**Additional File 4**

**Table 1** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2009.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Chengdong  | 2110.3 | 3.06 | 0.002 |
|  | Huangzhong |  363.9 | 0.01 | 0.001 |
|  | Chengzhong  | 5057.3 | 6.97 | 0.001 |
|  | Chengbei  | 2503.5 | 3.52 | 0.001 |
|  | Chengxi  | 1211.4 | 2.43 | 0.002 |
| Low-Risk Cluster | Chindu |  0.0 | 0.16 | 0.026 |
|  | Qumarleeb |  0.0 | 0.15 | 0.027 |
|  | Yushu  |  0.0 | 0.16 | 0.001 |
| 　 | Golmud  |  88.3 | 0.12 | 0.001 |

**Table 2** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2010.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Huzhu  |  778.1 | 0.10 | 0.006 |
|  | Chengdong  | 5271.2 | 4.86 | 0.001 |
|  | Chengzhong | 7056.5 | 7.92 | 0.001 |
|  | Chengbei  | 5631.0 | 4.69 | 0.001 |
|  | Chengxi  | 2971.1 | 3.65 | 0.001 |
| Low-Risk Cluster | Maqeen  |  198.9 | 0.12 | 0.020 |
|  | Chindu  |  0.0 | 0.18 | 0.018 |
|  | Zhidoi  |  37.7 | 0.16 | 0.026 |
|  | Nangqeen  |  0.0 | 0.18 | 0.045 |
|  | Qumarleeb  |  0.0 | 0.17 | 0.022 |
|  | Yushu  |  0.0 | 0.17 | 0.008 |
|  | Madoi  |  0.0 | 0.16 | 0.035 |
| 　 | Golmud  |  90.7 | 0.15 | 0.009 |

**Table 3** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2011.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Chengdong  |  684.6 | 2.69 | 0.001 |
|  | Chengzhong | 1619.7 | 7.23 | 0.001 |
|  | Chengbei  |  697.2 | 2.88 | 0.001 |
|  | Chengxi  |  648.9 | 4.29 | 0.004 |
| Low-Risk Cluster | Xinghai  |  0.0 | 0.15 | 0.018 |
|  | Maqeen  |  19.9 | 0.13 | 0.005 |
|  | Qumarleeb  |  0.0 | 0.16 | 0.009 |
|  | Yushu  |  0.0 | 0.16 | 0.009 |
|  | Madoi  |  0.0 | 0.16 | 0.021 |
| 　 | Zadoi  |  0.0 | 0.16 | 0.049 |

**Table 4** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2012.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Ping'an  | 210.9 | 0.66 | 0.009 |
|  | Huzhu  | 574.1 | 2.46 | 0.007 |
|  | Chengdong  | 762.0 | 4.57 | 0.001 |
|  | Datong  | 240.0 | 0.61 | 0.040 |
|  | Chengzhong  | 447.1 | 3.20 | 0.002 |
|  | Chengbei  | 325.5 | 2.22 | 0.001 |
| Low-Risk Cluster | Maqeen  |  60.2 | 0.14 | 0.036 |
|  | Qumarleeb |  0.0 | 0.32 | 0.023 |
|  | Yushu |  13.3 | 0.31 | 0.015 |
| 　 | Madoi  |  0.0 | 0.32 | 0.037 |

**Table 5** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2013.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Ping'an  |  533.0 | 0.55 | 0.028 |
|  | Huzhu  |  610.0 | 0.98 | 0.001 |
|  | Chengdong  | 1560.3 | 4.76 | 0.001 |
|  | Datong  |  388.6 | 0.26 | 0.031 |
|  | Huangzhong |  372.8 | 0.45 | 0.001 |
|  | Chengzhong  | 1459.9 | 6.81 | 0.001 |
|  | Chengbei  | 1492.7 | 5.25 | 0.001 |
|  | Chengxi | 1617.2 | 6.55 | 0.003 |
| Low-Risk Cluster | Tongde  |  31.7 | 0.20 | 0.048 |
|  | Maqeen  |  42.2 | 0.20 | 0.007 |
|  | Jigzhi |  39.3 | 0.21 | 0.017 |
|  | Chindu |  0.0 | 0.26 | 0.017 |
|  | Qumarleeb  |  0.0 | 0.24 | 0.022 |
|  | Yushu  |  0.0 | 0.25 | 0.003 |
|  | Madoi  |  0.0 | 0.24 | 0.019 |
|  | Dulan  |  17.2 | 0.20 | 0.036 |
| 　 | Golmud  |  82.7 | 0.15 | 0.024 |

**Table 6** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2014.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Incidence Rate | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Huzhu  |  602.2 | 0.39 | 0.002 |
|  | Chengdong  | 2111.1 | 2.85 | 0.009 |
|  | Chengzhong | 1324.3 | 2.66 | 0.002 |
|  | Chengbei  | 2076.2 | 3.07 | 0.003 |
|  | Chengxi  | 1553.1 | 2.41 | 0.027 |
| Low-Risk Cluster | Tongde |  15.4 | 0.40 | 0.030 |
|  | Xinghai |  11.8 | 0.38 | 0.026 |
|  | Maqeen  |  42.8 | 0.37 | 0.010 |
|  | Nangqeen  |  0.0 | 0.44 | 0.031 |
|  | Yushu  |  6.7 | 0.43 | 0.002 |
|  | Madoi  |  88.0 | 0.33 | 0.008 |
|  | Golmud  |  402.3 | 0.00 | 0.002 |
| 　 | Lenghu |  0.0 | 0.45 | 0.032 |

**Table 7** Statistically significant county-level high incidence and low incidence spatial clusters of Hand, Foot, and Mouth Disease identified using the Local Indicator for Spatial Autocorrelation in GeoDa software in 2015.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | County Name | Incidence Rate | Local Moran | *Ｐ-*value |
| High-Risk Cluster | Chengzhong | 750.6 | 1.54 | 0.008 |
|  | Chengbei  | 647.8 | 0.85 | 0.010 |
| Low-Risk Cluster | Zhidoi  |  55.9 | 0.57 | 0.046 |
|  | Nangqeen  |  76.7 | 0.81 | 0.002 |
|  | Qumarleeb  | 116.7 | 0.42 | 0.041 |
| 　 | Yushu  |  6.6 | 0.89 | 0.002 |