Epidemiology and Infection

**Association of meteorological factors with seasonal activity of influenza A subtypes and B lineages in subtropical western China**

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**Supplementary Material**

**Table S1.** The primers and probes used for real-time reverse transcription PCR (rRT-PCR) for determining the types, subtypes, and lineages of influenza isolates.

|  |  |
| --- | --- |
| **Primer/Probe** | **Base composition** |
| FluA-Forward | 5’-GACCRATCCTGTCACCTCTGAC-3’ |
| FluA-Reverse | 5’-GGGCATTYTGGACAAAKCGTCTACG-3’ |
| FluA-probe | 5’-TGCAGTCCTCGCTCACTGGGCACG-3’ |
| FluB-Forward | 5’-TCCTCAACTCACTCTTCGAGCG-3’ |
| FluB-Reverse | 5’-CGGTGCTCTTGACCAAATTGG-3’ |
| FluB-probe | 5’-CCAATTCGAGCAGCTGAAACTGCGGTG-3’ |
| BHA- Forward | 5’-AGACCAGAGGGAAACTATGCCC-3’ |
| BHA- Reverse | 5’-TCCGGATGTAACAGGTCTGACTT-3’ |
| VIC- probe | 5’-CAGACCAAAATGCACGGGGAAHATACC-3’ |
| YAM- probe | 5’-CAGRCCAATGTGTGTGGGGAYCACACC-3’ |
| CNICH3-Forward | 5’-ACCCTCAGTGTGATGGCTTTCAAA-3’ |
| CNICH3-Reverse | 5’-TAAGGGAGGCATAATCCGGCACAT-3’ |
| CNICH3-Probe | 5’-ACGAAGCAAAGCCTACAGCAACTGT-3’ |
| pdmH1Forward | 5’-GGGTAGCCCCATTGCAT-3’ |
| pdmH1Reverse | 5’-AGAGTGATTCACACTCTGGATTTC-3’ |
| pdmH1Probe | 5’-TGGGTAAATGTAACATTGCTGGCTGG-3’ |
| H1-F247 | 5’-AACATGTTACCCAGGGCATTTCGC-3’ |
| H1-R361 | 5’-GTGGTTGGGCCATGAGCTTTCTTT-3’ |
| H1-P278 | 5’-GAGGAACTGAGGGAGCAATTGAGTTCAG-3’ |

**Table S2.** Summary of monthly statistics for climatic variables in Panzhihua, 2006–2015

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Climatic variable** | **Mean** | **S.D.** | **Median** | **Minimum** | **Maximum** |
| **Temperature (°C)** | 21.2 | 4.9  | 22.3  | 11.9  | 29.6  |
| **Vapor pressure (hPa)** | 13.2 | 5.7  | 12.1  | 4.8  | 22.9  |
| **Relative humidity (%)** | 53.9 | 15.6  | 59.0  | 24.0  | 77.0  |
| **Precipitation (cm)** | 6.2 | 7.9  | 1.8  | 0.0  | 35.2  |
| **Sunshine hours (h)** | 230.6 | 48.4  | 237.3  | 120.3  | 328.2  |

**Figure S1.** Seasonal prevalence and wavelet power spectrum of influenza A subtypes and B lineages in Panzhihua, 2006–2015.(A) The monthly positive rates of laboratory confirmed A/H3N2, seasonal A/H1N1, A/H1N1pdm09, Victoria, and Yamagata. (B) Wavelet power spectrum of the monthly activity of influenza virus. White lines highlight periodicities that reach statistical significance of 95%. The region outside the white-curved cone indicates the presence of edge effects. The power values were shown in the panel on the right. Time series have been square-root transformed.