**Appendix 4. Time-series Forecasting of Hospital-onset COVID-19 Cases (Per 10,000 persons)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor | Coefficients per 10,000 persons | 95% CI | P | P - Trend | Relationship |
| Community cases |  |  |  |  |  |
|  Static Model | -1.74 | -3.8, 0.3 | 0.10 | 0.18 | No |
|  Noise corrected | -0.21 | -3.91, 3.49 | 0.91 |
|  Lag 1 | -1.00 | -5.27, 3.27 | 0.64 |
|  Lag 2 | 0.01 | -3.73, 3.76 | 0.99 |
|  Lag 4 | -0.74 | -3.23, 1.75 | 0.56 |
|  Lag 7 | -2.54 | -4.90, -0.18 | **0.03\*** |
| Health Care Worker (cases) |  |  |  |  |  |
|  Static Model | -16.04 | -32.2, 0.1 | 0.05 | **0.03\*** | **Yes** |
|  Noise corrected | -10.69 | -38.82, 17.43 | 0.45 |
|  Lag 1 | 1.47 | -31.35, 34.29 | 0.93 |
|  Lag 2 | -8.71 | -36.92, 19.50 | 0.54 |
|  Lag 4 | -4.79 | -25.77, 16.19 | 0.65 |
|  Lag 7 | -27.11 | -44.58, -9.63 | **0.003\*** |
| SARS-CoV-2 in Wastewater (MGC/person/day) |  |  |  |  |  |
|  Static Model | -2.09 | -3.1, -1.1 | **<0.001\*** | **<0.001\*** | **Yes** |
|  Noise corrected | -2.10 | -3.86, -0.34 | **0.02\*** |
|  Lag 1 | -0.22 | -2.48, 2.04 | 0.85 |
|  Lag 2 | -0.11 | -2.07, 1.84 | 0.91 |
|  Lag 4 | -0.65 | -1.82, 0.51 | 0.27 |
|  Lag 8 | -2.84 | -3.70, -1.97 | **<0.001\*** |
| Covid In-patients (cases) |  |  |  |  |  |
|  Static Model | -73.6 | -147.1, -0.18 | **0.05\*** | **<0.001\*** | **Yes** |
|  Noise corrected | -25.37 | -141.93, 91.19 | 0.67 |
|  Lag 1 | 10.17 | -129.96, 150.29 | 0.89 |
|  Lag 2 | -34.18 | -159.74, 91.38 | 0.59 |
|  Lag 4 | -93.03 | -174.76, -11.29 | **0.03\*** |
|  Lag 8 | -186.28 | -248.87, -123.69 | **<0.001\*** |
| \*Statistically significant |