EX	0	0	0	0	0	22129	1086	0	0	4	0	0	0	0	ETEC	
529	4-Sep-14	EX	0	0	0	0	0	14306	594	0	0	2513	0	0	0	0	ETEC	
530	4-Sep-14	EX	0	0	0	0	0	15	0	0	0	1	0	0	0	0	-	
531	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
532	4-Sep-14	EX	0	0	0	0	0	8	1	0	0	673	1	0	0	0	-	
533	4-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	0	0	-	
534	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	1	0	0	0	0	-	
535	4-Sep-14	EX	0	0	0	0	0	9	0	0	0	4	0	0	0	0	-	+
536	4-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	
537	4-Sep-14	EX	0	0	0	0	0	7	0	0	0	0	2	0	0	0	-	
538	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
539	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
540	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
541	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	1	82	0	0	0	-	
542	4-Sep-14	EX	0	0	0	0	0	8636	168	0	0	699	0	0	0	0	ETEC	
543	4-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	
544	4-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	0	0	4	0	-	
545	4-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
546	4-Sep-14	EX	0	0	0	0	0	6	0	0	0	0	0	0	0	0	-	
547	4-Sep-14	EX	0	0	0	0	0	6	0	0	0	3	0	0	1	0	-	
548	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
549	4-Sep-14	EX	0	0	0	0	0	2	0	0	0	1	0	0	0	0	-	
550	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
551	4-Sep-14	EX	0	0	0	0	1792	4	0	0	0	2883	20	0	0	0	EAEC	
552	4-Sep-14	EX	0	0	2	0	0	2	0	0	0	4	2	0	0	0	-	
553	4-Sep-14	EX	0	0	0	0	0	0	2	0	0	1	0	0	0	0	-	
554	4-Sep-14	EX	0	0	0	0	2	5	0	0	0	6	3003	0	0	0	-	
555	4-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	
556	4-Sep-14	EX	0	0	0	0	2	1804	30	0	0	0	0	0	0	0	ETEC	
557	4-Sep-14	EX	0	0	0	0	0	3414	44	0	0	0	0	0	0	0	ETEC	
558	4-Sep-14	EX	0	0	0	1	0	18574	566	0	0	3	0	0	1	0	ETEC	
559	4-Sep-14	EX	0	0	0	0	0	8	0	0	0	2	0	0	0	0	-	
560	4-Sep-14	EX	0	0	2	0	2	1653	6	0	0	3	2	0	0	0	ETEC	
561	4-Sep-14	EX	0	0	0	0	0	4	0	0	0	1	0	0	0	0	-	+
562	4-Sep-14	EX	0	2	0	0	0	4	0	0	0	3	0	0	0	0	-	

563	4-Sep-14	EX	0	0	0	0	2	8785	150	0	0	7	3	0	0	0	ETEC	
564	4-Sep-14	EX	0	0	0	0	0	2563	42	0	0	0	0	0	0	0	ETEC	
565	4-Sep-14	EX	0	0	0	0	0	5	0	0	0	7407	0	0	0	0	-	
566	4-Sep-14	EX	0	0	0	0	1	5063	72	0	0	1985	0	0	0	0	ETEC	
567	4-Sep-14	EX	0	0	0	0	0	1167	14	0	0	0	0	0	0	0	ETEC	
568	4-Sep-14	EX	0	0	0	0	0	8	0	0	0	3	2	0	0	0	-	+
569	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-	
570	4-Sep-14	EX	0	0	0	2	0	4	0	0	0	3	2	0	4	0	-	
571	4-Sep-14	EX	0	0	0	0	0	464	2	0	0	2	0	0	0	0	-	
572	4-Sep-14	EX	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
573	4-Sep-14	EX	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
574	4-Sep-14	EX	0	0	0	0	0	545	0	0	0	0	0	0	0	0	-	
575	4-Sep-14	EX	0	0	0	0	0	791	4	0	0	2	0	0	0	0	-	
576	4-Sep-14	EX	0	0	0	0	0	452	8	0	0	1	2	0	0	0	-	
577	4-Sep-14	EX	0	0	0	0	0	634	10	0	0	0	0	0	0	0	-	
578	4-Sep-14	EX	0	0	0	0	0	991	42	0	0	0	0	0	0	0	ETEC	
579	4-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	+
580	4-Sep-14	EX	0	0	0	0	0	38	0	0	0	0	0	0	0	0	-	
581	7-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
582	7-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	0	0	1	0	-	
583	7-Sep-14	EX	0	0	0	0	0	793	10	0	0	0	1	0	0	0	-	
584	7-Sep-14	EX	0	0	0	0	0	1752	56	0	0	194	0	0	0	0	ETEC	
585	7-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	
586	7-Sep-14	EX	0	0	0	0	0	613	6	0	0	0	2	0	0	0	-	
587	7-Sep-14	EX	0	0	0	0	1	1931	20	0	0	0	0	0	0	0	ETEC	
588	7-Sep-14	EX	0	0	0	0	0	2823	39	0	0	0	0	0	0	0	ETEC	
589	7-Sep-14	EX	0	0	0	0	0	6	1	0	0	2	0	0	0	0	-	+
590	7-Sep-14	EX	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
591	7-Sep-14	EX	0	0	0	0	0	987	4	0	0	0	0	0	0	0	ETEC	
592	7-Sep-14	EX	0	0	0	0	0	5	1	0	0	1	4	0	0	0	-	+
593	7-Sep-14	EX	0	0	0	0	0	3622	40	0	0	0	0	0	0	0	ETEC	
594	7-Sep-14	EX	0	0	0	1	0	3	0	0	0	0	0	0	0	0	-	+
595	7-Sep-14	EX	0	0	0	0	0	4	0	0	0	1	0	0	0	1	-	
596	7-Sep-14	EX	0	0	0	0	0	1	0	0	0	2	0	0	0	0	-	+
597	7-Sep-14	EX	0	0	0	0	0	645	18	0	0	2	2	0	0	2	-	
598	7-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	2	0	-	
599	7-Sep-14	EX	0	0	0	0	0	1200	14	0	0	0	1	0	0	0	ETEC	
600	7-Sep-14	EX	0	0	0	0	0	1044	6	0	0	0	0	0	0	0	ETEC	
601	7-Sep-14	EX	0	0	0	0	0	2	0	0	0	3	0	0	0	0	-	
602	7-Sep-14	EX	0	0	0	0	0	891	10	0	1	2	0	0	0	0	ETEC	
603	7-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	+
604	7-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	1	0	0	0	-	
605	7-Sep-14	EX	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-	+
606	7-Sep-14	EX	0	0	0	0	0	5	0	0	0	1	0	0	0	0	-	
607	7-Sep-14	EX	0	0	0	0	0	2587	1	0	0	0	0	0	0	0	ETEC	+
608	7-Sep-14	EX	0	0	0	0	0	1	1	0	0	0	1	0	0	0	-	+
609	7-Sep-14	EX	0	0	0	0	0	8	0	0	0	1	2	0	0	0	-	
610	7-Sep-14	EX	0	0	0	0	0	3	0	0	0	0	1	0	2	0	-	
611	7-Sep-14	EX	0	0	0	0	2	0	1	0	0	0	0	0	0	0	-	
612	7-Sep-14	EX	0	0	0	0	0	4	0	0	0	0	2	0	1	0	-	
613	7-Sep-14	EX	0	0	0	0	0	2377	26	0	0	0	0	0	0	0	ETEC	
614	7-Sep-14	EX	0	0	0	0	0	2	2	0	0	0	2	0	1	0	-	
615	7-Sep-14	EX	0	0	0	0	0	2	0	0	0	2	0	0	0	0	-	+
616	7-Sep-14	EX	0	0	0	0	0	5	1	0	0	0	0	0	1	0	-	
617	7-Sep-14	EX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	+
618	7-Sep-14	EX	0	0	0	1	0	2	0	0	0	0	2775	60	22719	0	ExPEC	
619	7-Sep-14	EX	0	0	0	0	0	5	0	0	0	0	0	0	2	0	-	
620	7-Sep-14	EX	0	0	0	0	0	2	0	0	0	1	2102	0	0	0	-	
621	7-Sep-14	EX	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	
KCo003		-	21063	8980	0	0	0	2	0	0	0	0	1	0	4	0	STEC	
KcCo002		-	0	3458	378	0	0	0	0	0	0	0	0	0	1	0	EHEC	
KGu002		-	0	0	0	0	2581	4	0	0	0	0	0	0	16	0	EAEC	
KKa001		-	0	0	0	0	0	2	0	2	3446	0	17567	0	2	0	ExPEC	

KH007	-	0	0	0	0	0	0	0	0	0	934	2626	0	1	0	ExPEC
KP003	-	0	0	0	0	0	0	0	0	0	2441	1	14	19112	4251	ExPEC
KP002	-	2	0	0	0	0	7	0	0	0	0	0	0	1	0	-
KP002+ *ipaH*	-	0	0	0	47	0	0	0	0	0	0	2	0	0	0	EIEC
KP002+ *StIb*	-	0	0	0	0	0	8337	0	0	2	1	2	0	1	0	ETEC
KP002+ *LtI*	-	0	2	0	0	0	1	2783	0	0	0	0	0	0	0	ETEC
KP002+ *daaE*	-	0	0	0	0	0	0	2	868	0	0	0	0	22	0	DAEC
ANMR	-	2106.3	621.9	37.8	4.7	258.1	833.7	278.3	86.8	344.6	168.75	1009.65	1.4	1911.2	425.1	

[a] Positive values, which are higher than ANMR/10, are colored by red except for control strains. Expected gene to be positive for control strains are colored by yellow.

[b] Seven reference *E. coli* strains were used as controls. *E coli* strains KCo003 (positive for *stx1* and *stx2*), KGu002 (positive for *stx2* and *eaeA*), KKa001 (positive for *afa*/*dra* and *iutA*), KH007 (positive for *kpsMT II* and *iut A*), and KP003 (positive for *kpsMT II*, *papA*, *papC* and *sfa*/*foc*) were used for positive controls. KP002 was used as a negative control. Positive controls for *ipaH*, *StIb*, *LtI*, and *daaE* were prepared by mixing synthesized genes containing target sequences with strain KP002.

[c] SW and EX indicate stored drinking water and sanitary wastewater, respectively.

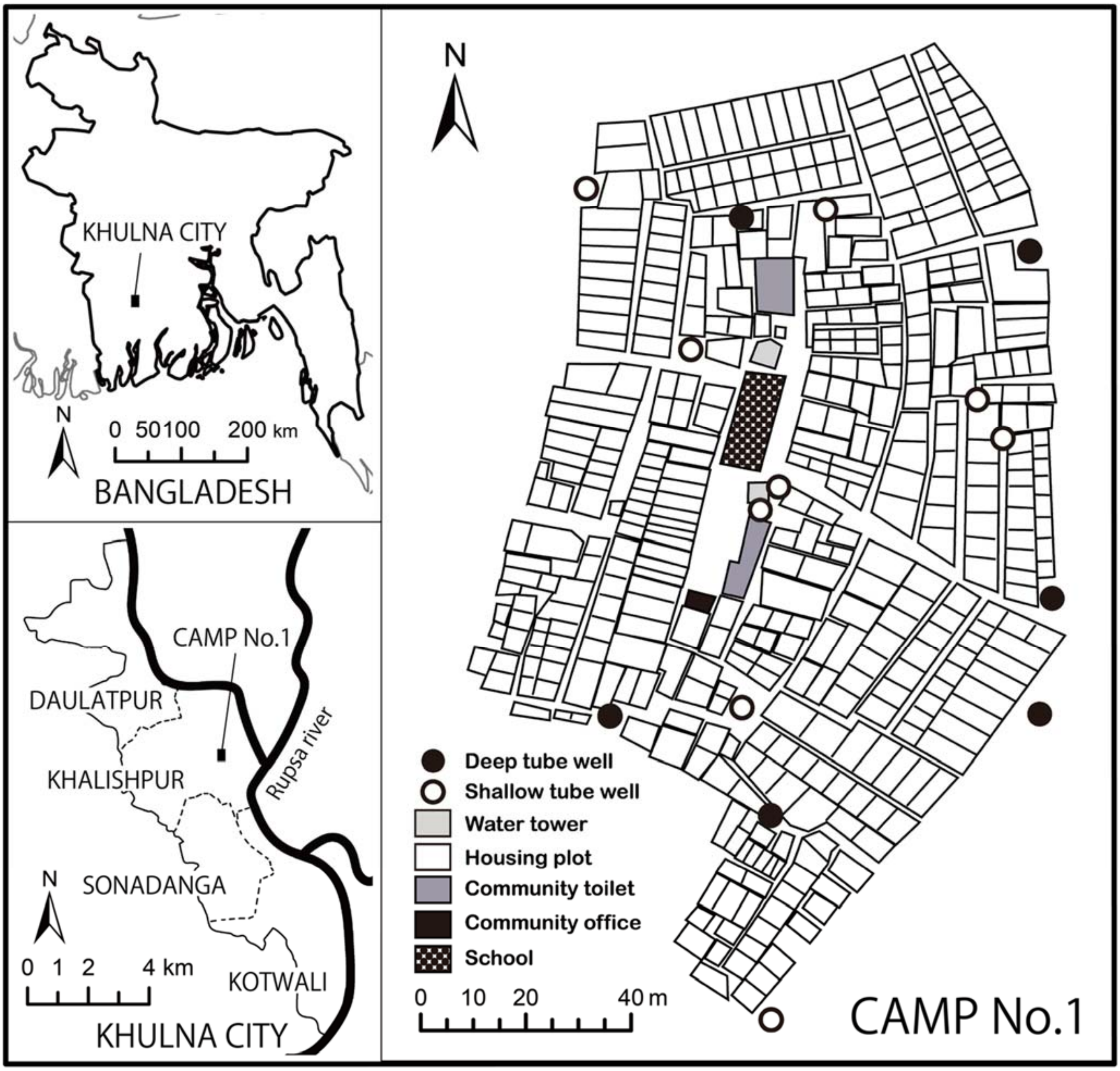

Figure S1 The selected study site. This map was developed on the basis of GIS data from thematicmapping.org and data from a survey conducted in 2013 by Michiya Kodera, Kyoto University.

Figure S2 An example of a drinking water storage pot (photo credit: Shotaro Goto). Water pots are sometimes covered with a dish.