

## Additional file2 Summary of cleaning process and data set exploration (data set 1)

<b>Data set 1</b>	<b>Observations (%)</b>	<b>Action</b>
<b>A</b> <i>Cleaning process 1</i> <i>Select the study period</i>	<i>N = 3187</i>	
Year 2012	48 (1.5)	removed
<b>B</b> <i>Cleaning process 2</i> <i>Check multiple entries</i>	<i>N = 3139</i>	<i>saved</i>
“Equivocal” and “negative” <i>Test Results</i>	532 (16.9)	removed
Double entry of individuals	30 (0.9)	removed
<b>C</b> <i>Cleaning process 3</i> <i>Information about the data set</i>	<i>N = 2576</i>	<i>saved</i>
Epi-linked cases	60 (1.9)	kept
Missing <i>Age</i>	6 (0.2)	kept
Missing <i>Onset Date</i>	0 (-)	-
”Indeterminate”, ”not stated/unknown” <i>Gender</i>	18 (0.7)	kept
Missing <i>Serogroup code</i>	483 (18.8)	kept
<i>Country of Source</i> “not stated” and ”Inadequately described”	481 (18.7)	kept
Missing <i>locality name</i>	0 (-)	-
Misspelling <i>Street Name</i>	107 (4.1)	corrected
<i>Street Number</i> in the wrong cell	5 (0.2)	corrected
Missing <i>Street Name</i>	258 (10.0)	kept
Missing <i>Street Number</i>	309 (11.9)	kept
<b>D</b> <i>Cleaning process 4</i> <i>Preparation for Time series data set for locally –acquired cases</i>	<i>N = 2576</i>	<i>saved</i>
Locally-acquired cases	2418 (93.9)	kept
CCD code not attributed	306 (11.9)	kept
SLA name not stated or ‘Overseas - other’	132 (5.1)	removed
”Indeterminate” <i>Age</i>	5 (0.2)	removed
”Indeterminate” <i>Gender</i>	19 (0.7)	removed
<b>E</b> <i>Cleaning process 5</i> <i>Develop the time-series dataset by :</i>	<i>N= 2262</i>	
SLA	43	
Age-group	17	
Gender	2	
Year	17	
Month	12	
<b>Total time-series data set</b>	<b>= 298248</b>	saved and analysed