**Supplemental Table 1. The trend changes of SFTS incidence by regions and prefectures in Japan, 2013–2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Period 1 | |  | Period 2 | |  | Entire study period |
| Regions and Prefectures | Total cases of SFTS  (2013–2022) | Years | APC (95% CI) |  | Years | APC (95% CI) |  | Average APC (95% CI) |
| **Hokkaido/Tohoku** | **0** | **2013–2022** | **N/A** |  |  |  |  | **N/A** |
| **Kanto** | **2** | **2013–2022** | **N/A** |  |  |  |  | **N/A** |
| **Hokuriku/Chubu** | **18** | **2013–2020** | **4.8 (-42.6–34.5)** |  | **2020–2022** | **161.7\* (42.8–406.2)** |  | **28.5\* (10.9–51.0)** |
| **Kinki** | **81** | **2013–2022** | **18.5\* (10.2–32.3)** |  |  |  |  | **18.5\* (10.2–32.3)** |
| Mie | 24 | 2013–2022 | 26.9\* (0.8-80.1) |  |  |  |  | 26.9\* (0.8-80.1) |
| Wakayama | 34 | 2013–2022 | 11.9 (-8.3–45.3) |  |  |  |  | 11.9 (-8.3–45.3) |
| **Chugoku** | **215** | **2013–2022** | **15.5\* (8.4–26.3)** |  |  |  |  | **15.5\* (8.4–26.3)** |
| Shimane | 43 | 2013–2022 | 26.4\* (8.3–67.9) |  |  |  |  | 26.4\* (8.3–67.9) |
| Okayama | 27 | 2013–2022 | 19.1\* (4.3–51.8) |  |  |  |  | 19.1\* (4.3–51.8) |
| Hiroshima | 75 | 2013–2022 | 10.7 (-2.8–31.8) |  |  |  |  | 10.7 (-2.8–31.8) |
| Yamaguchi | 64 | 2013–2017 | 41.7\* (17.6–137.2) |  | 2017–2022 | -12.5\* (-34.9–-1.4) |  | 8.4 (-1.4–21.6) |
| **Shikoku** | **154** | **2013–2022** | **-3.3 (-14.6–7.7)** |  |  |  |  | **-3.3 (-14.6–7.7)** |
| Tokushima | 38 | 2013–2022 | -2.9 (-25.9–20.7) |  |  |  |  | -2.9 (-25.9–20.7) |
| Kagawa | 16 | 2013–2019 | 43.6\* (25.2–122.4) |  | 2019–2022 | -32.0\* (-66.5–-4.0) |  | 11.9 (-1.9–34.4) |
| Ehime | 39 | 2013–2022 | -13.4\* (-23.8–-5.2) |  |  |  |  | -13.4\* (-23.8–-5.2) |
| Kochi | 61 | 2013–2022 | 0.8 (-14.6–18.4) |  |  |  |  | 0.8 (-14.6–18.4) |
| **Kyushu** | **333** | **2013–2022** | **8.8\* (3.5–15.1)** |  |  |  |  | **8.8\* (3.5–15.1)** |
| Fukuoka | 26 | 2013–2022 | 0.3 (-14.8–20.2) |  |  |  |  | 0.3 (-14.8–20.2) |
| Saga | 15 | 2013–2022 | 11.6 (-3.5–39.6) |  |  |  |  | 11.6 (-3.5–39.6) |
| Nagasaki | 59 | 2013–2022 | 13.4\* (1.9–31.0) |  |  |  |  | 13.4\* (1.9–31.0) |
| Kumamoto | 35 | 2013–2022 | 15.1\* (1.6–39.5) |  |  |  |  | 15.1\* (1.6–39.5) |
| Oita | 35 | 2013–2022 | 15.0 (-0.4–38.5) |  |  |  |  | 15.0 (-0.4–38.5) |
| Miyazaki | 97 | 2013–2022 | 2.2 (-7.5–12.9) |  |  |  |  | 2.2 (-7.5–12.9) |
| Kagoshima | 65 | 2013–2022 | 5.4 (-6.0–19.0) |  |  |  |  | 5.4 (-6.0–19.0) |

\*Regions (colored in gray) and prefectures with a significantly increasing trend.

SFTS, severe fever with thrombocytopenia syndrome; CI, confidence interval; APC, annual percentage change; N/A, not applicable.

**Supplemental Table 2. Heatmap for the annual and mean incidence rates (per 100,000 people) of SFTS by prefecture**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **Mean rate** |
| **Hokkaido** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Aomori** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Iwate** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Miyagi** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Akita** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Yamagata** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Fukushima** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Ibaraki** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Tochigi** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Gunma** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Saitama** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Chiba** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Tokyo** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.007 | 0.00 |
| **Kanagawa** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Niigata** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Toyama** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.098 | 0.01 |
| **Ishikawa** | 0.000 | 0.000 | 0.173 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.02 |
| **Fukui** | 0.000 | 0.000 | 0.000 | 0.000 | 0.256 | 0.000 | 0.000 | 0.000 | 0.000 | 0.133 | 0.04 |
| **Yamanashi** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Nagano** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Gifu** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Shizuoka** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.111 | 0.168 | 0.03 |
| **Aichi** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.013 | 0.00 |
| **Mie** | 0.000 | 0.000 | 0.110 | 0.166 | 0.056 | 0.056 | 0.280 | 0.000 | 0.171 | 0.517 | 0.13 |
| **Shiga** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.071 | 0.000 | 0.01 |
| **Kyoto** | 0.000 | 0.000 | 0.077 | 0.038 | 0.038 | 0.077 | 0.000 | 0.078 | 0.117 | 0.039 | 0.05 |
| **Osaka** | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.011 | 0.000 | 0.000 | 0.000 | 0.011 | 0.00 |
| **Hyogo** | 0.036 | 0.000 | 0.000 | 0.000 | 0.018 | 0.000 | 0.018 | 0.000 | 0.018 | 0.037 | 0.01 |
| **Nara** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| **Wakayama** | 0.000 | 0.206 | 0.104 | 0.523 | 0.316 | 0.638 | 0.322 | 0.433 | 0.766 | 0.332 | 0.36 |
| **Tottori** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.362 | 0.546 | 0.184 | 0.11 |
| **Shimane** | 0.142 | 0.000 | 0.000 | 0.434 | 0.873 | 0.440 | 1.182 | 0.298 | 1.955 | 1.064 | 0.63 |
| **Okayama** | 0.104 | 0.104 | 0.000 | 0.052 | 0.000 | 0.105 | 0.158 | 0.371 | 0.320 | 0.215 | 0.14 |
| **Hiroshima** | 0.140 | 0.105 | 0.352 | 0.106 | 0.176 | 0.354 | 0.249 | 0.429 | 0.468 | 0.290 | 0.27 |
| **Yamaguchi** | 0.211 | 0.283 | 0.427 | 0.287 | 0.868 | 0.584 | 0.811 | 0.447 | 0.301 | 0.457 | 0.47 |
| **Tokushima** | 0.260 | 0.917 | 0.397 | 1.067 | 0.538 | 0.136 | 1.236 | 0.000 | 0.421 | 0.142 | 0.51 |
| **Kagawa** | 0.000 | 0.000 | 0.102 | 0.103 | 0.310 | 0.104 | 0.418 | 0.316 | 0.212 | 0.107 | 0.17 |
| **Ehime** | 0.569 | 0.788 | 0.072 | 0.073 | 0.292 | 0.221 | 0.223 | 0.150 | 0.151 | 0.306 | 0.29 |
| **Kochi** | 0.404 | 1.495 | 0.412 | 0.971 | 0.700 | 0.707 | 1.288 | 0.867 | 0.585 | 1.183 | 0.86 |
| **Fukuoka** | 0.000 | 0.000 | 0.137 | 0.059 | 0.020 | 0.019 | 0.117 | 0.039 | 0.020 | 0.098 | 0.05 |
| **Saga** | 0.238 | 0.119 | 0.000 | 0.000 | 0.242 | 0.122 | 0.000 | 0.370 | 0.372 | 0.375 | 0.18 |
| **Nagasaki** | 0.358 | 0.144 | 0.145 | 0.146 | 0.812 | 0.298 | 0.603 | 0.457 | 0.463 | 1.013 | 0.44 |
| **Kumamoto** | 0.222 | 0.056 | 0.056 | 0.056 | 0.057 | 0.284 | 0.114 | 0.345 | 0.521 | 0.291 | 0.20 |
| **Oita** | 0.000 | 0.171 | 0.343 | 0.259 | 0.260 | 0.175 | 0.441 | 0.623 | 0.180 | 0.632 | 0.31 |
| **Miyazaki** | 0.626 | 0.989 | 0.815 | 0.820 | 1.192 | 1.107 | 0.743 | 0.467 | 1.225 | 0.951 | 0.89 |
| **Kagoshima** | 0.299 | 0.241 | 0.364 | 0.244 | 0.677 | 0.558 | 0.499 | 0.189 | 0.381 | 0.576 | 0.40 |
| **Okinawa** | 0.000 | 0.000 | 0.000 | 0.069 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.01 |

SFTS, severe fever with thrombocytopenia syndrome.