

Figure S1. Prevalence, intensity and recent history of S. haematobium infection among sampled communities.

Table S1. Knowledge of urinary schistosomiasis with respect to age, sex, father's occupation, mother's occupation, father's education, mother's education, water contact activities and main source of water supply.

Crosstab

|  |  | main source of water supply |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tap | well | river | others |  |
| prevention stop going of infection to river | Count | 14 | 45 | 20 | 1 | 80 |
|  | Expected Count | 9.2 | 39.9 | 30.6 | . 4 | 80.0 |
|  | \% within prevention of infection | 17.5\% | 56.2\% | 25.0\% | 1.2\% | 100.0\% |
|  | \% within main source of water supply | 19.7\% | 14.6\% | 8.4\% | 33.3\% | 12.9\% |
|  | \% of Total | 2.3\% | 7.3\% | 3.2\% | . $2 \%$ | 12.9\% |
| eating <br> good food | Count | 18 | 101 | 69 | 0 | 188 |
|  | Expected Count | 21.5 | 93.7 | 71.9 | . 9 | 188.0 |
|  | \% within prevention of infection | 9.6\% | 53.7\% | 36.7\% | . $0 \%$ | 100.0\% |
|  | \% within main source of water supply | 25.4\% | 32.7\% | 29.1\% | .0\% | 30.3\% |
|  | \% of Total | 2.9\% | 16.3\% | 11.1\% | . $0 \%$ | 30.3\% |
| bathing regularly | Count | 5 | 23 | 35 | 0 | 63 |
|  | Expected Count | 7.2 | 31.4 | 24.1 | . 3 | 63.0 |
|  | \% within prevention of infection | 7.9\% | 36.5\% | 55.6\% | . $0 \%$ | 100.0\% |
|  | \% within main source of water supply | 7.0\% | 7.4\% | 14.8\% | . $0 \%$ | 10.2\% |
|  | \% of Total | . $8 \%$ | 3.7\% | 5.6\% | . $0 \%$ | 10.2\% |
| treat drinking water | Count | 16 | 104 | 86 | 0 | 206 |
|  | Expected Count | 23.6 | 102.7 | 78.7 | 1.0 | 206.0 |
|  | \% within prevention of infection | 7.8\% | 50.5\% | 41.7\% | .0\% | 100.0\% |
|  | \% within main source of water supply | 22.5\% | 33.7\% | 36.3\% | . $0 \%$ | 33.2\% |
|  | \% of Total | 2.6\% | 16.8\% | 13.9\% | . $0 \%$ | 33.2\% |
| i don'know Count |  | 18 | 36 | 27 | 2 | 83 |


| Expected Count | 9.5 | 41.4 | 31.7 | .4 | 83.0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| \% within prevention of infection | $21.7 \%$ | $43.4 \%$ | $32.5 \%$ | $2.4 \%$ | $100.0 \%$ |
| \% within main source of water <br> supply | $25.4 \%$ | $11.7 \%$ | $11.4 \%$ | $66.7 \%$ | $13.4 \%$ |
| \% of Total | $2.9 \%$ | $5.8 \%$ | $4.4 \%$ | $.3 \%$ | $13.4 \%$ |
| Countal <br> Expected Count <br> \% within prevention of infection | $11.5 \%$ | $49.8 \%$ | $38.2 \%$ | $.5 \%$ | $100.0 \%$ |
| \% within main source of water <br> supply | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

prevention of infection * main source of water supply

Crosstab

|  |  | contact made with water |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | play or bath | washing | agricultur <br> al work | fishin | no contact |  |
| prevention stop going of infection to river | Count | 23 | 42 | 3 | 1 | 11 | 80 |
|  | Expected <br> Count | 17.7 | 44.4 | 6.6 | 1.7 | 9.7 | 80.0 |
|  | \% within prevention of infection | 28.8\% | 52.5\% | 3.8\% | 1.2\% | 13.8\% | 100.0\% |
|  | \% within contact made with water | 16.8\% | 12.2\% | 5.9\% | 7.7\% | 14.7\% | 12.9\% |
|  | \% of Total | 3.7\% | 6.8\% | . $5 \%$ | . $2 \%$ | 1.8\% | 12.9\% |
| eating good food | Count | 31 | 104 | 19 | 7 | 27 | 188 |
|  | Expected <br> Count | 41.5 | 104.3 | 15.5 | 3.9 | 22.7 | 188.0 |
|  | \% within prevention of infection | 16.5\% | 55.3\% | 10.1\% | 3.7\% | 14.4\% | 100.0\% |
|  | \% within contact made with water | 22.6\% | 30.2\% | 37.3\% | 53.8\% | 36.0\% | 30.3\% |
|  | \% of Total | 5.0\% | 16.8\% | 3.1\% | 1.1\% | 4.4\% | 30.3\% |
| bathing regularly | Count | 11 | 33 | 9 | 4 | 6 | 63 |
|  | Expected <br> Count | 13.9 | 35.0 | 5.2 | 1.3 | 7.6 | 63.0 |
|  | \% within prevention of infection | 17.5\% | 52.4\% | 14.3\% | 6.3\% | 9.5\% | 100.0\% |
|  | \% within contact made with water | 8.0\% | 9.6\% | 17.6\% | 30.8\% | 8.0\% | 10.2\% |
|  | \% of Total | 1.8\% | 5.3\% | 1.5\% | . $6 \%$ | 1.0\% | 10.2\% |
|  | Count | 44 | 125 | 13 | 1 | 23 | 206 |


|  | treat <br> drinking | Expected <br> Count | 45.5 | 114.3 | 16.9 | 4.3 | 24.9 | 206.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within prevention of infection | 21.4\% | 60.7\% | 6.3\% | .5\% | 11.2\% | 100.0\% |
|  |  | \% within contact made with water | 32.1\% | 36.3\% | 25.5\% | 7.7\% | 30.7\% | 33.2\% |
|  |  | \% of Total | 7.1\% | 20.2\% | 2.1\% | .2\% | 3.7\% | 33.2\% |
|  | i don'know | Count | 28 | 40 | 7 | 0 | 8 | 83 |
|  |  | Expected <br> Count | 18.3 | 46.1 | 6.8 | 1.7 | 10.0 | 83.0 |
|  |  | \% within prevention of infection | 33.7\% | 48.2\% | 8.4\% | .0\% | 9.6\% | 100.0\% |
|  |  | \% within contact made with water | 20.4\% | 11.6\% | 13.7\% | .0\% | 10.7\% | 13.4\% |
|  |  | \% of Total | 4.5\% | 6.5\% | 1.1\% | . $0 \%$ | 1.3\% | 13.4\% |
| Total |  | Count | 137 | 344 | 51 | 13 | 75 | 620 |
|  |  | Expected <br> Count | 137.0 | 344.0 | 51.0 | 13.0 | 75.0 | 620.0 |
|  |  | \% within prevention of infection | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 100.0\% | 100.0\% | 100.0\% | $\left\lvert\, \begin{aligned} & 100.0 \\ & \% \end{aligned}\right.$ | 100.0\% | 100.0\% |
|  |  | \% of Total | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $37.678^{\mathrm{a}}$ | 12 | .000 |
| Likelihood Ratio | 35.077 | 12 | .000 |
| Linear-by-Linear Association | 1.086 | 1 | .297 |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(25.0 \%)$ have expected count less than 5 . The minimum expected count is .30 .
prevention of infection * contact made with water

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $32.813^{\mathrm{a}}$ | 32.874 | 16 |
| Likelihood Ratio | 3.662 | 16 | .008 |
| Linear-by-Linear Association | 1 | .008 |  |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(20.0 \%)$ have expected count less than 5 . The minimum expected count is 1.32 .

Crosstab

|  |  |  | mother educati | te primary |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no | Total |
| prevention of infection | stop going to river | Count | 64 | 16 | 80 |
|  |  | Expected Count | 55.7 | 24.3 | 80.0 |
|  |  | \% within prevention of infection | 80.0\% | 20.0\% | 100.0\% |
|  |  | \% within mother complete primary education | 14.8\% | 8.5\% | 12.9\% |
|  |  | \% of Total | 10.3\% | 2.6\% | 12.9\% |
|  | eating good food | Count | 123 | 65 | 188 |
|  |  | Expected Count | 131.0 | 57.0 | 188.0 |
|  |  | \% within prevention of infection | 65.4\% | 34.6\% | 100.0\% |
|  |  | \% within mother complete primary education | 28.5\% | 34.6\% | 30.3\% |
|  |  | \% of Total | 19.8\% | 10.5\% | 30.3\% |
|  | bathing regularly | Count | 34 | 29 | 63 |
|  |  | Expected Count | 43.9 | 19.1 | 63.0 |
|  |  | \% within prevention of infection | 54.0\% | 46.0\% | 100.0\% |
|  |  | \% within mother complete primary education | 7.9\% | 15.4\% | 10.2\% |
|  |  | \% of Total | 5.5\% | 4.7\% | 10.2\% |
|  | treat drinking water | Count | 139 | 67 | 206 |
|  |  | Expected Count | 143.5 | 62.5 | 206.0 |
|  |  | \% within prevention of infection | 67.5\% | 32.5\% | 100.0\% |


|  |  | \% within mother complete primary education | 32.2\% | 35.6\% | 33.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | 22.4\% | 10.8\% | 33.2\% |
|  | i don'know | Count | 72 | 11 | 83 |
|  |  | Expected Count | 57.8 | 25.2 | 83.0 |
|  |  | $\%$ within prevention of infection | 86.7\% | 13.3\% | 100.0\% |
|  |  | \% within mother complete primary education | 16.7\% | 5.9\% | 13.4\% |
|  |  | \% of Total | 11.6\% | 1.8\% | 13.4\% |
| Total |  | Count | 432 | 188 | 620 |
|  |  | Expected Count | 432.0 | 188.0 | 620.0 |
|  |  | \% within prevention of infection | 69.7\% | 30.3\% | 100.0\% |
|  |  | \% within mother complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 69.7\% | 30.3\% | 100.0\% |

## prevention of infection * mother complete primary education

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $24.921^{\mathrm{a}}$ | 4 | .000 |
| Likelihood Ratio | 26.586 | 4 | .000 |
| Linear-by-Linear Association | 1.055 | 1 | .304 |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 19.10.

Crosstab

|  |  |  | father complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no |  |
| prevention of infection | stop going to river | Count | 73 | 7 | 80 |
|  |  | Expected Count | 61.5 | 18.5 | 80.0 |
|  |  | \% within prevention of infection | 91.2\% | 8.8\% | 100.0\% |
|  |  | \% within father complete primary education | 15.3\% | 4.9\% | 12.9\% |
|  |  | \% of Total | 11.8\% | 1.1\% | 12.9\% |
|  | eating good food | Count | 140 | 48 | 188 |
|  |  | Expected Count | 144.6 | 43.4 | 188.0 |
|  |  | \% within prevention of infection | 74.5\% | 25.5\% | 100.0\% |
|  |  | \% within father complete primary education | 29.4\% | 33.6\% | 30.3\% |
|  |  | \% of Total | 22.6\% | 7.7\% | 30.3\% |
|  | bathing regularly | Count | 34 | 29 | 63 |
|  |  | Expected Count | 48.5 | 14.5 | 63.0 |
|  |  | \% within prevention of infection | 54.0\% | 46.0\% | 100.0\% |
|  |  | \% within father complete primary education | 7.1\% | 20.3\% | 10.2\% |
|  |  | \% of Total | 5.5\% | 4.7\% | 10.2\% |
|  | treat drinking water | Count | 153 | 53 | 206 |
|  |  | Expected Count | 158.5 | 47.5 | 206.0 |
|  |  | \% within prevention of infection | 74.3\% | 25.7\% | 100.0\% |


|  |  | \% within father complete primary education | 32.1\% | 37.1\% | 33.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | 24.7\% | 8.5\% | 33.2\% |
|  | i don'know | Count | 77 | 6 | 83 |
|  |  | Expected Count | 63.9 | 19.1 | 83.0 |
|  |  | \% within prevention of infection | 92.8\% | 7.2\% | 100.0\% |
|  |  | \% within father complete primary education | 16.1\% | 4.2\% | 13.4\% |
|  |  | \% of Total | 12.4\% | 1.0\% | 13.4\% |
| Total |  | Count | 477 | 143 | 620 |
|  |  | Expected Count | 477.0 | 143.0 | 620.0 |
|  |  | \% within prevention of infection | 76.9\% | 23.1\% | 100.0\% |
|  |  | \% within father complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 76.9\% | 23.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $41.164^{\mathrm{a}}$ | 4 | .000 |
| Likelihood Ratio | 43.647 | 4 | .000 |
| Linear-by-Linear Association | .035 | 1 | .852 |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 14.53 .

Crosstab

|  |  |  | mother's occupation |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | trading | farming | salary earner | unemployed |  |
| prevention of <br> infection | stop going Count to river |  | 52 | 11 | 13 | 4 | 80 |
|  |  | Expected Count | 37.5 | 17.8 | 16.6 | 8.0 | 80.0 |
|  |  | \% within prevention of infection | 65.0\% | 13.8\% | 16.2\% | 5.0\% | 100.0\% |
|  |  | \% within mother's occupation | 17.9\% | 8.0\% | 10.1\% | 6.5\% | 12.9\% |
|  |  | \% of Total | 8.4\% | 1.8\% | 2.1\% | .6\% | 12.9\% |
|  | eating | Count | 83 | 49 | 35 | 21 | 188 |
|  |  | Expected Count | 88.2 | 41.8 | 39.1 | 18.8 | 188.0 |
|  |  | \% within prevention of infection | 44.1\% | 26.1\% | 18.6\% | 11.2\% | 100.0\% |
|  |  | \% within mother's occupation | 28.5\% | 35.5\% | 27.1\% | 33.9\% | 30.3\% |
|  |  | \% of Total | 13.4\% | 7.9\% | 5.6\% | 3.4\% | 30.3\% |
|  | bathing <br> regularly | Count | 22 | 27 | 11 | 3 | 63 |
|  |  | Expected Count | 29.6 | 14.0 | 13.1 | 6.3 | 63.0 |
|  |  | \% within prevention of infection | 34.9\% | 42.9\% | 17.5\% | 4.8\% | 100.0\% |
|  |  | \% within mother's occupation | 7.6\% | 19.6\% | 8.5\% | 4.8\% | 10.2\% |
|  |  | \% of Total | 3.5\% | 4.4\% | 1.8\% | . $5 \%$ | 10.2\% |
|  | treat <br> drinking | Count | 86 | 46 | 44 | 30 | 206 |
|  | water | Expected Count | 96.7 | 45.9 | 42.9 | 20.6 | 206.0 |


|  |  | \% within prevention of infection | 41.7\% | 22.3\% | 21.4\% | 14.6\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within mother's occupation | 29.6\% | 33.3\% | 34.1\% | 48.4\% | 33.2\% |
|  |  | \% of Total | 13.9\% | 7.4\% | 7.1\% | 4.8\% | 33.2\% |
|  | i don't know | Count | 48 | 5 | 26 | 4 | 83 |
|  |  | Expected Count | 39.0 | 18.5 | 17.3 | 8.3 | 83.0 |
|  |  | \% within prevention of infection | 57.8\% | 6.0\% | 31.3\% | 4.8\% | 100.0\% |
|  |  | \% within mother's occupation | 16.5\% | 3.6\% | 20.2\% | 6.5\% | 13.4\% |
|  |  | \% of Total | 7.7\% | .8\% | 4.2\% | .6\% | 13.4\% |
| Total |  | Count | 291 | 138 | 129 | 62 | 620 |
|  |  | Expected Count | 291.0 | 138.0 | 129.0 | 62.0 | 620.0 |
|  |  | \% within prevention of infection | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |
|  |  | \% within mother's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |

Crosstab

|  |  | father's occupation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | fishing | farming | trading | salary earner | wage earner | Total |
| prevention stop going of infection to river | Count | 2 | 29 | 27 | 19 | 3 | 80 |
|  | Expected Count | 1.9 | 33.9 | 20.8 | 17.0 | 6.3 | 80.0 |
|  | \% within prevention of infection | 2.5\% | 36.2\% | 33.8\% | 23.8\% | 3.8\% | 100.0\% |
|  | \% within father's occupation | 13.3\% | 11.0\% | 16.8\% | 14.4\% | 6.1\% | 12.9\% |
|  | \% of Total | .3\% | 4.7\% | 4.4\% | 3.1\% | .5\% | 12.9\% |
|  | Count | 8 | 80 | 41 | 40 | 19 | 188 |
|  | Expected Count | 4.5 | 79.7 | 48.8 | 40.0 | 14.9 | 188.0 |
|  | \% within prevention of infection | 4.3\% | 42.6\% | 21.8\% | 21.3\% | 10.1\% | 100.0\% |
|  | \% within father's occupation | 53.3\% | 30.4\% | 25.5\% | 30.3\% | 38.8\% | 30.3\% |
|  | \% of Total | 1.3\% | 12.9\% | 6.6\% | 6.5\% | 3.1\% | 30.3\% |
| bathing regularly | Count | 3 | 41 | 11 | 5 | 3 | 63 |
|  | Expected Count | 1.5 | 26.7 | 16.4 | 13.4 | 5.0 | 63.0 |
|  | \% within prevention of infection | 4.8\% | 65.1\% | 17.5\% | 7.9\% | 4.8\% | 100.0\% |
|  | \% within father's occupation | 20.0\% | 15.6\% | 6.8\% | 3.8\% | 6.1\% | 10.2\% |
|  | \% of Total | . $5 \%$ | 6.6\% | 1.8\% | .8\% | .5\% | 10.2\% |
| treat drinking water | Count | 2 | 86 | 56 | 44 | 18 | 206 |
|  | Expected Count | 5.0 | 87.4 | 53.5 | 43.9 | 16.3 | 206.0 |
|  | \% within prevention of infection | 1.0\% | 41.7\% | 27.2\% | 21.4\% | 8.7\% | 100.0\% |


|  |  | \% within father's occupation | 13.3\% | 32.7\% | 34.8\% | 33.3\% | 36.7\% | 33.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | . $3 \%$ | 13.9\% | 9.0\% | 7.1\% | 2.9\% | 33.2\% |
|  | i don'know | Count | 0 | 27 | 26 | 24 | 6 | 83 |
|  |  | Expected Count | 2.0 | 35.2 | 21.6 | 17.7 | 6.6 | 83.0 |
|  |  | \% within prevention of infection | . $0 \%$ | 32.5\% | 31.3\% | 28.9\% | 7.2\% | 100.0\% |
|  |  | \% within father's occupation | . $0 \%$ | 10.3\% | 16.1\% | 18.2\% | 12.2\% | 13.4\% |
|  |  | \% of Total | . $0 \%$ | 4.4\% | 4.2\% | 3.9\% | 1.0\% | 13.4\% |
| Total |  | Count | 15 | 263 | 161 | 132 | 49 | 620 |
|  |  | Expected Count | 15.0 | 263.0 | 161.0 | 132.0 | 49.0 | 620.0 |
|  |  | \% within prevention of infection | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |
|  |  | \% within father's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $53.272^{\mathrm{a}}$ | 12 | .000 |
| Likelihood Ratio | 54.949 | 12 | .000 |
| Linear-by-Linear Association | 3.147 | 620 | 1 |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $53.272^{\mathrm{a}}$ | 12 | .000 |
| Likelihood Ratio | 54.949 | 12 | .000 |
| Linear-by-Linear Association | 3.147 | 1 | .076 |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 6.30 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $35.722^{\mathrm{a}}$ | 16 | .003 |
| Likelihood Ratio | 38.562 | 16 | .001 |
| Linear-by-Linear Association | 1.815 | 1 | .178 |
| N of Valid Cases | 620 |  |  |

a. 6 cells $(24.0 \%)$ have expected count less than 5 . The minimum expected count is 1.52 .

## Crosstab



|  | i don'know | Count | 44 | 39 | 83 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Expected Count | 48.5 | 34.5 | 83.0 |
|  |  | $\%$ within prevention of infection | 53.0\% | 47.0\% | 100.0\% |
|  |  | \% within sex | 12.2\% | 15.1\% | 13.4\% |
|  |  | \% of Total | 7.1\% | 6.3\% | 13.4\% |
| Total |  | Count | 362 | 258 | 620 |
|  |  | Expected Count | 362.0 | 258.0 | 620.0 |
|  |  | \% within prevention of infection | 58.4\% | 41.6\% | 100.0\% |
|  |  | \% within sex | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 58.4\% | 41.6\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $2.955^{\mathrm{a}}$ | 4 | .565 |
| Likelihood Ratio | 2.989 | 4 | .560 |
| Linear-by-Linear Association | .772 | 1 | .380 |
| N of Valid Cases | 620 |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 26.22 .

Crosstab

|  |  |  | Age distribution |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | <_4 | 5-9 | 10-14 | 15-19 | >_20 |  |
| prevention of infection | stop going to river | Count | 7 | 6 | 41 | 26 | 0 | 80 |
|  |  | Expected Count | 2.2 | 20.1 | 34.8 | 21.7 | 1.2 | 80.0 |
|  |  | \% within prevention of infection | 8.8\% | 7.5\% | 51.2\% | 32.5\% | . $0 \%$ | 100.0\% |
|  |  | \% within Age distribution | 41.2\% | 3.8\% | 15.2\% | 15.5\% | . $0 \%$ | 12.9\% |
|  |  | \% of Total | 1.1\% | 1.0\% | 6.6\% | 4.2\% | . $0 \%$ | 12.9\% |
|  | eating good food | Count | 4 | 55 | 76 | 52 | 1 | 188 |
|  |  | Expected Count | 5.2 | 47.3 | 81.9 | 50.9 | 2.7 | 188.0 |
|  |  | \% within prevention of infection | 2.1\% | 29.3\% | 40.4\% | 27.7\% | . $5 \%$ | 100.0\% |
|  |  | \% within Age distribution | 23.5\% | 35.3\% | 28.1\% | 31.0\% | 11.1\% | 30.3\% |
|  |  | \% of Total | . $6 \%$ | 8.9\% | 12.3\% | 8.4\% | . $2 \%$ | 30.3\% |
|  | bathing regularly | Count | 2 | 14 | 30 | 15 | 2 | 63 |
|  |  | Expected Count | 1.7 | 15.9 | 27.4 | 17.1 | . 9 | 63.0 |
|  |  | \% within prevention of infection | 3.2\% | 22.2\% | 47.6\% | 23.8\% | 3.2\% | 100.0\% |
|  |  | \% within Age distribution | 11.8\% | 9.0\% | 11.1\% | 8.9\% | 22.2\% | 10.2\% |
|  |  | \% of Total | . $3 \%$ | 2.3\% | 4.8\% | 2.4\% | .3\% | 10.2\% |
|  | treat drinking water | Count | 4 | 65 | 81 | 52 | 4 | 206 |
|  |  | Expected Count | 5.6 | 51.8 | 89.7 | 55.8 | 3.0 | 206.0 |
|  |  | \% within prevention of infection | 1.9\% | 31.6\% | 39.3\% | 25.2\% | 1.9\% | 100.0\% |


|  |  | \% within Age distribution | 23.5\% | 41.7\% | 30.0\% | 31.0\% | 44.4\% | 33.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | .6\% | 10.5\% | 13.1\% | 8.4\% | .6\% | 33.2\% |
|  | i don'know | Count | 0 | 16 | 42 | 23 | 2 | 83 |
|  |  | Expected Count | 2.3 | 20.9 | 36.1 | 22.5 | 1.2 | 83.0 |
|  |  | \% within prevention of infection | 0\% | 19.3\% | 50.6\% | 27.7\% | 2.4\% | 100.0\% |
|  |  | \% within Age distribution | .0\% | 10.3\% | 15.6\% | 13.7\% | 22.2\% | 13.4\% |
|  |  | \% of Total | .0\% | 2.6\% | 6.8\% | 3.7\% | . $3 \%$ | 13.4\% |
| Total |  | Count | 17 | 156 | 270 | 168 | 9 | 620 |
|  |  | Expected Count | 17.0 | 156.0 | 270.0 | 168.0 | 9.0 | 620.0 |
|  |  | $\%$ within prevention of infection | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |
|  |  | \% within Age distribution | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |

Crosstab

|  |  |  | main source of water supply |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | tap | well | river | others |  |
| symtoms of infection | blood in | Count | 17 | 99 | 96 | 1 | 213 |
|  |  | Expected Count | 24.4 | 106.2 | 81.4 | 1.0 | 213.0 |
|  |  | \% within symtoms of infection | 8.0\% | 46.5\% | 45.1\% | . $5 \%$ | 100.0\% |
|  |  | \% within main source of water supply | 23.9\% | 32.0\% | 40.5\% | 33.3\% | 34.4\% |
|  |  | \% of Total | 2.7\% | 16.0\% | 15.5\% | . $2 \%$ | 34.4\% |
|  | stomach pain | Count | 29 | 115 | 87 | 0 | 231 |
|  |  | Expected Count | 26.5 | 115.1 | 88.3 | 1.1 | 231.0 |
|  |  | \% within symtoms of infection | 12.6\% | 49.8\% | 37.7\% | .0\% | 100.0\% |
|  |  | \% within main source of water supply | 40.8\% | 37.2\% | 36.7\% | .0\% | 37.3\% |
|  |  | \% of Total | 4.7\% | 18.5\% | 14.0\% | . $0 \%$ | 37.3\% |
|  | waist pain | Count | 9 | 57 | 23 | 0 | 89 |
|  |  | Expected Count | 10.2 | 44.4 | 34.0 | . 4 | 89.0 |
|  |  | \% within symtoms of infection | 10.1\% | 64.0\% | 25.8\% | .0\% | 100.0\% |
|  |  | \% within main source of water supply | 12.7\% | 18.4\% | 9.7\% | .0\% | 14.4\% |
|  |  | \% of Total | 1.5\% | 9.2\% | 3.7\% | . $0 \%$ | 14.4\% |
|  | blurred | Count | 6 | 9 | 12 | 0 | 27 |
|  |  | Expected Count | 3.1 | 13.5 | 10.3 | . 1 | 27.0 |
|  |  | \% within symtoms of infection | 22.2\% | 33.3\% | 44.4\% | .0\% | 100.0\% |
|  |  | \% within main source of water supply | 8.5\% | 2.9\% | 5.1\% | .0\% | 4.4\% |
|  |  | \% of Total | 1.0\% | 1.5\% | 1.9\% | .0\% | 4.4\% |
|  | i don't know | Count | 10 | 29 | 19 | 2 | 60 |


|  | Expected Count | 6.9 | 29.9 | 22.9 | . 3 | 60.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within symtoms of infection | 16.7\% | 48.3\% | 31.7\% | 3.3\% | 100.0\% |
|  | \% within main source of water supply | 14.1\% | 9.4\% | 8.0\% | 66.7\% | 9.7\% |
|  | \% of Total | 1.6\% | 4.7\% | 3.1\% | .3\% | 9.7\% |
| Total | Count | 71 | 309 | 237 | 3 | 620 |
|  | Expected Count | 71.0 | 309.0 | 237.0 | 3.0 | 620.0 |
|  | \% within symtoms of infection | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |
|  | $\%$ within main source of water supply | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 11.5\% | 49.8\% | 38.2\% | . $5 \%$ | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $38.827^{\mathrm{a}}$ | 16 | .001 |
| Likelihood Ratio | 41.845 | 16 | .000 |
| Linear-by-Linear Association | .052 | 1 | .819 |

a. 8 cells $(32.0 \%)$ have expected count less than 5 . The minimum expected count is .91 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $31.271^{\mathrm{a}}$ | 12 | .002 |
| Likelihood Ratio | 26.932 | 12 | .008 |
| Linear-by-Linear Association | 5.286 | 1 | .021 |
| of Valid Cases | 620 |  |  |

a. 6 cells $(30.0 \%)$ have expected count less than 5 . The minimum expected count is .13 .

|  |  |  | contact made with water |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | play or bath | washing | agricultural work | fishing | no contact |  |
| symtoms of infection | blood in | Count | 40 | 119 | 22 | 7 | 25 | 213 |
|  |  | Expected Count | 47.1 | 118.2 | 17.5 | 4.5 | 25.8 | 213.0 |
|  |  | \% within symtoms of infection | 18.8\% | 55.9\% | 10.3\% | 3.3\% | 11.7\% | 100.0\% |
|  |  | \% within contact made with water | 29.2\% | 34.6\% | 43.1\% | 53.8\% | 33.3\% | 34.4\% |
|  |  | \% of Total | 6.5\% | 19.2\% | 3.5\% | 1.1\% | 4.0\% | 34.4\% |
|  | stomach pain | Count | 48 | 144 | 9 | 5 | 25 | 231 |
|  |  | Expected <br> Count | 51.0 | 128.2 | 19.0 | 4.8 | 27.9 | 231.0 |
|  |  | \% within symtoms of infection | 20.8\% | 62.3\% | 3.9\% | 2.2\% | 10.8\% | 100.0\% |
|  |  | \% within contact made with water | 35.0\% | 41.9\% | 17.6\% | 38.5\% | 33.3\% | 37.3\% |
|  |  | \% of Total | 7.7\% | 23.2\% | 1.5\% | .8\% | 4.0\% | 37.3\% |
|  | waist pain | Count | 20 | 45 | 10 | 1 | 13 | 89 |
|  |  | Expected Count | 19.7 | 49.4 | 7.3 | 1.9 | 10.8 | 89.0 |
|  |  | \% within symtoms of infection | 22.5\% | 50.6\% | 11.2\% | 1.1\% | 14.6\% | 100.0\% |
|  |  | \% within contact made with water | 14.6\% | 13.1\% | 19.6\% | 7.7\% | 17.3\% | 14.4\% |
|  |  | \% of Total | 3.2\% | 7.3\% | 1.6\% | . $2 \%$ | 2.1\% | 14.4\% |
|  |  | Count | 10 | 9 | 5 | 0 | 3 | 27 |


|  | blurred vision | Expected <br> Count | 6.0 | 15.0 | 2.2 | . 6 | 3.3 | 27.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within symtoms of infection | 37.0\% | 33.3\% | 18.5\% | .0\% | 11.1\% | 100.0\% |
|  |  | \% within contact made with water | 7.3\% | 2.6\% | 9.8\% | .0\% | 4.0\% | 4.4\% |
|  |  | \% of Total | 1.6\% | 1.5\% | .8\% | .0\% | .5\% | 4.4\% |
|  | i don't <br> know | Count | 19 | 27 | 5 | 0 | 9 | 60 |
|  |  | Expected Count | 13.3 | 33.3 | 4.9 | 1.3 | 7.3 | 60.0 |
|  |  | \% within symtoms of infection | 31.7\% | 45.0\% | 8.3\% | .0\% | 15.0\% | 100.0\% |
|  |  | \% within contact made with water | 13.9\% | 7.8\% | 9.8\% | .0\% | 12.0\% | 9.7\% |
|  |  | \% of Total | 3.1\% | 4.4\% | .8\% | . $0 \%$ | 1.5\% | 9.7\% |
| Total |  | Count | 137 | 344 | 51 | 13 | 75 | 620 |
|  |  | Expected <br> Count | 137.0 | 344.0 | 51.0 | 13.0 | 75.0 | 620.0 |
|  |  | \% within symtoms of infection | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $28.161^{\mathrm{a}}$ | 16 | .030 |
| Likelihood Ratio | 29.706 | 16 | .020 |
| Linear-by-Linear Association | .379 | 1 | .538 |
| N of Valid Cases | 620 |  |  |

a. 8 cells $(32.0 \%)$ have expected count less than 5 . The minimum expected count is .57 .

Crosstab

|  |  | mother complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | yes | no |  |
| symtoms of infection | Count | 149 | 64 | 213 |
|  | Expected Count | 148.4 | 64.6 | 213.0 |
|  | \% within symtoms of infection | 70.0\% | 30.0\% | 100.0\% |
|  | \% within mother complete primary education | $34.5 \%$ | 34.0\% | 34.4\% |
|  | \% of Total | 24.0\% | 10.3\% | 34.4\% |
|  | Count | 155 | 76 | 231 |
|  | Expected Count | 161.0 | 70.0 | 231.0 |
|  | \% within symtoms of infection | 67.1\% | 32.9\% | 100.0\% |
|  | \% within mother complete primary education | $35.9 \%$ | 40.4\% | 37.3\% |
|  | \% of Total | 25.0\% | 12.3\% | 37.3\% |
|  | Count | 62 | 27 | 89 |
|  | Expected Count | 62.0 | 27.0 | 89.0 |
|  | \% within symtoms of infection | 69.7\% | 30.3\% | 100.0\% |
|  | \% within mother complete primary education | 14.4\% | 14.4\% | 14.4\% |
|  | \% of Total | 10.0\% | 4.4\% | 14.4\% |
|  | Count | 15 | 12 | 27 |
|  | Expected Count | 18.8 | 8.2 | 27.0 |
|  | \% within symtoms of infection | 55.6\% | 44.4\% | 100.0\% |


|  |  | \% within mother complete primary education | 3.5\% | 6.4\% | 4.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | 2.4\% | 1.9\% | 4.4\% |
|  | i don't know | Count | 51 | 9 | 60 |
|  |  | Expected Count | 41.8 | 18.2 | 60.0 |
|  |  | \% within symtoms of infection | 85.0\% | 15.0\% | 100.0\% |
|  |  | \% within mother complete primary education | 11.8\% | 4.8\% | 9.7\% |
|  |  | \% of Total | 8.2\% | 1.5\% | 9.7\% |
| Total |  | Count | 432 | 188 | 620 |
|  |  | Expected Count | 432.0 | 188.0 | 620.0 |
|  |  | \% within symtoms of infection | 69.7\% | 30.3\% | 100.0\% |
|  |  | \% within mother complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 69.7\% | 30.3\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $9.950^{\mathrm{a}}$ | 4 | .041 |
| Likelihood Ratio | 10.711 | 4 | .030 |
| Linear-by-Linear Association | 1.902 | 1 | .168 |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 8.19.

Crosstab

|  |  | father complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | yes | no |  |
| symtoms of infection blood in urine | Count | 163 | 50 | 213 |
|  | Expected Count | 163.9 | 49.1 | 213.0 |
|  | \% within symtoms of infection | 76.5\% | 23.5\% | 100.0\% |
|  | \% within father complete primary education | 34.2\% | 35.0\% | 34.4\% |
|  | \% of Total | 26.3\% | 8.1\% | 34.4\% |
| stomach pain | Count | 171 | 60 | 231 |
|  | Expected Count | 177.7 | 53.3 | 231.0 |
|  | \% within symtoms of infection | 74.0\% | 26.0\% | 100.0\% |
|  | \% within father complete primary education | 35.8\% | 42.0\% | 37.3\% |
|  | \% of Total | 27.6\% | 9.7\% | 37.3\% |
| waist pain | Count | 73 | 16 | 89 |
|  | Expected Count | 68.5 | 20.5 | 89.0 |
|  | \% within symtoms of infection | 82.0\% | 18.0\% | 100.0\% |
|  | \% within father complete primary education | 15.3\% | 11.2\% | 14.4\% |
|  | \% of Total | 11.8\% | 2.6\% | 14.4\% |
| blurred vision | Count | 14 | 13 | 27 |
|  | Expected Count | 20.8 | 6.2 | 27.0 |
|  | \% within symtoms of infection | 51.9\% | 48.1\% | 100.0\% |
|  | \% within father complete primary education | 2.9\% | 9.1\% | 4.4\% |


|  |  | \% of Total | 2.3\% | 2.1\% | 4.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | i don't know | Count | 56 | 4 | 60 |
|  |  | Expected Count | 46.2 | 13.8 | 60.0 |
|  |  | \% within symtoms of infection | 93.3\% | 6.7\% | 100.0\% |
|  |  | \% within father complete primary education | 11.7\% | 2.8\% | 9.7\% |
|  |  | \% of Total | 9.0\% | . $6 \%$ | 9.7\% |
| Total |  | Count | 477 | 143 | 620 |
|  |  | Expected Count | 477.0 | 143.0 | 620.0 |
|  |  | \% within symtoms of infection | 76.9\% | 23.1\% | 100.0\% |
|  |  | \% within father complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 76.9\% | 23.1\% | 100.0\% |

symtoms of infection * father complete primary education

Crosstab

|  |  |  | mother's occupation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | trading | farming | salary <br> earner | unemploye d | Total |
| symtoms of infection | blood in urine | Count | 95 | 58 | 34 | 26 | 213 |
|  |  | Expected Count | 100.0 | 47.4 | 44.3 | 21.3 | 213.0 |
|  |  | \% within symtoms of infection | 44.6\% | 27.2\% | 16.0\% | 12.2\% | 100.0\% |
|  |  | \% within mother's occupation | 32.6\% | 42.0\% | 26.4\% | 41.9\% | 34.4\% |
|  |  | \% of Total | 15.3\% | 9.4\% | 5.5\% | 4.2\% | 34.4\% |
|  | stomach pain | Count | 115 | 55 | 42 | 19 | 231 |
|  |  | Expected Count | 108.4 | 51.4 | 48.1 | 23.1 | 231.0 |
|  |  | \% within symtoms of infection | 49.8\% | 23.8\% | 18.2\% | 8.2\% | 100.0\% |
|  |  | \% within mother's occupation | 39.5\% | 39.9\% | 32.6\% | 30.6\% | 37.3\% |
|  |  | \% of Total | 18.5\% | 8.9\% | 6.8\% | 3.1\% | 37.3\% |
|  | waist pain | Count | 36 | 15 | 27 | 11 | 89 |
|  |  | Expected Count | 41.8 | 19.8 | 18.5 | 8.9 | 89.0 |
|  |  | \% within symtoms of infection | 40.4\% | 16.9\% | 30.3\% | 12.4\% | 100.0\% |
|  |  | \% within mother's occupation | 12.4\% | 10.9\% | 20.9\% | 17.7\% | 14.4\% |
|  |  | \% of Total | 5.8\% | 2.4\% | 4.4\% | 1.8\% | 14.4\% |
|  | blurred vision | Count | 11 | 7 | 7 | 2 | 27 |
|  |  | Expected Count | 12.7 | 6.0 | 5.6 | 2.7 | 27.0 |
|  |  | \% within symtoms of infection | 40.7\% | 25.9\% | 25.9\% | 7.4\% | 100.0\% |
|  |  | \% within mother's occupation | 3.8\% | 5.1\% | 5.4\% | 3.2\% | 4.4\% |


|  | \% of Total | 1.8\% | 1.1\% | 1.1\% | . $3 \%$ | 4.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | i don't know Count | 34 | 3 | 19 | 4 | 60 |
|  | Expected Count | 28.2 | 13.4 | 12.5 | 6.0 | 60.0 |
|  | \% within symtoms of infection | 56.7\% | 5.0\% | 31.7\% | 6.7\% | 100.0\% |
|  | \% within mother's occupation | 11.7\% | 2.2\% | 14.7\% | 6.5\% | 9.7\% |
|  | \% of Total | 5.5\% | . $5 \%$ | 3.1\% | . $6 \%$ | 9.7\% |
| Total | Count | 291 | 138 | 129 | 62 | 620 |
|  | Expected Count | 291.0 | 138.0 | 129.0 | 62.0 | 620.0 |
|  | \% within symtoms of infection | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |
|  | \% within mother's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $21.085^{\mathrm{a}}$ | 4 | .000 |
| Likelihood Ratio | 22.264 | 4 | .000 |
| Linear-by-Linear Association | 2.762 | 1 | .097 |
| N of Valid Cases | 620 |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 6.23 .

|  |  |  | father's occupation |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | fishing | farming | trading | salary earner | wage earner |  |
| symtoms of infection | blood in urine | Count | 11 | 92 | 55 | 42 | 13 | 213 |
|  |  | Expected Count | 5.2 | 90.4 | 55.3 | 45.3 | 16.8 | 213.0 |
|  |  | \% within symtoms of infection | 5.2\% | 43.2\% | 25.8\% | 19.7\% | 6.1\% | 100.0\% |
|  |  | \% within father's occupation | 73.3\% | 35.0\% | 34.2\% | 31.8\% | 26.5\% | 34.4\% |
|  |  | \% of Total | 1.8\% | 14.8\% | 8.9\% | 6.8\% | 2.1\% | 34.4\% |
|  | stomach | Count | 4 | 104 | 62 | 44 | 17 | 231 |
|  |  | Expected Count | 5.6 | 98.0 | 60.0 | 49.2 | 18.3 | 231.0 |
|  |  | \% within symtoms of infection | 1.7\% | 45.0\% | 26.8\% | 19.0\% | 7.4\% | 100.0\% |
|  |  | \% within <br> father's <br> occupation | 26.7\% | 39.5\% | 38.5\% | 33.3\% | 34.7\% | 37.3\% |
|  |  | \% of Total | .6\% | 16.8\% | 10.0\% | 7.1\% | 2.7\% | 37.3\% |
|  | waist pain | Count | 0 | 36 | 19 | 25 | 9 | 89 |
|  |  | Expected Count | 2.2 | 37.8 | 23.1 | 18.9 | 7.0 | 89.0 |
|  |  | \% within <br> symtoms of infection | .0\% | 40.4\% | 21.3\% | 28.1\% | 10.1\% | 100.0\% |
|  |  | \% within father's occupation | .0\% | 13.7\% | 11.8\% | 18.9\% | 18.4\% | 14.4\% |
|  |  | \% of Total | . $0 \%$ | 5.8\% | 3.1\% | 4.0\% | 1.5\% | 14.4\% |
|  | blurred vision | Count | 0 | 14 | 8 | 4 | 1 | 27 |
|  |  | Expected Count | . 7 | 11.5 | 7.0 | 5.7 | 2.1 | 27.0 |


|  |  | \% within symtoms of infection | . $0 \%$ | 51.9\% | 29.6\% | 14.8\% | 3.7\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within father's occupation | . $0 \%$ | 5.3\% | 5.0\% | 3.0\% | 2.0\% | 4.4\% |
|  |  | \% of Total | . $0 \%$ | 2.3\% | 1.3\% | .6\% | . $2 \%$ | 4.4\% |
|  | i don't | Count | 0 | 17 | 17 | 17 | 9 | 60 |
|  |  | Expected Count | 1.5 | 25.5 | 15.6 | 12.8 | 4.7 | 60.0 |
|  |  | \% within symtoms of infection | .0\% | 28.3\% | 28.3\% | 28.3\% | 15.0\% | 100.0\% |
|  |  | \% within father's occupation | . $0 \%$ | 6.5\% | 10.6\% | 12.9\% | 18.4\% | 9.7\% |
|  |  | \% of Total | . $0 \%$ | 2.7\% | 2.7\% | 2.7\% | 1.5\% | 9.7\% |
| Total |  | Count | 15 | 263 | 161 | 132 | 49 | 620 |
|  |  | Expected Count | 15.0 | 263.0 | 161.0 | 132.0 | 49.0 | 620.0 |
|  |  | \% within symtoms of infection | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |
|  |  | \% within father's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |

## symtoms of infection * mother's occupation

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $28.753^{a}$ | 12 | .004 |
| Likelihood Ratio | 31.693 | 12 | .002 |
| Linear-by-Linear Association | .060 | 1 | .807 |
| N of Valid Cases | 620 |  |  |

a. 1 cells $(5.0 \%)$ have expected count less than 5 . The minimum expected count is 2.70 .

## symtoms of infection * father's occupation

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $26.857^{\mathrm{a}}$ | 16 | .043 |
| Likelihood Ratio | 29.043 | 16 | .024 |
| Linear-by-Linear Association | 10.775 | 1 | .001 |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(20.0 \%)$ have expected count less than 5 . The minimum expected count is .65 .

## Crosstab

|  |  |  | sex |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | male | female | Total |
| symtoms of infection | blood in urine | Count | 132 | 81 | 213 |
|  |  | Expected Count | 124.4 | 88.6 | 213.0 |
|  |  | \% within symtoms of infection | 62.0\% | 38.0\% | 100.0\% |
|  |  | \% within sex | 36.5\% | 31.4\% | 34.4\% |
|  |  | \% of Total | 21.3\% | 13.1\% | 34.4\% |
|  | stomach pain | Count | 130 | 101 | 231 |
|  |  | Expected Count | 134.9 | 96.1 | 231.0 |
|  |  | \% within symtoms of infection | 56.3\% | 43.7\% | 100.0\% |
|  |  | \% within sex | 35.9\% | 39.1\% | 37.3\% |
|  |  | \% of Total | 21.0\% | 16.3\% | 37.3\% |
|  | waist pain | Count | 48 | 41 | 89 |
|  |  | Expected Count | 52.0 | 37.0 | 89.0 |
|  |  | \% within symtoms of infection | 53.9\% | 46.1\% | 100.0\% |
|  |  | \% within sex | 13.3\% | 15.9\% | 14.4\% |
|  |  | \% of Total | 7.7\% | 6.6\% | 14.4\% |
|  | blurred vision | Count | 18 | 9 | 27 |
|  |  | Expected Count | 15.8 | 11.2 | 27.0 |
|  |  | \% within symtoms of infection | 66.7\% | 33.3\% | 100.0\% |
|  |  | \% within sex | 5.0\% | 3.5\% | 4.4\% |



|  |  | Age distribution |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | <_4 | 5-9 | 10-14 | 15-19 | >_20 |  |
| symtoms of blood in infection urine | Count | 6 | 56 | 88 | 62 | 1 | 213 |
|  | Expected Count | 5.8 | 53.6 | 92.8 | 57.7 | 3.1 | 213.0 |
|  | \% within symtoms of infection | 2.8\% | 26.3\% | 41.3\% | 29.1\% | . $5 \%$ | 100.0\% |
|  | \% within Age <br> distribution | 35.3\% | 35.9\% | 32.6\% | 36.9\% | 11.1\% | 34.4\% |
|  | \% of Total | 1.0\% | 9.0\% | 14.2\% | 10.0\% | . $2 \%$ | 34.4\% |
| stomach | Count | 10 | 50 | 112 | 53 | 6 | 231 |
|  | Expected Count | 6.3 | 58.1 | 100.6 | 62.6 | 3.4 | 231.0 |
|  | \% within symtoms of infection | 4.3\% | 21.6\% | 48.5\% | 22.9\% | 2.6\% | 100.0\% |
|  | \% within Age <br> distribution | 58.8\% | 32.1\% | 41.5\% | 31.5\% | 66.7\% | 37.3\% |
|  | \% of Total | 1.6\% | 8.1\% | 18.1\% | 8.5\% | 1.0\% | 37.3\% |
| waist pain | Count | 1 | 31 | 34 | 23 | 0 | 89 |
|  | Expected Count | 2.4 | 22.4 | 38.8 | 24.1 | 1.3 | 89.0 |
|  | \% within symtoms of infection | 1.1\% | 34.8\% | 38.2\% | 25.8\% | .0\% | 100.0\% |
|  | \% within Age <br> distribution | 5.9\% | 19.9\% | 12.6\% | 13.7\% | .0\% | 14.4\% |
|  | \% of Total | . $2 \%$ | 5.0\% | 5.5\% | 3.7\% | . $0 \%$ | 14.4\% |
| blurred <br> vision | Count | 0 | 4 | 12 | 11 | 0 | 27 |
|  | Expected Count | . 7 | 6.8 | 11.8 | 7.3 | . 4 | 27.0 |
|  | \% within symtoms of infection | . $0 \%$ | 14.8\% | 44.4\% | 40.7\% | .0\% | 100.0\% |
|  | \% within Age <br> distribution | .0\% | 2.6\% | 4.4\% | 6.5\% | .0\% | 4.4\% |
|  | \% of Total | . $0 \%$ | .6\% | 1.9\% | 1.8\% | . $0 \%$ | 4.4\% |


|  | i don't know Count | 0 | 15 | 24 | 19 | 2 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Expected Count | 1.6 | 15.1 | 26.1 | 16.3 | . 9 | 60.0 |
|  | \% within symtoms of infection | .0\% | 25.0\% | 40.0\% | 31.7\% | 3.3\% | 100.0\% |
|  | \% within Age distribution | .0\% | 9.6\% | 8.9\% | 11.3\% | 22.2\% | 9.7\% |
|  | \% of Total | . $0 \%$ | 2.4\% | 3.9\% | 3.1\% | .3\% | 9.7\% |
| Total | Count | 17 | 156 | 270 | 168 | 9 | 620 |
|  | Expected Count | 17.0 | 156.0 | 270.0 | 168.0 | 9.0 | 620.0 |
|  | \% within symtoms of infection | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |
|  | \% within Age distribution | $\begin{aligned} & 100.0 \\ & \% \end{aligned}$ | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $3.112^{\mathrm{a}}$ | 4 | .539 |
| Likelihood Ratio | 3.132 | 4 | .536 |
| Linear-by-Linear Association | .462 | 1 | .497 |
| N of Valid Cases | 620 |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 11.24.

Crosstab

|  |  |  | main source of water supply |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | tap | well | river | others |  |
| intermidiate host | housefly and cocroaches | Count | 23 | 139 | 120 | 0 | 282 |
|  |  | Expected Count | 32.3 | 140.5 | 107.8 | 1.4 | 282.0 |
|  |  | \% within intermidiate host | 8.2\% | 49.3\% | 42.6\% | . $0 \%$ | 100.0\% |
|  |  | \% within main source of water supply | 32.4\% | 45.0\% | 50.6\% | . $0 \%$ | 45.5\% |
|  |  | \% of Total | 3.7\% | 22.4\% | 19.4\% | .0\% | 45.5\% |
|  | water snail | Count | 20 | 51 | 27 | 1 | 99 |
|  |  | Expected Count | 11.3 | 49.3 | 37.8 | . 5 | 99.0 |
|  |  | \% within intermidiate host | 20.2\% | 51.5\% | 27.3\% | 1.0\% | 100.0\% |
|  |  | \% within main source of water supply | 28.2\% | 16.5\% | 11.4\% | 33.3\% | 16.0\% |
|  |  | \% of Total | 3.2\% | 8.2\% | 4.4\% | . 2 \% | 16.0\% |
|  | fish | Count | 14 | 60 | 61 | 0 | 135 |
|  |  | Expected Count | 15.5 | 67.3 | 51.6 | . 7 | 135.0 |
|  |  | \% within intermidiate host | 10.4\% | 44.4\% | 45.2\% | . $0 \%$ | 100.0\% |
|  |  | \% within main source of water supply | 19.7\% | 19.4\% | 25.7\% | .0\% | 21.8\% |
|  |  | \% of Total | 2.3\% | 9.7\% | 9.8\% | .0\% | 21.8\% |
|  | houserat | Count | 7 | 31 | 12 | 1 | 51 |
|  |  | Expected Count | 5.8 | 25.4 | 19.5 | . 2 | 51.0 |
|  |  | \% within intermidiate host | 13.7\% | 60.8\% | 23.5\% | 2.0\% | 100.0\% |
|  |  | \% within main source of water supply | 9.9\% | 10.0\% | 5.1\% | 33.3\% | 8.2\% |
|  |  | \% of Total | 1.1\% | 5.0\% | 1.9\% | . $2 \%$ | 8.2\% |


|  | i don't know | Count | 7 | 28 | 17 | 1 | 53 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Expected Count | 6.1 | 26.4 | 20.3 | . 3 | 53.0 |
|  |  | \% within intermidiate host | 13.2\% | 52.8\% | 32.1\% | 1.9\% | 100.0\% |
|  |  | \% within main source of water supply | 9.9\% | 9.1\% | 7.2\% | 33.3\% | 8.5\% |
|  |  | \% of Total | 1.1\% | 4.5\% | 2.7\% | . $2 \%$ | 8.5\% |
| Total |  | Count | 71 | 309 | 237 | 3 | 620 |
|  |  | Expected Count | 71.0 | 309.0 | 237.0 | 3.0 | 620.0 |
|  |  | \% within intermidiate host | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |
|  |  | \% within main source of water supply | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $24.171^{a}$ | 16 | .086 |
| Likelihood Ratio | 27.567 | 16 | .036 |
| Linear-by-Linear Association | 1.663 | 1 | .197 |
| N of Valid Cases | 620 |  |  |

a. 8 cells ( $32.0 \%$ ) have expected count less than 5 . The minimum expected count is .39 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $28.631^{\mathrm{a}}$ | 12 | .004 |
| Likelihood Ratio | 28.274 | 12 | .005 |
| Linear-by-Linear Association | 2.111 | 1 | .146 |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(25.0 \%)$ have expected count less than 5 . The minimum expected count is .25 .

|  |  |  | contact made with water |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | play or bath | washing | agricultural work | fishing | no contact |  |
| intermidiate host | housefly and cocroaches | Count | 55 | 172 | 20 | 6 | 29 | 282 |
|  |  | Expected <br> Count | 62.3 | 156.5 | 23.2 | 5.9 | 34.1 | 282.0 |
|  |  | \% within intermidiate host | 19.5\% | 61.0\% | 7.1\% | 2.1\% | 10.3\% | 100.0\% |
|  |  | \% within contact made with water | 40.1\% | 50.0\% | 39.2\% | 46.2\% | 38.7\% | 45.5\% |
|  |  | \% of Total | 8.9\% | 27.7\% | 3.2\% | 1.0\% | 4.7\% | 45.5\% |
|  | water snail | Count | 23 | 57 | 6 | 1 | 12 | 99 |
|  |  | Expected <br> Count | 21.9 | 54.9 | 8.1 | 2.1 | 12.0 | 99.0 |
|  |  | \% within intermidiate host | 23.2\% | 57.6\% | 6.1\% | 1.0\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 16.8\% | 16.6\% | 11.8\% | 7.7\% | 16.0\% | 16.0\% |
|  |  | \% of Total | 3.7\% | 9.2\% | 1.0\% | . $2 \%$ | 1.9\% | 16.0\% |
|  | fish | Count | 24 | 74 | 16 | 4 | 17 | 135 |
|  |  | Expected Count | 29.8 | 74.9 | 11.1 | 2.8 | 16.3 | 135.0 |
|  |  | \% within intermidiate host | 17.8\% | 54.8\% | 11.9\% | 3.0\% | 12.6\% | 100.0\% |
|  |  | \% within contact made with water | 17.5\% | 21.5\% | 31.4\% | 30.8\% | 22.7\% | 21.8\% |
|  |  | \% of Total | 3.9\% | 11.9\% | 2.6\% | . $6 \%$ | 2.7\% | 21.8\% |


|  | houserat | Count | 17 | 20 | 2 | 1 | 11 | 51 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Expected Count | 11.3 | 28.3 | 4.2 | 1.1 | 6.2 | 51.0 |
|  |  | \% within intermidiate host | 33.3\% | 39.2\% | 3.9\% | 2.0\% | 21.6\% | 100.0\% |
|  |  | \% within contact made with water | 12.4\% | 5.8\% | 3.9\% | 7.7\% | 14.7\% | 8.2\% |
|  |  | \% of Total | 2.7\% | 3.2\% | . $3 \%$ | . $2 \%$ | 1.8\% | 8.2\% |
|  | i don't <br> know | Count | 18 | 21 | 7 | 1 | 6 | 53 |
|  |  | Expected <br> Count | 11.7 | 29.4 | 4.4 | 1.1 | 6.4 | 53.0 |
|  |  | \% within intermidiate host | 34.0\% | 39.6\% | 13.2\% | 1.9\% | 11.3\% | 100.0\% |
|  |  | \% within contact made with water | 13.1\% | 6.1\% | 13.7\% | 7.7\% | 8.0\% | 8.5\% |
|  |  | \% of Total | 2.9\% | 3.4\% | 1.1\% | . $2 \%$ | 1.0\% | 8.5\% |
| Total |  | Count | 137 | 344 | 51 | 13 | 75 | 620 |
|  |  | Expected Count | 137.0 | 344.0 | 51.0 | 13.0 | 75.0 | 620.0 |
|  |  | \% within intermidiate host | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |

Crosstab

|  |  |  | mother <br> educati | primary |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no | Total |
| intermidiate | housefly and | Count | 189 | 93 | 282 |
|  |  | Expected Count | 196.5 | 85.5 | 282.0 |
|  |  | \% within intermidiate host | 67.0\% | 33.0\% | 100.0\% |
|  |  | \% within mother complete primary education | 43.8\% | 49.5\% | 45.5\% |
|  |  | \% of Total | 30.5\% | 15.0\% | 45.5\% |
|  | water snail | Count | 89 | 10 | 99 |
|  |  | Expected Count | 69.0 | 30.0 | 99.0 |
|  |  | \% within intermidiate host | 89.9\% | 10.1\% | 100.0\% |
|  |  | \% within mother complete primary education | 20.6\% | 5.3\% | 16.0\% |
|  |  | \% of Total | 14.4\% | 1.6\% | 16.0\% |
|  | fish | Count | 72 | 63 | 135 |
|  |  | Expected Count | 94.1 | 40.9 | 135.0 |
|  |  | \% within intermidiate host | 53.3\% | 46.7\% | 100.0\% |
|  |  | \% within mother complete primary education | 16.7\% | 33.5\% | 21.8\% |
|  |  | \% of Total | 11.6\% | 10.2\% | 21.8\% |
|  | houserat | Count | 39 | 12 | 51 |
|  |  | Expected Count | 35.5 | 15.5 | 51.0 |
|  |  | \% within intermidiate host | 76.5\% | 23.5\% | 100.0\% |
|  |  | \% within mother complete primary education | 9.0\% | 6.4\% | 8.2\% |
|  |  | \% of Total | 6.3\% | 1.9\% | 8.2\% |
|  | i don't know | Count | 43 | 10 | 53 |
|  |  | Expected Count | 36.9 | 16.1 | 53.0 |


|  | \% within intermidiate host | 81.1\% | 18.9\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: |
|  | \% within mother complete primary education | 10.0\% | 5.3\% | 8.5\% |
|  | \% of Total | 6.9\% | 1.6\% | 8.5\% |
| Total | Count | 432 | 188 | 620 |
|  | Expected Count | 432.0 | 188.0 | 620.0 |
|  | \% within intermidiate host | 69.7\% | 30.3\% | 100.0\% |
|  | \% within mother complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 69.7\% | 30.3\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $26.384^{a}$ | 16 | .049 |
| Likelihood Ratio | 25.368 | 16 | .064 |
| Linear-by-Linear Association | .369 | 1 | .543 |
| N of Valid Cases | 620 |  |  |

a. 6 cells $(24.0 \%)$ have expected count less than 5 . The minimum expected count is 1.07 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $41.576^{\mathrm{a}}$ | 4 | .000 |
| Likelihood Ratio | 44.898 | 4 | .000 |
| Linear-by-Linear Association | .490 | 1 | .484 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (. $0 \%$ ) have expected count less than 5 . The minimum expected count is 15.46.

## Crosstab

|  |  |  | father complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no |  |
| intermidiate <br> host | housefly and | Count | 214 | 68 | 282 |
|  |  | Expected Count | 217.0 | 65.0 | 282.0 |
|  |  | \% within intermidiate host | 75.9\% | 24.1\% | 100.0\% |
|  |  | \% within father complete primary education | 44.9\% | 47.6\% | 45.5\% |
|  |  | \% of Total | 34.5\% | 11.0\% | 45.5\% |
|  | water snail | Count | 92 | 7 | 99 |
|  |  | Expected Count | 76.2 | 22.8 | 99.0 |
|  |  | \% within intermidiate host | 92.9\% | 7.1\% | 100.0\% |
|  |  | \% within father complete primary education | 19.3\% | 4.9\% | 16.0\% |
|  |  | \% of Total | 14.8\% | 1.1\% | 16.0\% |
|  | fish | Count | 82 | 53 | 135 |
|  |  | Expected Count | 103.9 | 31.1 | 135.0 |
|  |  | \% within intermidiate host | 60.7\% | 39.3\% | 100.0\% |
|  |  | \% within father complete primary education | 17.2\% | 37.1\% | 21.8\% |
|  |  | \% of Total | 13.2\% | 8.5\% | 21.8\% |
|  | houserat | Count | 43 | 8 | 51 |
|  |  | Expected Count | 39.2 | 11.8 | 51.0 |
|  |  | \% within intermidiate host | 84.3\% | 15.7\% | 100.0\% |
|  |  | \% within father complete primary education | 9.0\% | 5.6\% | 8.2\% |


|  |  | \% of Total | 6.9\% | 1.3\% | 8.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | i don't know | Count | 46 | 7 | 53 |
|  |  | Expected Count | 40.8 | 12.2 | 53.0 |
|  |  | \% within intermidiate host | 86.8\% | 13.2\% | 100.0\% |
|  |  | \% within father complete primary education | 9.6\% | 4.9\% | 8.5\% |
|  |  | \% of Total | 7.4\% | 1.1\% | 8.5\% |
| Total |  | Count | 477 | 143 | 620 |
|  |  | Expected Count | 477.0 | 143.0 | 620.0 |
|  |  | \% within intermidiate host | 76.9\% | 23.1\% | 100.0\% |
|  |  | \% within father complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 76.9\% | 23.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $38.866^{\mathrm{a}}$ | 4 | .000 |
| Likelihood Ratio | 40.985 | 4 | .000 |
| Linear-by-Linear Association | .096 | 1 | .756 |
| N of Valid Cases | 620 |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 11.76 .

|  |  |  | mother's occupation |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | trading | farming | salary earner | unemployed |  |
| intermidiate host | housefly and | Count | 120 | 73 | 55 | 34 | 282 |
|  |  | Expected Count | 132.4 | 62.8 | 58.7 | 28.2 | 282.0 |
|  |  | \% within intermidiate host | 42.6\% | 25.9\% | 19.5\% | 12.1\% | 100.0\% |
|  |  | \% within mother's occupation | 41.2\% | 52.9\% | 42.6\% | 54.8\% | 45.5\% |
|  |  | \% of Total | 19.4\% | 11.8\% | 8.9\% | 5.5\% | 45.5\% |
|  | water snail | Count | 67 | 7 | 18 | 7 | 99 |
|  |  | Expected Count | 46.5 | 22.0 | 20.6 | 9.9 | 99.0 |
|  |  | \% within intermidiate host | 67.7\% | 7.1\% | 18.2\% | 7.1\% | 100.0\% |
|  |  | \% within mother's occupation | 23.0\% | 5.1\% | 14.0\% | 11.3\% | 16.0\% |
|  |  | \% of Total | 10.8\% | 1.1\% | 2.9\% | 1.1\% | 16.0\% |
|  | fish | Count | 57 | 47 | 19 | 12 | 135 |
|  |  | Expected Count | 63.4 | 30.0 | 28.1 | 13.5 | 135.0 |
|  |  | \% within intermidiate host | 42.2\% | 34.8\% | 14.1\% | 8.9\% | 100.0\% |
|  |  | \% within mother's occupation | 19.6\% | 34.1\% | 14.7\% | 19.4\% | 21.8\% |
|  |  | \% of Total | 9.2\% | 7.6\% | 3.1\% | 1.9\% | 21.8\% |
|  | houserat | Count | 22 | 5 | 20 | 4 | 51 |
|  |  | Expected Count | 23.9 | 11.4 | 10.6 | 5.1 | 51.0 |
|  |  | \% within intermidiate host | 43.1\% | 9.8\% | 39.2\% | 7.8\% | 100.0\% |
|  |  | \% within mother's occupation | 7.6\% | 3.6\% | 15.5\% | 6.5\% | 8.2\% |
|  |  | \% of Total | 3.5\% | .8\% | 3.2\% | .6\% | 8.2\% |


|  | i don't know | Count | 25 | 6 | 17 | 5 | 53 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Expected Count | 24.9 | 11.8 | 11.0 | 5.3 | 53.0 |
|  |  | \% within intermidiate host | 47.2\% | 11.3\% | 32.1\% | 9.4\% | 100.0\% |
|  |  | \% within mother's occupation | 8.6\% | 4.3\% | 13.2\% | 8.1\% | 8.5\% |
|  |  | \% of Total | 4.0\% | 1.0\% | 2.7\% | .8\% | 8.5\% |
| Total |  | Count | 291 | 138 | 129 | 62 | 620 |
|  |  | Expected Count | 291.0 | 138.0 | 129.0 | 62.0 | 620.0 |
|  |  | \% within intermidiate host | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |
|  |  | \% within mother's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |

intermidiate host * mother's occupation

Crosstab

|  |  |  | father's occupation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | fishing | farming | trading | salary earner | wage earner | Total |
| intermidiate host | housefly and cocroaches | Count | 11 | 127 | 75 | 49 | 20 | 282 |
|  |  | Expected Count | 6.8 | 119.6 | 73.2 | 60.0 | 22.3 | 282.0 |
|  |  | \% within intermidiate host | 3.9\% | 45.0\% | 26.6\% | 17.4\% | 7.1\% | 100.0\% |
|  |  | \% within father's occupation | 73.3\% | 48.3\% | 46.6\% | 37.1\% | 40.8\% | 45.5\% |
|  |  | \% of Total | 1.8\% | 20.5\% | 12.1\% | 7.9\% | 3.2\% | 45.5\% |
|  | water snail | Count | 1 | 38 | 30 | 21 | 9 | 99 |
|  |  | Expected Count | 2.4 | 42.0 | 25.7 | 21.1 | 7.8 | 99.0 |
|  |  | \% within intermidiate host | 1.0\% | 38.4\% | 30.3\% | 21.2\% | 9.1\% | 100.0\% |
|  |  | \% within father's occupation | 6.7\% | 14.4\% | 18.6\% | 15.9\% | 18.4\% | 16.0\% |
|  |  | \% of Total | . $2 \%$ | 6.1\% | 4.8\% | 3.4\% | 1.5\% | 16.0\% |
|  | fish | Count | 3 | 69 | 28 | 25 | 10 | 135 |
|  |  | Expected Count | 3.3 | 57.3 | 35.1 | 28.7 | 10.7 | 135.0 |
|  |  | \% within intermidiate host | 2.2\% | 51.1\% | 20.7\% | 18.5\% | 7.4\% | 100.0\% |
|  |  | \% within father's occupation | 20.0\% | 26.2\% | 17.4\% | 18.9\% | 20.4\% | 21.8\% |
|  |  | \% of Total | . $5 \%$ | 11.1\% | 4.5\% | 4.0\% | 1.6\% | 21.8\% |
|  | houserat | Count | 0 | 11 | 18 | 20 | 2 | 51 |
|  |  | Expected Count | 1.2 | 21.6 | 13.2 | 10.9 | 4.0 | 51.0 |
|  |  | \% within intermidiate host | . $0 \%$ | 21.6\% | 35.3\% | 39.2\% | 3.9\% | 100.0\% |
|  |  | \% within father's occupation | . $0 \%$ | 4.2\% | 11.2\% | 15.2\% | 4.1\% | 8.2\% |


|  |  | \% of Total | . $0 \%$ | 1.8\% | 2.9\% | 3.2\% | . $3 \%$ | 8.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | i don't <br> know | Count | 0 | 18 | 10 | 17 | 8 | 53 |
|  |  | Expected Count | 1.3 | 22.5 | 13.8 | 11.3 | 4.2 | 53.0 |
|  |  | \% within intermidiate host | . $0 \%$ | 34.0\% | 18.9\% | 32.1\% | 15.1\% | 100.0\% |
|  |  | \% within father's occupation | . $0 \%$ | 6.8\% | 6.2\% | 12.9\% | 16.3\% | 8.5\% |
|  |  | \% of Total | . $0 \%$ | 2.9\% | 1.6\% | 2.7\% | 1.3\% | 8.5\% |
| Total |  | Count | 15 | 263 | 161 | 132 | 49 | 620 |
|  |  | Expected Count | 15.0 | 263.0 | 161.0 | 132.0 | 49.0 | 620.0 |
|  |  | \% within intermidiate host | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |
|  |  | \% within father's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $56.421^{\text {a }}$ | 12 | .000 |
| Likelihood Ratio | 57.478 | 12 | .000 |
| Linear-by-Linear Association | .055 | 1 | .814 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (.0\%) have expected count less than 5 . The minimum expected count is 5.10

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $38.239^{a}$ | 16 | .001 |
| Likelihood Ratio | 39.385 | 16 | .001 |
| Linear-by-Linear Association | 11.301 | 1 | .001 |
| N of Valid Cases | 620 |  |  |

a. 6 cells ( $24.0 \%$ ) have expected count less than 5 . The minimum expected count is 1.23 .

Crosstab

|  |  |  | sex |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | male | female |  |
| intermidiate host | housefly and cocroaches | Count | 177 | 105 | 282 |
|  |  | Expected Count | 164.7 | 117.3 | 282.0 |
|  |  | \% within intermidiate host | 62.8\% | 37.2\% | 100.0\% |
|  |  | \% within sex | 48.9\% | 40.7\% | 45.5\% |
|  |  | \% of Total | 28.5\% | 16.9\% | 45.5\% |
|  | water snail | Count | 55 | 44 | 99 |
|  |  | Expected Count | 57.8 | 41.2 | 99.0 |
|  |  | \% within intermidiate host | 55.6\% | 44.4\% | 100.0\% |
|  |  | \% within sex | 15.2\% | 17.1\% | 16.0\% |
|  |  | \% of Total | 8.9\% | 7.1\% | 16.0\% |
|  | fish | Count | 74 | 61 | 135 |
|  |  | Expected Count | 78.8 | 56.2 | 135.0 |
|  |  | \% within intermidiate host | 54.8\% | 45.2\% | 100.0\% |
|  |  | \% within sex | 20.4\% | 23.6\% | 21.8\% |
|  |  | \% of Total | 11.9\% | 9.8\% | 21.8\% |
|  | houserat | Count | 27 | 24 | 51 |
|  |  | Expected Count | 29.8 | 21.2 | 51.0 |
|  |  | \% within intermidiate host | 52.9\% | 47.1\% | 100.0\% |
|  |  | \% within sex | 7.5\% | 9.3\% | 8.2\% |
|  |  | \% of Total | 4.4\% | 3.9\% | 8.2\% |
|  | i don't know | Count | 29 | 24 | 53 |


| Expected Count | 30.9 | 22.1 | 53.0 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | \% within intermidiate host | $54.7 \%$ | $45.3 \%$ | $100.0 \%$ |
|  | \% within sex | $8.0 \%$ | $9.3 \%$ | $8.5 \%$ |
| \% of Total | $4.7 \%$ | $3.9 \%$ | $8.5 \%$ |  |
| Count | 362 | 258 | 620 |  |
|  | Expected Count | 362.0 | 258.0 | 620.0 |
|  | \% within intermidiate host | $58.4 \%$ | $41.6 \%$ | $100.0 \%$ |
|  |  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $4.178^{\mathrm{a}}$ | 4 | .383 |
| Likelihood Ratio | 4.188 | 4 | .381 |
| Linear-by-Linear Association | 3.112 | 1 | .078 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (. $0 \%$ ) have expected count less than 5 . The minimum expected count is 21.22.

|  |  |  | Age distribution |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | <_4 | 5-9 | 10-14 | 15-19 | >_20 |  |
| intermidiate host | housefly and | Count | 7 | 75 | 117 | 76 | 7 | 282 |
|  |  | Expected <br> Count | 7.7 | 71.0 | 122.8 | 76.4 | 4.1 | 282.0 |
|  |  | \% within intermidiate host | 2.5\% | 26.6\% | 41.5\% | 27.0\% | 2.5\% | 100.0\% |
|  |  | \% within Age distribution | 41.2\% | 48.1\% | 43.3\% | 45.2\% | 77.8\% | 45.5\% |
|  |  | \% of Total | 1.1\% | 12.1\% | 18.9\% | 12.3\% | 1.1\% | 45.5\% |
|  | water snail | Count | 7 | 9 | 47 | 36 | 0 | 99 |
|  |  | Expected Count | 2.7 | 24.9 | 43.1 | 26.8 | 1.4 | 99.0 |
|  |  | \% within intermidiate host | 7.1\% | 9.1\% | 47.5\% | 36.4\% | .0\% | 100.0\% |
|  |  | \% within Age distribution | 41.2\% | 5.8\% | 17.4\% | 21.4\% | .0\% | 16.0\% |
|  |  | \% of Total | 1.1\% | 1.5\% | 7.6\% | 5.8\% | .0\% | 16.0\% |
|  | fish | Count | 1 | 34 | 68 | 31 | 1 | 135 |
|  |  | Expected <br> Count | 3.7 | 34.0 | 58.8 | 36.6 | 2.0 | 135.0 |
|  |  | \% within intermidiate host | . $7 \%$ | 25.2\% | 50.4\% | 23.0\% | .7\% | 100.0\% |
|  |  | \% within Age distribution | 5.9\% | 21.8\% | 25.2\% | 18.5\% | 11.1\% | 21.8\% |
|  |  | \% of Total | . $2 \%$ | 5.5\% | 11.0\% | 5.0\% | . $2 \%$ | 21.8\% |
|  | houserat | Count | 1 | 17 | 21 | 11 | 1 | 51 |
|  |  | Expected <br> Count | 1.4 | 12.8 | 22.2 | 13.8 | . 7 | 51.0 |


|  |  | \% within intermidiate host | 2.0\% | 33.3\% | 41.2\% | 21.6\% | 2.0\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within Age distribution | 5.9\% | 10.9\% | 7.8\% | 6.5\% | 11.1\% | 8.2\% |
|  |  | \% of Total | . $2 \%$ | 2.7\% | 3.4\% | 1.8\% | . $2 \%$ | 8.2\% |
|  | i don't know | Count | 1 | 21 | 17 | 14 | 0 | 53 |
|  |  | Expected <br> Count | 1.5 | 13.3 | 23.1 | 14.4 | . 8 | 53.0 |
|  |  | \% within intermidiate host | 1.9\% | 39.6\% | 32.1\% | 26.4\% | . $0 \%$ | 100.0\% |
|  |  | \% within Age distribution | 5.9\% | 13.5\% | 6.3\% | 8.3\% | . $0 \%$ | 8.5\% |
|  |  | \% of Total | . $2 \%$ | 3.4\% | 2.7\% | 2.3\% | . $0 \%$ | 8.5\% |
| Total |  | Count | 17 | 156 | 270 | 168 | 9 | 620 |
|  |  | Expected <br> Count | 17.0 | 156.0 | 270.0 | 168.0 | 9.0 | 620.0 |
|  |  | \% within intermidiate host | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |
|  |  | \% within Age distribution | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |

intermidiate host * Age distribution

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $38.354^{\mathrm{a}}$ | 16 | .001 |
| Likelihood Ratio | 41.475 | 16 | .000 |
| Linear-by-Linear Association | 2.399 | 1 | .121 |
| N of Valid Cases | 620 |  |  |

a. 9 cells ( $36.0 \%$ ) have expected count less than 5 . The minimum expected count is .74 .


|  |  | water supply |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% of Total | 1.6\% | 4.2\% | 2.6\% | .2\% | 8.5\% |
|  | i don't know | Count | 35 | 189 | 160 | 1 | 385 |
|  |  | Expected <br> Count | 44.1 | 191.9 | 147.2 | 1.9 | 385.0 |
|  |  | \% within source of infection | 9.1\% | 49.1\% | 41.6\% | .3\% | 100.0\% |
|  |  | \% within main source of water supply | 49.3\% | 61.2\% | 67.5\% | 33.3\% | 62.1\% |
|  |  | \% of Total | 5.6\% | 30.5\% | 25.8\% | . $2 \%$ | 62.1\% |
| Total |  | Count | 71 | 309 | 237 | 3 | 620 |
|  |  | Expected <br> Count | 71.0 | 309.0 | 237.0 | 3.0 | 620.0 |
|  |  | \% within source of infection | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |
|  |  | \% within main source of water supply | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |


|  |  |  | contact made with water |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | play or bath | washing | agricultural work | fishing | no contact |  |
| source of infection | water | Count | 29 | 64 | 7 | 2 | 18 | 120 |
|  |  | Expected <br> Count | 26.5 | 66.6 | 9.9 | 2.5 | 14.5 | 120.0 |
|  |  | \% within source of infection | 24.2\% | 53.3\% | 5.8\% | 1.7\% | 15.0\% | 100.0\% |
|  |  | \% within contact made with water | 21.2\% | 18.6\% | 13.7\% | 15.4\% | 24.0\% | 19.4\% |
|  |  | \% of Total | 4.7\% | 10.3\% | 1.1\% | . $3 \%$ | 2.9\% | 19.4\% |
|  | playing <br> with | Count | 13 | 38 | 2 | 5 | 4 | 62 |
|  | infected <br> friends | Expected <br> Count | 13.7 | 34.4 | 5.1 | 1.3 | 7.5 | 62.0 |
|  |  | \% within source of infection | 21.0\% | 61.3\% | 3.2\% | 8.1\% | 6.5\% | 100.0\% |
|  |  | \% within contact made with water | 9.5\% | 11.0\% | 3.9\% | 38.5\% | 5.3\% | 10.0\% |
|  |  | \% of Total | 2.1\% | 6.1\% | . $3 \%$ | .8\% | .6\% | 10.0\% |
|  | food | Count | 16 | 26 | 1 | 4 | 6 | 53 |
|  |  | Expected <br> Count | 11.7 | 29.4 | 4.4 | 1.1 | 6.4 | 53.0 |
|  |  | \% within source of infection | 30.2\% | 49.1\% | 1.9\% | 7.5\% | 11.3\% | 100.0\% |
|  |  | \% within contact made with water | 11.7\% | 7.6\% | 2.0\% | 30.8\% | 8.0\% | 8.5\% |
|  |  | \% of Total | 2.6\% | 4.2\% | . $2 \%$ | .6\% | 1.0\% | 8.5\% |
|  |  | Count | 79 | 216 | 41 | 2 | 47 | 385 |


|  | i don't <br> know | Expected <br> Count | 85.1 | 213.6 | 31.7 | 8.1 | 46.6 | 385.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within source of infection | 20.5\% | 56.1\% | 10.6\% | . $5 \%$ | 12.2\% | 100.0\% |
|  |  | \% within contact made with water | 57.7\% | 62.8\% | 80.4\% | 15.4\% | 62.7\% | 62.1\% |
|  |  | \% of Total | 12.7\% | 34.8\% | 6.6\% | . $3 \%$ | 7.6\% | 62.1\% |
| Total |  | Count | 137 | 344 | 51 | 13 | 75 | 620 |
|  |  | Expected <br> Count | 137.0 | 344.0 | 51.0 | 13.0 | 75.0 | 620.0 |
|  |  | \% within source of infection | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $13.115^{\mathrm{a}}$ | 9 | .157 |
| Likelihood Ratio | 12.277 | 9 | .198 |
| Linear-by-Linear Association | 5.246 | 1 | .022 |
| N of Valid Cases | 620 |  |  |

a. 4 cells $(25.0 \%)$ have expected count less than 5 . The minimum expected count is .26 .

Crosstab

|  |  |  | mother educat | ete primary |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no | Total |
| source of | water | Count | 98 | 22 | 120 |
|  |  | Expected Count | 83.6 | 36.4 | 120.0 |
|  |  | \% within source of infection | 81.7\% | 18.3\% | 100.0\% |
|  |  | \% within mother complete primary education | 22.7\% | 11.7\% | 19.4\% |
|  |  | \% of Total | 15.8\% | 3.5\% | 19.4\% |
|  | playing with infected friends | Count | 40 | 22 | 62 |
|  |  | Expected Count | 43.2 | 18.8 | 62.0 |
|  |  | \% within source of infection | 64.5\% | 35.5\% | 100.0\% |
|  |  | \% within mother complete primary education | 9.3\% | 11.7\% | 10.0\% |
|  |  | \% of Total | 6.5\% | 3.5\% | 10.0\% |
|  | food | Count | 43 | 10 | 53 |
|  |  | Expected Count | 36.9 | 16.1 | 53.0 |
|  |  | $\%$ within source of infection | 81.1\% | 18.9\% | 100.0\% |
|  |  | \% within mother complete primary education | 10.0\% | 5.3\% | 8.5\% |
|  |  | \% of Total | 6.9\% | 1.6\% | 8.5\% |
|  | i don't know | Count | 251 | 134 | 385 |
|  |  | Expected Count | 268.3 | 116.7 | 385.0 |
|  |  | \% within source of infection | 65.2\% | 34.8\% | 100.0\% |


|  | \% within mother <br> complete primary <br> education | $58.1 \%$ | $71.3 \%$ | $62.1 \%$ |
| :--- | :--- | :--- | :--- | :--- |
|  | \% of Total | $40.5 \%$ | $21.6 \%$ | $62.1 \%$ |
|  | Count | 432 | 188 | 620 |
|  | Expected Count   <br> \% within source of   <br> infection   <br> \% within mother   <br> complete primary   <br> education   <br> \% of Total 432.0 $100.0 \%$ | $100.7 \%$ | $30.3 \%$ | $100.0 \%$ |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $36.441^{\mathrm{a}}$ | 12 | .000 |
| Likelihood Ratio | 32.686 | 12 | .001 |
| Linear-by-Linear Association | .003 | 1 | .958 |
| N of Valid Cases | 620 |  |  |

a. 4 cells $(20.0 \%)$ have expected count less than 5 . The minimum expected count is 1.11 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $15.899^{a}$ | 3 | .001 |
| Likelihood Ratio | 16.908 | 3 | .001 |
| Linear-by-Linear Association | 9.465 | 1 | .002 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (. $0 \%$ ) have expected count less than 5 . The minimum expected count is 16.07.

## Crosstab

|  |  |  | father complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no |  |
| source of infection | water | Count | 104 | 16 | 120 |
|  |  | Expected Count | 92.3 | 27.7 | 120.0 |
|  |  | $\%$ within source of infection | 86.7\% | 13.3\% | 100.0\% |
|  |  | \% within father complete primary education | 21.8\% | 11.2\% | 19.4\% |
|  |  | \% of Total | 16.8\% | 2.6\% | 19.4\% |
|  | playing with infected friends | Count | 51 | 11 | 62 |
|  |  | Expected Count | 47.7 | 14.3 | 62.0 |
|  |  | \% within source of infection | 82.3\% | 17.7\% | 100.0\% |
|  |  | \% within father complete primary education | 10.7\% | 7.7\% | 10.0\% |
|  |  | \% of Total | 8.2\% | 1.8\% | 10.0\% |
|  | food | Count | 46 | 7 | 53 |
|  |  | Expected Count | 40.8 | 12.2 | 53.0 |
|  |  | \% within source of infection | 86.8\% | 13.2\% | 100.0\% |
|  |  | \% within father complete primary education | 9.6\% | 4.9\% | 8.5\% |
|  |  | \% of Total | 7.4\% | 1.1\% | 8.5\% |
|  | i don't know | Count | 276 | 109 | 385 |
|  |  | Expected Count | 296.2 | 88.8 | 385.0 |


|  | $\%$ within source of infection | 71.7\% | 28.3\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: |
|  | \% within father complete primary education | 57.9\% | 76.2\% | 62.1\% |
|  | \% of Total | 44.5\% | 17.6\% | 62.1\% |
| Total | Count | 477 | 143 | 620 |
|  | Expected Count | 477.0 | 143.0 | 620.0 |
|  | \% within source of infection | 76.9\% | 23.1\% | 100.0\% |
|  | \% within father complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 76.9\% | 23.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $16.269^{\mathrm{a}}$ | 3 | .001 |
| Likelihood Ratio | 17.266 | 3 | .001 |
| Linear-by-Linear Association | 13.487 | 1 | .000 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (. $0 \%$ ) have expected count less than 5 . The minimum expected count is 12.22.

Crosstab

|  |  |  | mother's occupation |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | trading | farming | salary earner | unemployed |  |
| source of infection | water | Count | 65 | 18 | 26 | 11 | 120 |
|  |  | Expected Count | 56.3 | 26.7 | 25.0 | 12.0 | 120.0 |
|  |  | \% within source of infection | 54.2\% | 15.0\% | 21.7\% | 9.2\% | 100.0\% |
|  |  | \% within mother's occupation | 22.3\% | 13.0\% | 20.2\% | 17.7\% | 19.4\% |
|  |  | \% of Total | 10.5\% | 2.9\% | 4.2\% | 1.8\% | 19.4\% |
|  | playing with infected friends | Count | 27 | 13 | 18 | 4 | 62 |
|  |  | Expected Count | 29.1 | 13.8 | 12.9 | 6.2 | 62.0 |
|  |  | \% within source of infection | 43.5\% | 21.0\% | 29.0\% | 6.5\% | 100.0\% |
|  |  | \% within mother's occupation | 9.3\% | 9.4\% | 14.0\% | 6.5\% | 10.0\% |
|  |  | \% of Total | 4.4\% | 2.1\% | 2.9\% | .6\% | 10.0\% |
|  | food | Count | 28 | 5 | 13 | 7 | 53 |
|  |  | Expected Count | 24.9 | 11.8 | 11.0 | 5.3 | 53.0 |
|  |  | \% within source of infection | 52.8\% | 9.4\% | 24.5\% | 13.2\% | 100.0\% |
|  |  | \% within mother's occupation | 9.6\% | 3.6\% | 10.1\% | 11.3\% | 8.5\% |
|  |  | \% of Total | 4.5\% | .8\% | 2.1\% | 1.1\% | 8.5\% |
|  | i don't know | Count | 171 | 102 | 72 | 40 | 385 |


|  | Expected Count | 180.7 | 85.7 | 80.1 | 38.5 | 385.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within source of infection | 44.4\% | 26.5\% | 18.7\% | 10.4\% | 100.0\% |
|  | \% within mother's occupation | 58.8\% | 73.9\% | 55.8\% | 64.5\% | 62.1\% |
|  | \% of Total | 27.6\% | 16.5\% | 11.6\% | 6.5\% | 62.1\% |
| Total | Count | 291 | 138 | 129 | 62 | 620 |
|  | Expected Count | 291.0 | 138.0 | 129.0 | 62.0 | 620.0 |
|  | \% within source of infection | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |
|  | \% within mother's occupation | 100.0\% | 100.0\% | $\begin{aligned} & 100.0 \\ & \% \end{aligned}$ | 100.0\% | 100.0\% |
|  | \% of Total | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |



|  | i don't <br> know | Expected <br> Count | 9.3 | 163.3 | 100.0 | 82.0 | 30.4 | 385.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within source of infection | 1.3\% | 46.2\% | 24.4\% | 20.0\% | 8.1\% | 100.0\% |
|  |  | \% within father's occupation | 33.3\% | 67.7\% | 58.4\% | 58.3\% | 63.3\% | 62.1\% |
|  |  | \% of Total | .8\% | 28.7\% | 15.2\% | 12.4\% | 5.0\% | 62.1\% |
| Total |  | Count | 15 | 263 | 161 | 132 | 49 | 620 |
|  |  | Expected <br> Count | 15.0 | 263.0 | 161.0 | 132.0 | 49.0 | 620.0 |
|  |  | \% within source of infection | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |
|  |  | \% within father's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $17.007^{a}$ | 9 | .049 |
| Likelihood Ratio | 18.078 | 9 | .034 |
| Linear-by-Linear Association | .451 | 1 | .502 |
| N of Valid Cases | 620 |  |  |

a. 0 cells ( $.0 \%$ ) have expected count less than 5 . The minimum expected count is 5.30.
source of infection * father's occupation

Crosstab

|  |  |  | sex |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | male | female | Total |
| source of infection | water | Count | 72 | 48 | 120 |
|  |  | Expected Count | 70.1 | 49.9 | 120.0 |
|  |  | \% within source of infection | 60.0\% | 40.0\% | 100.0\% |
|  |  | \% within sex | 19.9\% | 18.6\% | 19.4\% |
|  |  | \% of Total | 11.6\% | 7.7\% | 19.4\% |
|  | playing with infected friends | Count | 39 | 23 | 62 |
|  |  | Expected Count | 36.2 | 25.8 | 62.0 |
|  |  | $\%$ within source of infection | 62.9\% | 37.1\% | 100.0\% |
|  |  | \% within sex | 10.8\% | 8.9\% | 10.0\% |
|  |  | \% of Total | 6.3\% | 3.7\% | 10.0\% |
|  | food | Count | 31 | 22 | 53 |
|  |  | Expected Count | 30.9 | 22.1 | 53.0 |
|  |  | $\%$ within source of infection | 58.5\% | 41.5\% | 100.0\% |
|  |  | \% within sex | 8.6\% | 8.5\% | 8.5\% |
|  |  | \% of Total | 5.0\% | 3.5\% | 8.5\% |
|  | i don't know | Count | 220 | 165 | 385 |
|  |  | Expected Count | 224.8 | 160.2 | 385.0 |
|  |  | \% within source of infection | 57.1\% | 42.9\% | 100.0\% |
|  |  | \% within sex | 60.8\% | 64.0\% | 62.1\% |
|  |  | \% of Total | 35.5\% | 26.6\% | 62.1\% |
| Total |  | Count | 362 | 258 | 620 |
|  |  | Expected Count | 362.0 | 258.0 | 620.0 |


| \% within source of <br> infection | $58.4 \%$ | $41.6 \%$ | $100.0 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| \% within sex | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| \% of Total | $58.4 \%$ | $41.6 \%$ | $100.0 \%$ |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $31.385^{\mathrm{a}}$ | 12 | .002 |
| Likelihood Ratio | 22.403 | 12 | .033 |
| Linear-by-Linear Association | .117 | 1 | .732 |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(25.0 \%)$ have expected count less than 5 . The minimum expected count is 1.28 .
source of infection * sex

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $.894^{\mathrm{a}}$ | 3 | .827 |
| Likelihood Ratio | .901 | 3 | .825 |
| Linear-by-Linear Association | .589 | 1 | .443 |
| N of Valid Cases | 620 |  |  |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $.894^{\text {a }}$ | 3 | .827 |
| Likelihood Ratio | .901 | 3 | .825 |
| Linear-by-Linear Association | .589 | 1 | .443 |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 22.05 .
source of infection * Age distribution

Crosstab

|  |  |  | Age distribution |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | <_4 | 5-9 | 10-14 | 15-19 | >_20 |  |
| source of infection | water | Count | 2 | 24 | 59 | 33 | 2 | 120 |
|  |  | Expected Count | 3.3 | 30.2 | 52.3 | 32.5 | 1.7 | 120.0 |
|  |  | \% within source of infection | 1.7\% | 20.0\% | 49.2\% | 27.5\% | 1.7\% | 100.0\% |
|  |  | \% within Age distribution | 11.8\% | 15.4\% | 21.9\% | 19.6\% | 22.2\% | 19.4\% |
|  |  | \% of Total | . $3 \%$ | 3.9\% | 9.5\% | 5.3\% | . $3 \%$ | 19.4\% |
|  | playing with infected friends | Count | 1 | 13 | 27 | 20 | 1 | 62 |
|  |  | Expected Count | 1.7 | 15.6 | 27.0 | 16.8 | . 9 | 62.0 |
|  |  | $\%$ within source of infection | 1.6\% | 21.0\% | 43.5\% | 32.3\% | 1.6\% | 100.0\% |
|  |  | \% within Age distribution | 5.9\% | 8.3\% | 10.0\% | 11.9\% | 11.1\% | 10.0\% |
|  |  | \% of Total | . $2 \%$ | 2.1\% | 4.4\% | 3.2\% | . $2 \%$ | 10.0\% |
|  | food | Count | 0 | 13 | 29 | 11 | 0 | 53 |
|  |  | Expected Count | 1.5 | 13.3 | 23.1 | 14.4 | . 8 | 53.0 |
|  |  | \% within source of infection | .0\% | 24.5\% | 54.7\% | 20.8\% | .0\% | 100.0\% |
|  |  | \% within Age distribution | .0\% | 8.3\% | 10.7\% | 6.5\% | .0\% | 8.5\% |
|  |  | \% of Total | .0\% | 2.1\% | 4.7\% | 1.8\% | .0\% | 8.5\% |
|  | i don't know | Count | 14 | 106 | 155 | 104 | 6 | 385 |
|  |  | Expected Count | 10.6 | 96.9 | 167.7 | 104.3 | 5.6 | 385.0 |
|  |  | \% within source of infection | 3.6\% | 27.5\% | 40.3\% | 27.0\% | 1.6\% | 100.0\% |


|  | \% within Age distribution | 82.4\% | 67.9\% | 57.4\% | 61.9\% | 66.7\% | 62.1\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of Total | 2.3\% | 17.1\% | 25.0\% | 16.8\% | 1.0\% | 62.1\% |
| Total | Count | 17 | 156 | 270 | 168 | 9 | 620 |
|  | Expected Count | 17.0 | 156.0 | 270.0 | 168.0 | 9.0 | 620.0 |
|  | \% within source of infection | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |
|  | \% within Age distribution | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |

Crosstab

|  |  |  | main source of water supply |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | tap | well | river | others |  |
| route of schistosome infection | contact with contaminated natural water | Count | 23 | 74 | 30 | 1 | 128 |
|  |  | Expected <br> Count | 14.7 | 63.8 | 48.9 | . 6 | 128.0 |
|  |  | \% within route of schistosome infection | 18.0\% | 57.8\% | 23.4\% | .8\% | 100.0\% |
|  |  | \% within main source of water supply | 32.4\% | 23.9\% | 12.7\% | 33.3\% | 20.6\% |
|  |  | \% of Total | 3.7\% | 11.9\% | 4.8\% | . $2 \%$ | 20.6\% |
|  | eating unhygienic | Count | 9 | 17 | 14 | 0 | 40 |
|  | food | Expected <br> Count | 4.6 | 19.9 | 15.3 | . 2 | 40.0 |
|  |  | \% within route of schistosome infection | 22.5\% | 42.5\% | 35.0\% | .0\% | 100.0\% |
|  |  | \% within main source of water supply | 12.7\% | 5.5\% | 5.9\% | . $0 \%$ | 6.5\% |
|  |  | \% of Total | 1.5\% | 2.7\% | 2.3\% | . $0 \%$ | 6.5\% |
|  | playing with soil | Count | 5 | 20 | 20 | 0 | 45 |
|  |  | Expected <br> Count | 5.2 | 22.4 | 17.2 | . 2 | 45.0 |
|  |  | \% within route of schistosome infection | 11.1\% | 44.4\% | 44.4\% | . $0 \%$ | 100.0\% |
|  |  | \% within main source of water supply | 7.0\% | 6.5\% | 8.4\% | .0\% | 7.3\% |
|  |  | \% of Total | .8\% | 3.2\% | 3.2\% | .0\% | 7.3\% |
|  | i don't know | Count | 34 | 198 | 173 | 2 | 407 |


|  | Expected <br> Count | 46.6 | 202.8 | 155.6 | 2.0 | 407.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within route of schistosome infection | 8.4\% | 48.6\% | 42.5\% | .5\% | 100.0\% |
|  | \% within main source of water supply | 47.9\% | 64.1\% | 73.0\% | 66.7\% | 65.6\% |
|  | \% of Total | 5.5\% | 31.9\% | 27.9\% | .3\% | 65.6\% |
| Total | Count | 71 | 309 | 237 | 3 | 620 |
|  | Expected <br> Count | 71.0 | 309.0 | 237.0 | 3.0 | 620.0 |
|  | \% within route of schistosome infection | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |
|  | \% within main source of water supply | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 11.5\% | 49.8\% | 38.2\% | .5\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $11.541^{\mathrm{a}}$ | 12 | .483 |
| Likelihood Ratio | 13.795 | 12 | .314 |
| Linear-by-Linear Association | 2.848 | 1 | .092 |
| N of Valid Cases | 620 |  |  |

a. 6 cells (30.0\%) have expected count less than 5 . The minimum expected count is .77 .
route of schistosome infection * main source of water supply

Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $25.354^{\text {a }}$ | 9 | .003 |
| Likelihood Ratio | 25.481 | 9 | .002 |
| Linear-by-Linear Association | 19.264 | 1 | .000 |
| N of Valid Cases | 620 |  |  |

a. 5 cells ( $31.3 \%$ ) have expected count less than 5 . The minimum expected count is .19 .
route of schistosome infection * contact made with water

|  |  |  | contact made with water |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | play or bath | washin <br> g | agricultural work | fishing | no contact |  |
| route of schistosome infection | contact with contaminated natural water | Count | 30 | 58 | 10 | 1 | 29 | 128 |
|  |  | Expected <br> Count | 28.3 | 71.0 | 10.5 | 2.7 | 15.5 | 128.0 |
|  |  | \% within route of schistosom e infection | 23.4\% | 45.3\% | 7.8\% | .8\% | 22.7\% | 100.0\% |
|  |  | \% within <br> contact <br> made with water | 21.9\% | 16.9\% | 19.6\% | 7.7\% | 38.7\% | 20.6\% |
|  |  | \% of Total | 4.8\% | 9.4\% | 1.6\% | . $2 \%$ | 4.7\% | 20.6\% |
|  | eating <br> unhygienic <br> food | Count | 11 | 22 | 1 | 3 | 3 | 40 |
|  |  | Expected Count | 8.8 | 22.2 | 3.3 | . 8 | 4.8 | 40.0 |
|  |  | \% within route of schistosom e infection | 27.5\% | 55.0\% | 2.5\% | 7.5\% | 7.5\% | 100.0\% |
|  |  | \% within <br> contact <br> made with water | 8.0\% | 6.4\% | 2.0\% | 23.1\% | 4.0\% | 6.5\% |
|  |  | \% of Total | 1.8\% | 3.5\% | . $2 \%$ | .5\% | . $5 \%$ | 6.5\% |
|  | playing with soil | Count | 9 | 30 | 3 | 2 | 1 | 45 |
|  |  | Expected Count | 9.9 | 25.0 | 3.7 | . 9 | 5.4 | 45.0 |
|  |  | \% within route of | 20.0\% | 66.7\% | 6.7\% | 4.4\% | 2.2\% | 100.0\% |


|  |  | schistosom <br> e infection |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% within contact made with water | 6.6\% | 8.7\% | 5.9\% | 15.4\% | 1.3\% | 7.3\% |
|  |  | \% of Total | 1.5\% | 4.8\% | . $5 \%$ | . $3 \%$ | . $2 \%$ | 7.3\% |
|  | i don't know | Count | 87 | 234 | 37 | 7 | 42 | 407 |
|  |  | Expected <br> Count | 89.9 | 225.8 | 33.5 | 8.5 | 49.2 | 407.0 |
|  |  | \% within route of schistosom e infection | 21.4\% | 57.5\% | 9.1\% | 1.7\% | 10.3\% | 100.0\% |
|  |  | \% within contact made with water | 63.5\% | 68.0\% | 72.5\% | 53.8\% | 56.0\% | 65.6\% |
|  |  | \% of Total | 14.0\% | 37.7\% | 6.0\% | 1.1\% | 6.8\% | 65.6\% |
| Total |  | Count | 137 | 344 | 51 | 13 | 75 | 620 |
|  |  | Expected <br> Count | 137.0 | 344.0 | 51.0 | 13.0 | 75.0 | 620.0 |
|  |  | \% within route of schistosom e infection | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |
|  |  | \% within contact made with water | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 22.1\% | 55.5\% | 8.2\% | 2.1\% | 12.1\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $31.913^{\mathrm{a}}$ | 12 | .001 |
| Likelihood Ratio | 29.995 | 12 | .003 |
| Linear-by-Linear Association | 5.155 | 1 | .023 |
| N of Valid Cases | 620 |  |  |

a. 6 cells ( $30.0 \%$ ) have expected count less than 5 . The minimum expected count is .84 .
route of schistosome infection * mother complete primary education

Crosstab

|  |  |  | mother complete primary education |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | yes | no |  |
| route of schistosome infection | contact with contaminated natural water | Count | 102 | 26 | 128 |
|  |  | Expected Count | 89.2 | 38.8 | 128.0 |
|  |  | \% within route of schistosome infection | 79.7\% | 20.3\% | 100.0\% |
|  |  | \% within mother complete primary education | 23.6\% | 13.8\% | 20.6\% |
|  |  | \% of Total | 16.5\% | 4.2\% | 20.6\% |
|  | eating unhygienic food | Count | 31 | 9 | 40 |
|  |  | Expected Count | 27.9 | 12.1 | 40.0 |
|  |  | \% within route of schistosome infection | 77.5\% | 22.5\% | 100.0\% |
|  |  | \% within mother complete primary education | 7.2\% | 4.8\% | 6.5\% |
|  |  | \% of Total | 5.0\% | 1.5\% | 6.5\% |
|  | playing with soil | Count | 32 | 13 | 45 |
|  |  | Expected Count | 31.4 | 13.6 | 45.0 |
|  |  | \% within route of schistosome infection | 71.1\% | 28.9\% | 100.0\% |
|  |  | \% within mother complete primary education | 7.4\% | 6.9\% | 7.3\% |
|  |  | \% of Total | 5.2\% | 2.1\% | 7.3\% |
|  | i don't know | Count | 267 | 140 | 407 |


|  | Expected Count | 283.6 | 123.4 | 407.0 |
| :---: | :---: | :---: | :---: | :---: |
|  | \% within route of schistosome infection | 65.6\% | 34.4\% | 100.0\% |
|  | \% within mother complete primary education | 61.8\% | 74.5\% | 65.6\% |
|  | \% of Total | 43.1\% | 22.6\% | 65.6\% |
| Total | Count | 432 | 188 | 620 |
|  | Expected Count | 432.0 | 188.0 | 620.0 |
|  | \% within route of schistosome infection | 69.7\% | 30.3\% | 100.0\% |
|  | \% within mother complete primary education | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 69.7\% | 30.3\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $10.472^{\mathrm{a}}$ | 3 | .015 |
| Likelihood Ratio | 10.946 | 3 | .012 |
| Linear-by-Linear | 10.345 | 1 | .001 |
| Association | 620 |  |  |
| N of Valid Cases |  |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 12.13 .

Crosstab


|  | \% within father <br> complete primary <br> education | $61.4 \%$ | $79.7 \%$ | $65.6 \%$ |
| :--- | :--- | :--- | :--- | :--- |
|  | \% of Total | $47.3 \%$ | $18.4 \%$ | $65.6 \%$ |
| Total | Count | 477 | 143 | 620 |
|  | Expected Count <br> \% within route of <br> schistosome infection | $76.9 \%$ | $23.1 \%$ | $100.0 \%$ |
| \% within father <br> complete primary <br> education <br> \% of Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |  |

route of schistosome infection * father complete primary education

Crosstab

|  |  | mother's occupation |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | trading | farming | salary earner | d |


|  | i don't know | Count | 179 | 109 | 81 | 38 | 407 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Expected Count | 191.0 | 90.6 | 84.7 | 40.7 | 407.0 |
|  |  | \% within route of schistosome infection | 44.0\% | 26.8\% | 19.9\% | 9.3\% | 100.0\% |
|  |  | \% within mother's occupation | 61.5\% | 79.0\% | 62.8\% | 61.3\% | 65.6\% |
|  |  | \% of Total | 28.9\% | 17.6\% | 13.1\% | 6.1\% | 65.6\% |
| Total |  | Count | 291 | 138 | 129 | 62 | 620 |
|  |  | Expected <br> Count | 291.0 | 138.0 | 129.0 | 62.0 | 620.0 |
|  |  | \% within route of schistosome infection | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |
|  |  | \% within mother's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  |  | \% of Total | 46.9\% | 22.3\% | 20.8\% | 10.0\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $17.624^{a}$ | 3 | .001 |
| Likelihood Ratio | 19.536 | 3 | .000 |
| Linear-by-Linear Association | 14.619 | 1 | .000 |
| N of Valid Cases | 620 |  |  |

a. 0 cells $(.0 \%)$ have expected count less than 5 . The minimum expected count is 9.23.

|  |  |  | father's occupation |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | fishing | farming | trading | salary earner | wage <br> earner |  |
| route of schistosome infection | contact with | Count | 1 | 38 | 34 | 40 | 15 | 128 |
|  | natural water | Expected Count | 3.1 | 54.3 | 33.2 | 27.3 | 10.1 | 128.0 |
|  |  | \% within route of schistosome infection | .8\% | 29.7\% | 26.6\% | 31.2\% | 11.7\% | 100.0\% |
|  |  | \% within <br> father's <br> occupation | 6.7\% | 14.4\% | 21.1\% | 30.3\% | 30.6\% | 20.6\% |
|  |  | \% of Total | . $2 \%$ | 6.1\% | 5.5\% | 6.5\% | 2.4\% | 20.6\% |
|  | eating unhygienic | Count | 2 | 10 | 17 | 10 | 1 | 40 |
|  | food | Expected Count | 1.0 | 17.0 | 10.4 | 8.5 | 3.2 | 40.0 |
|  |  | \% within route of schistosome infection | 5.0\% | 25.0\% | 42.5\% | 25.0\% | 2.5\% | 100.0\% |
|  |  | \% within <br> father's <br> occupation | 13.3\% | 3.8\% | 10.6\% | 7.6\% | 2.0\% | 6.5\% |
|  |  | \% of Total | .3\% | 1.6\% | 2.7\% | 1.6\% | . $2 \%$ | 6.5\% |
|  | playing with soil | Count | 5 | 25 | 13 | 2 | 0 | 45 |
|  |  | Expected Count | 1.1 | 19.1 | 11.7 | 9.6 | 3.6 | 45.0 |
|  |  | \% within route of schistosome infection | 11.1\% | 55.6\% | 28.9\% | 4.4\% | .0\% | 100.0\% |
|  |  | \% within <br> father's <br> occupation | 33.3\% | 9.5\% | 8.1\% | 1.5\% | .0\% | 7.3\% |
|  |  | \% of Total | .8\% | 4.0\% | 2.1\% | . $3 \%$ | . $0 \%$ | 7.3\% |
|  | i don't know | Count | 7 | 190 | 97 | 80 | 33 | 407 |
|  |  | Expected Count | 9.8 | 172.6 | 105.7 | 86.7 | 32.2 | 407.0 |


|  | \% within route of schistosome infection | 1.7\% | 46.7\% | 23.8\% | 19.7\% | 8.1\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within father's occupation | 46.7\% | 72.2\% | 60.2\% | 60.6\% | 67.3\% | 65.6\% |
|  | \% of Total | 1.1\% | 30.6\% | 15.6\% | 12.9\% | 5.3\% | 65.6\% |
| Total | Count | 15 | 263 | 161 | 132 | 49 | 620 |
|  | Expected Count | 15.0 | 263.0 | 161.0 | 132.0 | 49.0 | 620.0 |
|  | \% within route of schistosome infection | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |
|  | \% within father's occupation | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 2.4\% | 42.4\% | 26.0\% | 21.3\% | 7.9\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $22.858^{\mathrm{a}}$ | 9 | .007 |
| Likelihood Ratio | 25.148 | 9 | .003 |
| Linear-by-Linear Association | .124 | 1 | .725 |
| N of Valid Cases | 620 |  |  |

a. 2 cells $(12.5 \%)$ have expected count less than 5 . The minimum expected count is 4.00 .

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $53.957^{\mathrm{a}}$ | 12 | .000 |
| Likelihood Ratio | 53.789 | 12 | .000 |
| Linear-by-Linear Association | 11.214 | 1 | .001 |
| N of Valid Cases | 620 |  |  |

a. 5 cells $(25.0 \%)$ have expected count less than 5 . The minimum expected count is .97 .

## Crosstab

|  |  |  | sex |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | male | female | Total |
| route of schistosome infection | contact with contaminated natural water | Count | 80 | 48 | 128 |
|  |  | Expected Count | 74.7 | 53.3 | 128.0 |
|  |  | \% within route of schistosome infection | 62.5\% | 37.5\% | 100.0\% |
|  |  | \% within sex | 22.1\% | 18.6\% | 20.6\% |
|  |  | \% of Total | 12.9\% | 7.7\% | 20.6\% |
|  | eating unhygienic food | Count | 22 | 18 | 40 |
|  |  | Expected Count | 23.4 | 16.6 | 40.0 |
|  |  | \% within route of schistosome infection | 55.0\% | 45.0\% | 100.0\% |
|  |  | \% within sex | 6.1\% | 7.0\% | 6.5\% |
|  |  | \% of Total | 3.5\% | 2.9\% | 6.5\% |
|  | playing with soil | Count | 21 | 24 | 45 |
|  |  | Expected Count | 26.3 | 18.7 | 45.0 |
|  |  | \% within route of schistosome infection | 46.7\% | 53.3\% | 100.0\% |
|  |  | \% within sex | 5.8\% | 9.3\% | 7.3\% |
|  |  | \% of Total | 3.4\% | 3.9\% | 7.3\% |
|  | i don't know | Count | 239 | 168 | 407 |
|  |  | Expected Count | 237.6 | 169.4 | 407.0 |
|  |  | \% within route of schistosome infection | 58.7\% | 41.3\% | 100.0\% |
|  |  | \% within sex | 66.0\% | 65.1\% | 65.6\% |


| \% of Total | $38.5 \%$ | $27.1 \%$ | $65.6 \%$ |  |
| :--- | :--- | :--- | :--- | :--- |
| Total | Count | 362 | 258 | 620 |
|  | Expected Count | 362.0 | 258.0 | 620.0 |
|  | \% within route of <br> schistosome infection | $58.4 \%$ | $41.6 \%$ | $100.0 \%$ |
|  | \% within sex | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
|  |  | $58.4 \%$ | $41.6 \%$ | $100.0 \%$ |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $3.643^{a}$ | 3 | .303 |
| Likelihood Ratio | 3.608 | 3 | .307 |
| Linear-by-Linear Association | .267 | 1 | .605 |
| N of Valid Cases | 620 |  |  |

a. 0 cells (. $0 \%$ ) have expected count less than 5 . The minimum expected count is 16.65.

## Crosstab

|  |  |  | Age distribution |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | <_4 | 5-9 | 10-14 | 15-19 | >_20 |  |
| route of schistosome infection | contact with | Count | 8 | 32 | 59 | 29 | 0 | 128 |
|  | natural water | Expected Count | 3.5 | 32.2 | 55.7 | 34.7 | 1.9 | 128.0 |
|  |  | \% within route of schistosome infection | 6.2\% | 25.0\% | 46.1\% | 22.7\% | .0\% | 100.0\% |
|  |  | \% within Age distribution | 47.1\% | 20.5\% | 21.9\% | 17.3\% | .0\% | 20.6\% |
|  |  | \% of Total | 1.3\% | 5.2\% | 9.5\% | 4.7\% | .0\% | 20.6\% |
|  | eating unhygienic food | Count | 0 | 6 | 22 | 11 | 1 | 40 |
|  |  | Expected Count | 1.1 | 10.1 | 17.4 | 10.8 | . 6 | 40.0 |
|  |  | \% within route of schistosome infection | .0\% | 15.0\% | 55.0\% | 27.5\% | 2.5\% | 100.0\% |
|  |  | \% within Age distribution | .0\% | 3.8\% | 8.1\% | 6.5\% | 11.1\% | 6.5\% |
|  |  | \% of Total | . $0 \%$ | 1.0\% | 3.5\% | 1.8\% | . $2 \%$ | 6.5\% |
|  | playing with soil | Count | 0 | 8 | 22 | 13 | 2 | 45 |
|  |  | Expected Count | 1.2 | 11.3 | 19.6 | 12.2 | . 7 | 45.0 |
|  |  | \% within route of schistosome infection | .0\% | 17.8\% | 48.9\% | 28.9\% | 4.4\% | 100.0\% |
|  |  | \% within Age distribution | .0\% | 5.1\% | 8.1\% | 7.7\% | 22.2\% | 7.3\% |
|  |  | \% of Total | . $0 \%$ | 1.3\% | 3.5\% | 2.1\% | .3\% | 7.3\% |
|  | i don't know | Count | 9 | 110 | 167 | 115 | 6 | 407 |
|  |  | Expected Count | 11.2 | 102.4 | 177.2 | 110.3 | 5.9 | 407.0 |


|  | \% within route of schistosome infection | 2.2\% | 27.0\% | 41.0\% | 28.3\% | 1.5\% | 100.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% within Age distribution | 52.9\% | 70.5\% | 61.9\% | 68.5\% | 66.7\% | 65.6\% |
|  | \% of Total | 1.5\% | 17.7\% | 26.9\% | 18.5\% | 1.0\% | 65.6\% |
| Total | Count | 17 | 156 | 270 | 168 | 9 | 620 |
|  | Expected Count | 17.0 | 156.0 | 270.0 | 168.0 | 9.0 | 620.0 |
|  | \% within route of schistosome infection | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |
|  | \% within Age distribution | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
|  | \% of Total | 2.7\% | 25.2\% | 43.5\% | 27.1\% | 1.5\% | 100.0\% |

## Chi-Square Tests

|  | Value | df | Asymp. Sig. (2- <br> sided) |
| :--- | :--- | :--- | :--- |
| Pearson Chi-Square | $20.084^{\mathrm{a}}$ | 12 | .066 |
| Likelihood Ratio | 22.045 | 12 | .037 |
| Linear-by-Linear Association | 1.453 | 1 | .228 |
| N of Valid Cases | 620 |  |  |

a. 6 cells ( $30.0 \%$ ) have expected count less than 5 . The minimum expected count is .58 .

