

**Table S1:** Monthly counts of Salmonellosis, Shigellosis, Pneumonia and Influenza infections and Simulated data

| Salmonellosis |       |       | Shigellosis |       |       | Pneumonia and Influenza |       |       | Simulated Data |       |       |
|---------------|-------|-------|-------------|-------|-------|-------------------------|-------|-------|----------------|-------|-------|
| Year          | Month | Count | Year        | Month | Count | Year                    | Month | Count | Year           | Month | Count |
| 1991          | 1     | 133   | 2003        | 1     | 4     | 1968                    | 1     | 81    | 1              | 1     | 9     |
| 1991          | 2     | 99    | 2003        | 2     | 3     | 1968                    | 2     | 45    | 1              | 2     | 9     |
| 1991          | 3     | 118   | 2003        | 3     | 6     | 1968                    | 3     | 34    | 1              | 3     | 9     |
| 1991          | 4     | 175   | 2003        | 4     | 8     | 1968                    | 4     | 28    | 1              | 4     | 10    |
| 1991          | 5     | 195   | 2003        | 5     | 4     | 1968                    | 5     | 25    | 1              | 5     | 10    |
| 1991          | 6     | 329   | 2003        | 6     | 8     | 1968                    | 6     | 25    | 1              | 6     | 10    |
| 1991          | 7     | 386   | 2003        | 7     | 17    | 1968                    | 7     | 25    | 1              | 7     | 8     |
| 1991          | 8     | 376   | 2003        | 8     | 15    | 1968                    | 8     | 25    | 1              | 8     | 7     |
| 1991          | 9     | 353   | 2003        | 9     | 7     | 1968                    | 9     | 23    | 1              | 9     | 6     |
| 1991          | 10    | 270   | 2003        | 10    | 6     | 1968                    | 10    | 26    | 1              | 10    | 4     |
| 1991          | 11    | 173   | 2003        | 11    | 4     | 1968                    | 11    | 32    | 1              | 11    | 6     |
| 1991          | 12    | 172   | 2003        | 12    | 6     | 1968                    | 12    | 73    | 1              | 12    | 7     |
| 1992          | 1     | 142   | 2004        | 1     | 4     | 1969                    | 1     | 82    | 2              | 1     | 14    |
| 1992          | 2     | 130   | 2004        | 2     | 1     | 1969                    | 2     | 44    | 2              | 2     | 18    |
| 1992          | 3     | 170   | 2004        | 3     | 8     | 1969                    | 3     | 38    | 2              | 3     | 21    |
| 1992          | 4     | 142   | 2004        | 4     | 4     | 1969                    | 4     | 29    | 2              | 4     | 20    |
| 1992          | 5     | 177   | 2004        | 5     | 17    | 1969                    | 5     | 26    | 2              | 5     | 19    |
| 1992          | 6     | 200   | 2004        | 6     | 24    | 1969                    | 6     | 24    | 2              | 6     | 18    |
| 1992          | 7     | 280   | 2004        | 7     | 9     | 1969                    | 7     | 25    | 2              | 7     | 14    |
| 1992          | 8     | 290   | 2004        | 8     | 5     | 1969                    | 8     | 23    | 2              | 8     | 14    |
| 1992          | 9     | 249   | 2004        | 9     | 3     | 1969                    | 9     | 23    | 2              | 9     | 14    |
| 1992          | 10    | 231   | 2004        | 10    | 7     | 1969                    | 10    | 27    | 2              | 10    | 12    |
| 1992          | 11    | 189   | 2004        | 11    | 9     | 1969                    | 11    | 30    | 2              | 11    | 17    |
| 1992          | 12    | 142   | 2004        | 12    | 7     | 1969                    | 12    | 36    | 2              | 12    | 21    |
| 1993          | 1     | 145   | 2005        | 1     | 6     | 1970                    | 1     | 49    | 3              | 1     | 29    |
| 1993          | 2     | 106   | 2005        | 2     | 2     | 1970                    | 2     | 57    | 3              | 2     | 30    |
| 1993          | 3     | 147   | 2005        | 3     | 10    | 1970                    | 3     | 36    | 3              | 3     | 30    |
| 1993          | 4     | 136   | 2005        | 4     | 2     | 1970                    | 4     | 27    | 3              | 4     | 27    |
| 1993          | 5     | 157   | 2005        | 5     | 9     | 1970                    | 5     | 24    | 3              | 5     | 24    |
| 1993          | 6     | 201   | 2005        | 6     | 5     | 1970                    | 6     | 22    | 3              | 6     | 23    |
| 1993          | 7     | 263   | 2005        | 7     | 10    | 1970                    | 7     | 23    | 3              | 7     | 20    |
| 1993          | 8     | 237   | 2005        | 8     | 12    | 1970                    | 8     | 23    | 3              | 8     | 21    |
| 1993          | 9     | 207   | 2005        | 9     | 6     | 1970                    | 9     | 23    | 3              | 9     | 20    |
| 1993          | 10    | 218   | 2005        | 10    | 9     | 1970                    | 10    | 26    | 3              | 10    | 16    |
| 1993          | 11    | 179   | 2005        | 11    | 6     | 1970                    | 11    | 29    | 3              | 11    | 20    |
| 1993          | 12    | 144   | 2005        | 12    | 22    | 1970                    | 12    | 31    | 3              | 12    | 25    |
| 1994          | 1     | 115   | 2006        | 1     | 14    | 1971                    | 1     | 37    | 4              | 1     | 34    |
| 1994          | 2     | 110   | 2006        | 2     | 5     | 1971                    | 2     | 37    | 4              | 2     | 33    |
| 1994          | 3     | 136   | 2006        | 3     | 5     | 1971                    | 3     | 34    | 4              | 3     | 36    |
| 1994          | 4     | 148   | 2006        | 4     | 12    | 1971                    | 4     | 29    | 4              | 4     | 34    |
| 1994          | 5     | 158   | 2006        | 5     | 11    | 1971                    | 5     | 24    | 4              | 5     | 32    |
| 1994          | 6     | 235   | 2006        | 6     | 17    | 1971                    | 6     | 23    | 4              | 6     | 30    |

|      |    |     |      |    |    |      |    |    |   |    |    |
|------|----|-----|------|----|----|------|----|----|---|----|----|
| 1994 | 7  | 280 | 2006 | 7  | 11 | 1971 | 7  | 21 | 4 | 7  | 26 |
| 1994 | 8  | 299 | 2006 | 8  | 5  | 1971 | 8  | 21 | 4 | 8  | 26 |
| 1994 | 9  | 289 | 2006 | 9  | 2  | 1971 | 9  | 21 | 4 | 9  | 23 |
| 1994 | 10 | 278 | 2006 | 10 | 2  | 1971 | 10 | 25 | 4 | 10 | 21 |
| 1994 | 11 | 170 | 2006 | 11 | 5  | 1971 | 11 | 28 | 4 | 11 | 26 |
| 1994 | 12 | 183 | 2006 | 12 | 4  | 1971 | 12 | 34 | 4 | 12 | 30 |
| 1995 | 1  | 165 | 2007 | 1  | 5  | 1972 | 1  | 64 | 5 | 1  | 40 |
| 1995 | 2  | 119 | 2007 | 2  | 6  | 1972 | 2  | 52 | 5 | 2  | 43 |
| 1995 | 3  | 143 | 2007 | 3  | 6  | 1972 | 3  | 30 | 5 | 3  | 50 |
| 1995 | 4  | 141 | 2007 | 4  | 3  | 1972 | 4  | 25 | 5 | 4  | 47 |
| 1995 | 5  | 169 | 2007 | 5  | 6  | 1972 | 5  | 21 | 5 | 5  | 43 |
| 1995 | 6  | 200 | 2007 | 6  | 9  | 1972 | 6  | 20 | 5 | 6  | 40 |
| 1995 | 7  | 275 | 2007 | 7  | 0  | 1972 | 7  | 23 | 5 | 7  | 33 |
| 1995 | 8  | 302 | 2007 | 8  | 7  | 1972 | 8  | 21 | 5 | 8  | 32 |
| 1995 | 9  | 294 | 2007 | 9  | 1  | 1972 | 9  | 22 | 5 | 9  | 29 |
| 1995 | 10 | 248 | 2007 | 10 | 1  | 1972 | 10 | 25 | 5 | 10 | 27 |
| 1995 | 11 | 219 | 2007 | 11 | 9  | 1972 | 11 | 26 | 5 | 11 | 35 |
| 1995 | 12 | 197 | 2007 | 12 | 2  | 1972 | 12 | 34 | 5 | 12 | 39 |
| 1996 | 1  | 148 | 2008 | 1  | 7  | 1973 | 1  | 60 | 6 | 1  | 48 |
| 1996 | 2  | 138 | 2008 | 2  | 7  | 1973 | 2  | 52 | 6 | 2  | 50 |
| 1996 | 3  | 137 | 2008 | 3  | 8  | 1973 | 3  | 31 | 6 | 3  | 55 |
| 1996 | 4  | 143 | 2008 | 4  | 6  | 1973 | 4  | 26 | 6 | 4  | 53 |
| 1996 | 5  | 208 | 2008 | 5  | 1  | 1973 | 5  | 22 | 6 | 5  | 50 |
| 1996 | 6  | 225 | 2008 | 6  | 8  | 1973 | 6  | 22 | 6 | 6  | 45 |
| 1996 | 7  | 238 | 2008 | 7  | 18 | 1973 | 7  | 22 | 6 | 7  | 37 |
| 1996 | 8  | 255 | 2008 | 8  | 11 | 1973 | 8  | 22 | 6 | 8  | 36 |
| 1996 | 9  | 252 | 2008 | 9  | 8  | 1973 | 9  | 24 | 6 | 9  | 33 |
| 1996 | 10 | 217 | 2008 | 10 | 2  | 1973 | 10 | 25 | 6 | 10 | 32 |
| 1996 | 11 | 188 | 2008 | 11 | 5  | 1973 | 11 | 26 | 6 | 11 | 42 |
| 1996 | 12 | 168 | 2008 | 12 | 5  | 1973 | 12 | 28 | 6 | 12 | 48 |
| 1997 | 1  | 136 | 2009 | 1  | 13 | 1974 | 1  | 31 | 7 | 1  | 55 |
| 1997 | 2  | 110 | 2009 | 2  | 11 | 1974 | 2  | 33 | 7 | 2  | 56 |
| 1997 | 3  | 126 | 2009 | 3  | 9  | 1974 | 3  | 35 | 7 | 3  | 63 |
| 1997 | 4  | 151 | 2009 | 4  | 5  | 1974 | 4  | 31 | 7 | 4  | 65 |
| 1997 | 5  | 158 | 2009 | 5  | 10 | 1974 | 5  | 22 | 7 | 5  | 60 |
| 1997 | 6  | 155 | 2009 | 6  | 22 | 1974 | 6  | 20 | 7 | 6  | 51 |
| 1997 | 7  | 239 | 2009 | 7  | 13 | 1974 | 7  | 22 | 7 | 7  | 45 |
| 1997 | 8  | 221 | 2009 | 8  | 12 | 1974 | 8  | 19 | 7 | 8  | 46 |
| 1997 | 9  | 226 | 2009 | 9  | 7  | 1974 | 9  | 20 | 7 | 9  | 44 |
| 1997 | 10 | 203 | 2009 | 10 | 15 | 1974 | 10 | 23 | 7 | 10 | 42 |
| 1997 | 11 | 163 | 2009 | 11 | 10 | 1974 | 11 | 23 | 7 | 11 | 51 |
| 1997 | 12 | 132 | 2009 | 12 | 7  | 1974 | 12 | 32 | 7 | 12 | 55 |
| 1998 | 1  | 140 | 2010 | 1  | 13 | 1975 | 1  | 49 | 8 | 1  | 62 |
| 1998 | 2  | 94  | 2010 | 2  | 9  | 1975 | 2  | 47 | 8 | 2  | 63 |
| 1998 | 3  | 111 | 2010 | 3  | 7  | 1975 | 3  | 31 | 8 | 3  | 72 |
| 1998 | 4  | 104 | 2010 | 4  | 13 | 1975 | 4  | 23 | 8 | 4  | 72 |
| 1998 | 5  | 188 | 2010 | 5  | 6  | 1975 | 5  | 20 | 8 | 5  | 67 |



|      |    |     |
|------|----|-----|
| 2002 | 5  | 150 |
| 2002 | 6  | 145 |
| 2002 | 7  | 197 |
| 2002 | 8  | 242 |
| 2002 | 9  | 206 |
| 2002 | 10 | 187 |
| 2002 | 11 | 143 |
| 2002 | 12 | 100 |