**Appendix Table 1.** Risk factors and estimated hazard ratios for 14- and 45-day mortality for MERS-CoV patients at the national level and each of the regions between 2012 and 2019 from univariate Cox proportional-hazards (CPH) modeling.

|  |  |  |
| --- | --- | --- |
|  | **14-day mortality** | **45-day mortality** |
| **Regions/Factors** | **HR** | **95% CI for HR** | **P** | **HR** | **95% CI for HR** | **P** |
| **National**  |  |  |  |  |  |  |
| Male gender  | 1.34 | 1.08-1.66 | 0.0069 | 1.38 | 1.16-1.64 | 0.0003 |
| Age 41-60 years  | 2.20 | 1.61-2.99 | <0.0001 | 2.24 | 1.75-2.86 | <0.0001 |
| Age ≥ 61 years | 5.83 | 4.37-7.79 | <0.0001 | 5.08 | 4.02-6.41 | <0.0001 |
| Non-healthcare worker | 17.61 | 8.34-37.18 | <0.0001 | 7.88 | 5.20-11.95 | <0.0001 |
| With comorbidity | 7.21 | 4.88-10.66 | <0.0001 | 6.28 | 4.59-8.58 | <0.0001 |
| **Central**  |  |  |  |  |  |  |
| Male gender  | 1.46 | 1.09-1.97 | 0.0110 | 1.35 | 1.06-1.71 | 0.0135 |
| Age 20-40 years  | 0.46 | 0.29-0.73 | 0.0010 | 0.46 | 0.31-0.67 | 0.0001 |
| Age ≥ 61 years | 2.56 | 1.90-3.46 | <0.0001 | 2.33 | 1.82-2.98 | <0.0001 |
| Non-healthcare worker | 9.47 | 4.20-21.34 | <0.0001 | 6.52 | 3.66-11.61 | <0.0001 |
| With comorbidity | 10.95 | 5.80-20.66 | <0.0001 | 9.58 | 5.70-16.10 | <0.0001 |
| **East**  |  |  |  |  |  |  |
| Age ≥ 61 years | 3.62 | 2.06-6.36 | <0.0001 | 2.58 | 1.68-3.97 | <0.0001 |
| Non-healthcare worker | NV | NV | NV | 5.93  | 1.45-24.14 | 0.0129 |
| With comorbidity | 4.30 | 1.70-10.84 | 0.0020 | 3.96 | 1.91-8.21 | 0.0002 |
| **West**  |  |  |  |  |  |  |
| Male gender  | NV | NV | NV | 1.40 | 1.01-1.94 | 0.0429 |
| Age 41-60 years  | 3.47 | 1.84-6.53 | 0.0001 | 3.29 | 2.05-5.29 | <0.0001 |
| Age ≥ 61 years | 11.39 | 6.28-20.68 | <0.0001 | 8.83 | 5.60-13.91 | <0.0001 |
| Non-healthcare worker | 55.77 | 7.78-399.41 | 0.0001 | 9.54 | 4.88-18.64 | <0.0001 |
| With comorbidity | 8.41 | 3.70-19.14 | <0.0001 | 6.32 | 3.44-11.62 | <0.0001 |
| **North**  |  |  |  |  |  |  |
| Age ≥ 61 years | NV | NV | NV | 2.43 | 1.18-4.99 | 0.0157 |
| Without comorbidity  | NV | NV | NV | 0.15 | 0.03-0.65 | 0.0109 |

NV: No variables were retained in this model. Note: No variables were retained in this model for the South region.