Reviewer's report

Title: A descriptive study of reportable gastrointestinal illnesses in Ontario, Canada, from 2007 to 2009

Version: 2  Date: 9 July 2012

Reviewer: Franz Allerberger

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This submission to BMC Public Health, entitled "A descriptive study of reportable gastrointestinal illnesses in Ontario, Canada, from 2007 to 2009" is a diligently written paper analyzing data from iPHIS, Ontario's central reportable disease surveillance system. The manuscript contains a lengthy Discussion-part, but is clearly written. Only one typing error: page 8 "cyclporiasis" should read cylosporiasis.

Major Compulsory Revisions

The only major comment is concerning the overall proportion of deaths: on page 5 it reads "Similarly with deaths, cases with death dates were classified as deceased ....". It is strongly recommended to change the criterium to "... cases with death dates within 30 days after reporting [or onset of illness, or diagnosis of illness, or...] were classified as deceased ...."; same for page 8 (2nd to the last paragraph): ".....24.3% (n(46) of reported listeriosis cases died" [a population of patients predominatly age < 65 years have a high risk to die during the next years on unrelated causes too]" could read "".....24.3% (n(46) of reported listeriosis cases died within 30 days after reporting [or onset of illness, or diagnosis of illness, or...]."

Minor Essential Revisions

Please explain abbreviation "iPHIS" when first used on page 4. Please do not use the abbreviation VTEC as a synonym for a disease, as VTEC is the abbreviation of a bacterium causing a disease named VTEC-infection (there are other names too, e.g. "infections due to VTEC"). So the first sentence in the paragraph Methods (page 2) should read "... salmonellosis, shigellosis, typhoid fever, infections due to verotoxin-producing Escherichia coli (VTEC), and .....". Same in the last sentence of the paragraph Results (page 3), i.e. add "-infections": "... and VTEC-infections showed seasonal patterns with incidence peaking in the summer months." Also line 4 of page 5, line 12 of page 8, 7th to the last line of page 9, lines 14 and 16 of page 10, 2nd and 4th to the last lines of page 11, page 13 6Th to the last line,

Page 4, "Background", second paragraph: The sentence "In Ontario, Canada's most populous province, there are ....." should be rephrased and should provide information on the population number, e.g. "In Ontario, Canada's most populous province with a total population of xy inhabitants, there are .....". 4th to the last line of page 4: Explain abbreviation "iPHIS".
Page 6: delete the comma after "e.g.,". Page 11: 2nd line: comma missing after diseases ("... diseases, with the exception of ...."). Empty space missing before the reference "[5,7]" on page 11 and before "[7]" on page 12. "Taylos et al [10] also found .... " should read "et al. [italic] [dot missing]". Page 13, line 6: "et al" should read "et al. [italic] [dot missing]". On page 14: "Dumoulin et al for the years 2006 to ..." "et al" should read "et al. [italic] [dot missing]".

Acknowledgements: Change "... and entered their information iPHIS, the Ontario public health laboratories ..." to "... and entered their information into iPHIS, the Ontario public health laboratories ...".

In the legend of Figure 2, please delete "verotoxigenic E. coli or VTEC" and add "VTEC-infections" instead.

In Tables 1, 2, 3, 4 and 5 please change "VTEC" to "VTEC-infection"; the same please in the Figures.

In Table 3, please clarify "%Deceased5" (30day mortality?): " ... as deceased within 30 days of ..."

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.