Supplementary Table 1: Study characteristics for 33 studies in a systematic review and meta-analysis determining the prevalence of *Cyclospora cayetanensis* in water

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Study | Number of Samples | Location | Concentration Method | Identification Method | Use of Sequencing Methods |
| Alakpa et al 2003 [1] | 3 | Nigeria | Filtration | Light Microscopy | No |
| Ayed et al 2012 [2] | 3 | Tunisia | Centrifugation or Sedimentation | Nested PCR | Yes |
| Bern et al 1999 [3] | 1 | Guatemala | Centrifugation or Sedimentation and  Flocculation | Fluorescent Microscopy | No |
| Bilung et al 2017 [4] | 4 | Malaysia | Centrifugation or Sedimentation and  Flocculation | Light Microscopy and Fluorescent Microscopy | No |
| Dowd et al 2003 [5] | 1 | Guatemala | Centrifugation and Filtration | Standard PCR | Yes |
| El-Karamany et al 2005 [6] | 5 | Egypt | Centrifugation or Sedimentation and  Flocculation | Fluorescent Microscopy | No |
| Galvan et al 2013 [7] | 3 | Spain | Filtration | Light Microscopy and Nested PCR | Yes |
| Giangaspero et al 2015 [8] | 1 | Italy | Not Reported | RealTimePCR | Yes |
| Giangaspero et al 2015 [9] | 3 | Italy | Centrifugation or Sedimentation and  Flocculation | RealTimePCR | Yes |
| Gupta et al 2004 [10] | 1 | Nepal | Centrifugation or Sedimentation | Light Microscopy | No |
| Hoge et al 1993 [11] | 3 | Nepal | Filtration | Light Microscopy | No |
| Karaman et al 2017 [12] | 1 | Turkey | Centrifugation or Sedimentation | Light Microscopy | No |
| Khalifa et al 2001 [13] | 1 | Egypt | Centrifugation or Sedimentation | Fluorescent Microscopy | No |
| Khalifa et al 2014 [14] | 7 | Egypt | Centrifugation or Sedimentation and  Flocculation | Light Microscopy | No |
| Kitajima et al 2014 [15] | 4 | United States | Centrifugation or Sedimentation and Filtration | Real Time PCR | Yes |
| Kwakye-Nuako et al 2007 [16] | 1 | Ghana | Centrifugation or Sedimentation and Filtration | Light Microscopy | No |
| Li et al 2012 [17] | 4 | China | Centrifugation or Sedimentation | Nested PCR | Yes |
| Lopez et al 2003 [18] | 3 | Haiti | Filtration and Flocculation | Fluorescent Microscopy and Nested PCR | No |
| Masungo et al 2010 [19] | 1 | Zimbabwae | Centrifugation or Sedimentation | Light Microscopy | No |
| Mtapuri-Zinyowera et al 2014 [20] | 1 | Zimbabwae | Centrifugation or Sedimentation | Light Microscopy | No |
| Munoz-Sanchez et al 2019 [21] | 2 | Colombia | Not Reported | Standard PCR | Yes |
| Tram et al 2008 [22] | 2 | Vietnam | Centrifugation or Sedimentation and Filtration | Light Microscopy and Fluorescent Microscopy | No |
| Onstad et al 2019 [23] | 3 | United States | Centrifugation or Sedimentation and Filtration | Standard PCR | No |
| Rabold et al 1994 [24] | 1 | Nepal | Filtration | Light Microscopy | No |
| Sanchez et al 2018 [25] | 4 | Colombia | Centrifugation or Sedimentation and Filtration | Real Time PCR | Yes |
| Santos et al 2010 [26] | 4 | Brazil | Filtration | Light Microscopy | No |
| Schmitz et al 2018 [27] | 4 | United States | Centrifugation or Sedimentation and Filtration | Real Time PCR | No |
| Sherchan et al 2010 [28] | 4 | Nepal | Centrifugation or Sedimentation | Light Microscopy | No |
| Ssemanda et al 2018 [29] | 5 | Rwanda | Not Reported | Standard Conventional PCR | No |
| Sturbaum et al 1998 [30] | 2 | Peru | Centrifugation or Sedimentation and Filtration | Fluorescent Microscopy and Nested PCR | No |
| Youssef et al 1998 [31] | 3 | Egypt | Centrifugation or Sedimentation | Light Microscopy | No |
| Nsoh et al 2016 [32] | 4 | Cameroon | Centrifugation or Sedimentation | Light Microscopy | No |
| Tetteh-Quarcoo et al 2016 [33] | 3 | Ghana | Centrifugation or Sedimentation | Light Microscopy | No |

Supplementary Table 2: Results of individual studies of 92 prevalence estimates from 33 studies in a systematic review and meta-analysis examining the prevalence of *Cyclospora cayetanensis* in water

|  |  |  |  |
| --- | --- | --- | --- |
| Study | Type of Water Examined | Prevalence | Confidence Interval |
| Alakpa et al 2003 [1] | Pure “sachet” water | 0.00 | [0.0000; 0.1194] |
|  | Irrigation water from well | 0.067 | [0.00; 0.32] |
|  | Tap water | 0.00 | [0.00; 0.41] |
| Ayed et al 2012 [2] | Raw wastewater | 0.01 | [0.00; 0.05] |
|  | Treated wastewater | 0.00 | [0.00; 0.03] |
|  | Sludge | 0.00 | [0.00; 0.26] |
| Bern et al 1999 [3] | River | 0.07 | [0.00; 0.22] |
| Bilung et al 2017 [4] | Raw drinking water treatment plant | 0.17 | [0.02; 0.48] |
|  | Raw drinking water treatment plant | 0.00 | [0.00; 0.26] |
|  | Lake | 0.33 | [0.04; 0.78] |
|  | River | 0.00 | [0.00; 0.46] |
| Dowd et al 2003 [5] | Community drinking water | 0.25 | [0.05; 0.57] |
| El-Karamany et al 2005 [6] | Drains | 1.00 | [0.03; 1.00] |
|  | irrigation canals  shallow underground water | 1.00 | [0.03; 1.00] |
|  | Shallow underground water | 1.00 | [0.03; 1.00] |
|  | finishshed pipe water | 1.00 | [0.03; 1.00] |
|  | deep underground water | 0.00 | [0.00; 0.98] |
| Galvan et al 2013 [7] | drinking water treatment plan | 0.25 | [0.07; 0.52] |
|  | waste water treatment plant | 0.54 | [0.34; 0.72] |
|  | river basins | 0.08 | [0.00; 0.38] |
| Giangaspero et al 2015 [8] | toilet on trains | 0.30 | [0.07; 0.65] |
| Giangaspero et al 2015 [9] | well water | 0.06 | [0.00; 0.30] |
|  | treated irrigation water | 0.21 | [0.14; 0.31] |
|  | drinking water | 0.00 | [0.00; 0.71] |
| Gupta et al 2004 [10] | River | 0.00 | [0.00; 0.34] |
| Hoge et al 1993 [11] | Tap water | 0.05 | [0.00; 0.23] |
|  | water storage tanks | 0.00 | [0.00; 0.15] |
|  | drinking water | 0.00 | [0.00; 0.15] |
| Karaman et al 2017 [12] | River | 0.06 | [0.03; 0.12] |
| Khalifa et al 200 [13] | household water tanks | 0.09 | [0.04; 0.16] |
| Khalifa et al 2014 [14] | River | 0.06 | [0.01; 0.17] |
|  | Waterworks | 0.06 | [0.01; 0.17] |
|  | Tap water | 0.00 | [0.00; 0.07] |
|  | Water pumps | 0.02 | [0.00; 0.11] |
|  | Water tanks | 0.08 | [0.02; 0.20] |
|  | Pond | 0.10 | [0.03; 0.23] |
|  | Canal | 0.08 | [0.02; 0.20] |
| Kitajima et al 2014 [15] | 1- Treatment Plant (untreated water) | 0.25 | [0.05; 0.57] |
|  | 1- Treatment Plant (treated water) | 0.08 | [0.00; 0.38] |
|  | 2- Treatment Plant (untreated water) | 0.25 | [0.05; 0.57] |
|  | 2- Treatment Plant (treated water) | 0.17 | [0.02; 0.48] |
| Kwakye-Nuako et al 2007 [16] | Drinking Water | 0.59 | [0.39; 0.78] |
| Li et al 2012 [17] | 1- Wastewater treatment plant | 0.00 | [0.00; 0.04] |
|  | 2- Wastewater treatment plant | 0.06 | [0.02; 0.13] |
|  | 3- Wastewater treatment plant | 0.06 | [0.02; 0.12] |
|  | 4- Wastewater treatment plant | 0.00 | [0.00; 0.04] |
| Lopez et al 2003 [18] | 1 - Well | 0.11 | [0.00; 0.48] |
|  | 2 - Well | 0.00 | [0.00; 0.19] |
|  | 3 - Well | 0.00 | [0.00; 0.11] |
| Masungo et al 2010 [19] | Tap water | 0.00 | [0.00; 0.46] |
| Mtapuri--Zinyowera et al 2014 [20] | Wells, tap water, and boreholes | 0.10 | [0.02; 0.27] |
| Munoz-Sanchez et al 2019 [21] | Boiled water | 0.00 | [0.00; 0.12] |
|  | Tap water | 0.00 | [0.00; 0.31] |
| Tram et al 2008 [22] | Tap water | 0.13 | [0.05; 0.25] |
|  | irrigation water | 0.13 | [0.09; 0.26] |
| Onstad et al 2019 [23] | 1- River | 0.25 | [0.01; 0.81] |
|  | 2- River | 0.00 | [0.00; 0.71] |
|  | 3- River | 0.00 | [0.00; 0.60] |
| Rabold et al 1994 (24) | Water storage tanks | 1.00 | [0.03; 1.00] |
| Sanchez et al 2018 [25] | 1- Drinking water treatment plant | 0.00 | [0.00; 0.15] |
|  | 2- Drinking water treatment plant | 0.00 | [0.00; 0.15] |
|  | 3- Drinking water treatment plant | 0.00 | [0.00; 0.15] |
|  | 4- Drinking water treatment plant | 0.00 | [0.00; 0.08] |
| Santos et al 2010 [26] | 1- River | 0.00 | [0.00; 0.14] |
|  | 2- River | 0.00 | [0.00; 0.26] |
|  | 1- Lake | 0.00 | [0.00; 0.26] |
|  | 2- Lake | 0.00 | [0.00; 0.26] |
| Schmitz et al 2018 [27] | 1- Treatment Plant (untreated water) | 0.00 | [0.00; 0.26] |
|  | 1- Treatment Plant (treated water) | 0.00 | [0.00; 0.10] |
|  | 2- Treatment Plant (untreated water) | 0.00 | [0.00; 0.26] |
|  | 1- Treatment Plant (treated water) | 0.00 | [0.00; 0.06] |
| Sherchan et al 2010 [28] | Tap water | 0.00 | [0.00; 0.10] |
|  | Ponds | 0.08 | [0.00; 0.38] |
|  | Well | 0.00 | [0.00; 0.11] |
|  | Canal | 0.25 | [0.03; 0.65] |
| Ssemanda et al 2018 [29] | River | 0.17 | [0.00; 0.64] |
|  | Marshland | 0.17 | [0.00; 0.64] |
|  | Lake run-off | 0.67 | [0.22; 0.96] |
|  | Lakes | 0.67 | [0.22; 0.96] |
|  | Ground water | 0.33 | [0.04; 0.78] |
| Sturbaum et al 1998 [30] | Lagoon | 1.00 | [0.29; 1.00] |
|  | Wastewater | 0.50 | [0.16; 0.84] |
| Youssef et al 1998 [31] | Water tank | 0.08 | [0.00; 0.38] |
|  | Canal | 0.00 | [0.00; 0.46] |
|  | Swimming pools | 0.00 | [0.00; 0.60] |
| Nsoh et al 2016 [32] | Borehole | 0.40 | [0.19; 0.64] |
|  | Springs | 0.00 | [0.00; 0.41] |
|  | Tap water | 0.18 | [0.11; 0.25] |
|  | Well water | 0.13 | [0.00; 0.53] |
| Tetteh-Quarcoo et al 2016 [33] | School water | 0.00 | [0.00; 0.19] |
|  | Water before hand washing | 0.11 | [0.01; 0.35] |
|  | Water after hand washing | 0.11 | [0.01; 0.35] |

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