**Supplementary Table 2:** P values for *S. japonicum* prevalence based on real-time PCR (qPCR) results

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Sex** |  | **Male** |  | **p <0.05** | | |  |  | | |  | |  | |  | |  |
|  | **Female** | 0.74 |  |  |  |  | | |  |  | |  | |  | |
|  | **Province** |  | **Hunan** |  |  |  |  | | |  |  | |  | |  | |
|  | **Jiangxi** | <0.0001 |  |  |  |  | | |  |  | |  | |  | |
|  | **Jiangxi** | **Villages** | Xinhua | Dingshan | Caohui | Dongfang | Huangjia | | | Fuqian | Biaoen | | Huanggin | |  | |
|  | Xinhua | na | na | na | na | na | | | na | na | | na | |  | |
|  | Dingshan | 0.9997 | na | na | na | na | | | na | na | | na | |  | |
|  | Caohui | 0.599 | 0.9997 | na | na | na | | | na | na | | na | |  | |
|  | Dongfang | 0.7561 | 0.9997 | 0.3505 | na | na | | | na | na | | na | |  | |
|  | Huangjia | 0.8705 | 0.9997 | 0.432 | 0.8489 | na | | | na | na | | na | |  | |
|  | Fuqian | 0.818 | 0.9997 | 0.7361 | 0.5375 | 0.6498 | | | na | na | | na | |  | |
|  | Biaoen | 0.353 | 0.9997 | 0.1135 | 0.4215 | 0.3122 | | | 0.1854 | na | | na | |  | |
|  | Huanggin | 0.3688 | 0.9997 | 0.6684 | 0.1962 | 0.244 | | | 0.4539 | 0.064 | | na | |  | |
|  | **Hunan** | **Villages** | Longwang | Xiangjiang | Zhangshu | Changjiang | Ganzhou | | | Xincheng | Dongtinghong | | Xinggang | |  | |
|  | Longwang | na | na | na | na | na | | | na | na | | na | |  | |
|  | Xiangjiang | 0.708 | na | na | na | na | | | na | na | | na | |  | |
|  | Zhangshu | 0.0004 | 0.0019 | na | na | na | | | na | na | | na | |  | |
|  | Changjiang | <0.0001 | <0.0001 | 0.077 | na | na | | | na | na | | na | |  | |
|  | Ganzhou | 0.0002 | 0.0011 | 0.9734 | 0.0073 | na | | | na | na | | na | |  | |
|  | Xincheng | 0.0029 | 0.0115 | 0.517 | 0.0016 | 0.4807 | | | na | na | | na | |  | |
|  | Dongtinghong | <0.0001 | <0.0001 | 0.0327 | 0.5974 | 0.0315 | | | 0.008 | na | | na | |  | |
|  | Xinggang | <0.0001 | <0.0001 | 0.0039 | 0.7585 | 0.0037 | | | 0.0008 | 0.4105 | | na | |  | |
|  |  |  | <10 | 10 - 20 | 20 - 40 | 40 - 60 | >60 | | |  |  | |  | |  | |
|  | **Age group** | <10 | na | na | na | na | na | | |  |  | |  | |  | |
|  | 10 - 20 | 0.1198 | na | na | na | na | | |  |  | |  | |  | |
|  | 20 - 40 | 0.3323 | 0.261 | na | na | na | | |  |  | |  | |  | |
|  | 40 - 60 | 0.2637 | 0.1633 | 0.7181 | na | na | | |  |  | |  | |  | |
|  | >60 | 0.1018 | 0.5266 | 0.7965 | 0.4217 | na | | |  |  | |  | |  | |
|  |  |  | Illiterate | Primary school | Middle-high school | College |  | | |  |  | |  | |  | |
|  | **Education** | Illiterate | na | na | na | na |  | | |  |  | |  | |  | |
|  | Primary school | 0.507 | na | na | na |  | | |  |  | |  | |  | |
|  | Middle-high school | 0.914 | 0.3496 | na | na |  | | |  |  | |  | |  | |
|  | College | 0.4536 | 0.3496 | 0.3259 | na |  | | |  |  | |  | |  | |
|  |  |  | Farmer/fisher | Business/teacher | Student/child | Unemployed | Other | | |  |  | |  | |  | |
|  | **Occupation 2** | Farmer/fisher | na | na | na | na | na | | |  |  | |  | |  | |
|  | Business/teacher | 0.9384 | na | na | na | na | | |  | | | | | | |
|  | Student/child | 0.1032 | 0.5051 | na | na | na | | |
|  | Unemployed | 0.4197 | 0.4823 | 0.7325 | na | na | | |
|  | Other | 0.9993 | 0.9993 | 0.9993 | 0.9993 | na | | |
|  |  |  | Home latrine | Public latrine | Field | Marsh or lake | Other | | | Unknown |  | |  | |  | |
|  | **Defecate 2** | Home latrine | na | na | na | na | na | | | na |  | |  | |  | |
|  | Public latrine | <0.0001 | na | na | na | na | | | na |  | |  | |  | |
|  | Field | 0.9998 | 0.9998 | na | na | na | | | na |  | |  | |  | |
|  | Marsh or lake | <0.0001 | 0.0476 | 0.9998 | na | na | | | na |  | |  | |  | |
|  | Other | 0.9996 | 0.9996 | 1 | 0.9996 | na | | | na |  | |  | |  | |
|  | Unknown | 0.0102 | - | 0.9998 | 0.0004 | 0.9996 | | | na |  | |  | |  | |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  | | |  |  | |  | |  | |
|  | **Diarrhoea** | No | na | na | na | na |  | | |  |  | |  | |  | |
|  | 1-5 episodes/fortnight | 0.2407 | na | na | na |  | | |  |  | |  | |  | |
|  | >5 episodes/fortnight | 0.4544 | 0.8315 | na | na |  | | |  |  | |  | |  | |
|  | Don't know | 0.5232 | 0.2114 | 0.4216 | na |  | | |  |  | |  | |  | |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  | | |  |  | |  | |  | |
|  | **Weakness** | No | na | na | na | na |  | | |  |  | |  | |  | |
|  | 1-5 episodes/fortnight | 0.0347 | na | na | na |  | | |  |  | |  | |  | |
|  | >5 episodes/fortnight | <0.0001 | <0.0001 | na | na |  | | |  |  | |  | |  | |
|  | Don't know | 0.2552 | 0.0294 | 0.0603 | na |  | | |  |  | |  | |  | |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  | | |  |  | |  | |  | |
|  | **Fever** | No | na | na | na | na |  | | |  |  | |  | |  | |
|  | 1-5 episodes/fortnight | | na | na | na |  | | |  |  | |  | |  | |
|  | >5 episodes/fortnight | |  | na | na |  | | |  |  | |  | |  | |
|  | Don't know |  |  |  | na |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know | |  | | |  |  | |  | |  | |
|  | **HepB** | Yes | na | na | na |  |  | | |  |  | |  | |  | |
|  | No | 0.0347 | na | na |  |  | | |  |  | |  | |  | |
|  | Don't know | 0.0029 | 0.0689 | na |  |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know |  |  | | |  |  | |  | |  | |
|  | **Ever had schistosomiasis** | Yes | na | na | na |  |  | | |  |  | |  | |  | |
|  | No | 0.0849 | na | na |  |  | | |  |  | |  | |  | |
|  | Don't know | - | - | na |  |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know |  |  | | |  |  | |  | |  | |
|  | **Had advanced schistosomiasis** | Yes | na | na | na |  |  | | |  |  | |  | |  | |
|  | No | 0.7299 | na | na |  |  | | |  |  | |  | |  | |
|  | Don't know | <0.0001 | - | na |  |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know |  |  | | |  |  | |  | |  | |
|  | **Had acute schistosomiasis** | Yes | na | na | na |  |  | | |  |  | |  | |  | |
|  | No | - | na | na |  |  | | |  |  | |  | |  | |
|  | Don't know | - | - | na |  |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know |  |  | | |  |  | |  | |  | |
|  | **Treated for schistosomiasis last 2 years** | Yes | na | na | na |  |  | | |  |  | |  | |  | |
|  | No | 0.3745 | na | na |  |  | | |  |  | |  | |  | |
|  | Don't know | <0.0001 | - | na |  |  | | |  |  | |  | |  | |
|  |  |  | <5 | 5-10 | >10 <20 | >20 | 0 | | | Unknown |  | |  | |  | |
|  | **Total number of previous Schistosomiasis treatments** | <5 | na | na | na | na | na | | | na |  | |  | |  | |
|  | 5-10 | 0.5077 | na | na | na | na | | | na |  | |  | |  | |
|  | >10 <20 | 0.5697 | 0.8647 | na | na | na | | | na |  | |  | |  | |
|  | >20 | 0.0027 | 0.0023 | 0.0027 | na | na | | | na |  | |  | |  | |
|  | 0 | 0.5596 | 0.9927 | 0.9354 | 0.0029 | na | | | na |  | |  | |  | |
|  | Unknown | 0.0803 | 0.0502 | 0.0565 | 0.0007 | 0.0498 | | | na |  | |  | |  | |
|  |  |  | <5 | 5-10 | 10-20 | >20 |  | | |  |  | |  | |  | |
|  | **Years worked in this village** | <5 | na | na | na | na |  | | |  |  | |  | |  | |
|  | 5-10 | 0.9996 | na | na | na |  | | |  |  | |  | |  | |
|  | 10-20 | 0.9996 | 0.8961 | na | na |  | | |  |  | |  | |  | |
|  | >20 | 0.9996 | 0.6821 | 0.6877 | na |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know | No answer |  | | |  |  | |  | |  | |
|  | **Live and work for more than 6 mths/yr in this village** | Yes | na | na | na | na |  | | |  |  | |  | |  | |
|  | No | 0.2582 | na | na | na |  | | |  |  | |  | |  | |
|  | Don't know | <0.0001 | - | na | na |  | | |  |  | |  | |  | |
|  | No answer | - | - | - | na |  | | |  |  | |  | |  | |
|  |  |  | Yes | No | Don't know | No answer |  | | |  |  | |  | |  | |
|  | **Have you had water contact last 12 mths** | Yes | na | na | na | na |  | | |  |  | |  | |  | |
|  | No | 0.0051 | na | na | na |  | | |  |  | |  | |  | |
|  | Don't know | <0.0001 | - | na | na |  | | |  |  | |  | |  | |
|  | No answer | - | - | - | na |  | | |  |  | |  | |  | |
| **Spring water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  | | |  |  | |  | |  | |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  | | |  |  | |  | |  | |
| Between weekly and monthly | 0.3954 | na | na | na |  | | |  |  | |  | |  | |
| 1 per mth | 0.5253 | 0.5730 | na | na |  | | |  |  | |  | |  | |
| No response | - | - | - | na |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Fishing** | Checked | 0.3862 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Herding bovines** | Checked | 0.3239 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Farming/Cutting grass** | Checked | 0.0075 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **washing clothes** | Checked | 0.5280 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Swimming or playing** | Checked | 0.9135 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Wading/Washing hands** | Checked | 0.4677 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Other** | Checked | 0.0188 |  |  |  |  | | |  |  | |  | |  | |
| **Summer water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  | | |  |  | |  | |  | |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  | | |  |  | |  | |  | |
| Between weekly and monthly | 0.1191 | na | na | na |  | | |  |  | |  | |  | |
| 1 per mth | 0.9027 | 0.1745 | na | na |  | | |  |  | |  | |  | |
| No response | - | - | - | na |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Fishing** | Checked | 0.3862 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Herding bovines** | Checked | 0.3239 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Farming/Cutting grass** | Checked | 0.0075 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **washing clothes** | Checked | 0.528 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Swimming or playing** | Checked | 0.9135 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Wading/Washing hands** | Checked | 0.4677 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Other** | Checked | 0.0188 |  |  |  |  | | |  |  | |  | |  | |
| **Autumn water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  | | |  |  | |  | |  | |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  | | |  |  | |  | |  | |
| Between weekly and monthly | 0.4995 | na | na | na |  | | |  |  | |  | |  | |
| 1 per mth | 0.5058 | 0.8227 | na | na |  | | |  |  | |  | |  | |
| No response | - | - | - | na |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Fishing** | Checked | 0.0066 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Herding bovines** | Checked | 0.3457 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Farming/Cutting grass** | Checked | 0.2104 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **washing clothes** | Checked | 0.9045 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Swimming or playing** | Checked | 0.1717 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Wading/Washing hands** | Checked | 0.2895 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Other** | Checked | - |  |  |  |  | | |  |  | |  | |  | |
| **Water contact - seasons combined** |  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Fishing** | Checked | 0.2623 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Herding bovines** | Checked | 0.297 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Farming/Cutting grass** | Checked | 0.0956 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **washing clothes** | Checked | 0.3921 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Swimming or playing** | Checked | 0.9025 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Wading/Washing hands** | Checked | 0.6469 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Other** | Checked | 0.0145 |  |  |  |  | | |  |  | |  | |  | |
|  |  | Unchecked |  |  |  |  | | |  |  | |  | |  | |
| **Any WC** | Checked | 0.2857 |  |  |  |  | | |  |  | |  | |  | |