

Supplementary Table 3. Median number of specimens tested and percent positive for influenza, by age group, study design, and population among all data sources

| | Number of data sources (n=112) | Median total number specimens tested | Interquartile Range (IQR) | | Median percent positive | IQR | | p-value |
|---|---------------------------------------|---|----------------------------------|------|--------------------------------|------------|-----|----------------|
| All adults | 112 | 361 | 183 | 1137 | 11% | 7% | 19% | |
| Age group | | | | | | | | |
| Adults <65 years* | 50 | 727 | 319 | 1934 | 15% | 9% | 21% | 0.28 |
| Adults ≥65 years | 48 | 219 | 90 | 667 | 13% | 8% | 17% | |
| Data source | | | | | | | | |
| GRIPP Surveillance datasets | 37 | 1308 | 565 | 3222 | 15% | 10% | 20% | 0.011 |
| Published papers | 75 | 242 | 129 | 470 | 10% | 6% | 17% | |
| Timeframe | | | | | | | | |
| Pre-2009 data only | 45 | 187 | 119 | 296 | 8% | 5% | 16% | 0.016 |
| Post-2009 data only | 61 | 569 | 328 | 1890 | 14% | 8% | 20% | |
| Pre- & post-2009 data | 6 | 2294 | 1188 | 7487 | 10% | 10% | 15% | |
| Diagnostic Test | | | | | | | | |
| RT-PCR only | 40 | 452 | 204 | 1161 | 14% | 8% | 20% | 0.58 |
| Immunofluorescence only | 12 | 556 | 397 | 1053 | 9% | 6% | 15% | |
| Serological assay only | 13 | 250 | 135 | 338 | 11% | 6% | 16% | |
| Multiple tests, including RT-PCR | 38 | 455 | 189 | 1755 | 10% | 7% | 17% | |
| Multiple tests, excluding RT-PCR | 6 | 121 | 80 | 174 | 14% | 7% | 21% | |
| Other [†] | 3 | 340 | 321 | 412 | 9% | 9% | 16% | |
| Case definition | | | | | | | | |
| Acute respiratory infection (ARI) | 7 | 266 | 164 | 312 | 9% | 6% | 13% | 0.0014 |
| Lower respiratory infection (LRI) | 8 | 850 | 516 | 3697 | 14% | 11% | 15% | |
| Pneumonia | 32 | 189 | 127 | 302 | 7% | 6% | 11% | |
| Severe acute respiratory infection (SARI) | 35 | 1308 | 444 | 3213 | 17% | 11% | 20% | |
| Other [‡] | 30 | 412 | 190 | 579 | 10% | 5% | 18% | |
| Special population[¶] | | | | | | | | |
| Yes | 20 | 194 | 102 | 394 | 9% | 4% | 19% | 0.43 |
| No | 92 | 462 | 206 | 1384 | 11% | 7% | 19% | |
| World Health Organization region | | | | | | | | |
| Africa | 9 | 1259 | 411 | 1766 | 7% | 6% | 11% | 0.071 |
| Americas | 18 | 306 | 164 | 1947 | 9% | 6% | 17% | |

| | | | | | | | | |
|--------------------------------|----|-------------|-----|------|------------|-----|-----|-------|
| Eastern Mediterranean | 8 | 729 | 220 | 1951 | 20% | 17% | 21% | |
| Europe | 23 | 187 | 118 | 279 | 8% | 3% | 14% | |
| Southeast Asia | 14 | 714 | 407 | 1770 | 13% | 11% | 16% | |
| Western Pacific | 40 | 470 | 244 | 1015 | 13% | 8% | 19% | |
| World Bank income level | | | | | | | | |
| Low | 10 | 1006 | 530 | 1755 | 12% | 7% | 14% | 0.035 |
| Lower-middle | 26 | 825 | 385 | 1758 | 15% | 10% | 19% | |
| Upper-middle | 31 | 483 | 226 | 1342 | 14% | 7% | 20% | |
| High | 45 | 240 | 124 | 328 | 9% | 4% | 16% | |

*Gaps in age-specific estimates due to lack of outcome data stratified by age group.

† Includes rapid immunochromatographic assay (n=2), virus culture (n=1).

‡ Includes acute exacerbation of chronic obstructive pulmonary disease (COPD) (n=14), respiratory hospitalization (acute or non-acute) (n=10), acute exacerbation of asthma (n=3), acute febrile illness (n=2), intubation among intensive care unit (ICU) patients (n=1), acute respiratory distress syndrome (ARDS) (n=1), ICD codes consistent with influenza (n=1), and acute coronary syndrome with recent influenza-like illness (n=1).

¶ Includes studies of populations with COPD (n=10), hospitalised in the ICU only (n=3), immunocompromising conditions (n=1), asthma (n=1), heart disease (n=1), or in the military (n=1)