**Supplementary document:**

**The** **Global Health Security index and Joint External Evaluation score for health preparedness are not correlated with countries’ COVID-19 detection response time and mortality outcome**

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Table S1: The indicators used on GHSI

|  |  |
| --- | --- |
| The category  |  |
| 1. Prevention
 | Prevention of the emergence or release of pathogens |
| 1. Detection and reporting
 | Early detection and reporting for epidemics of potential international concern |
| 1. Rapid response
 | Rapid response to and mitigation of the spread of an epidemic |
| 1. Health system
 | Sufficient and robust health system to treat the sick and protect health workers |
| 1. Compliance with international norms
 | Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms |
| 1. Risk environment
 | Overall risk environment and country vulnerability to biological threats |
|  |  |

Table S2: The JEE technical areas 1–3

|  |
| --- |
| **Element and technical areas**  |
| Prevention1. National legislation, policy, and financing 2. IHR 2005 coordination, communication, and advocacy 3. Antimicrobial resistance 4. Zoonotic disease 5. Food safety 6. Biosafety and biosecurity 7. Immunization  |
| Detection 8. National laboratory system 9. Real-time surveillance 10. Reporting 11. Workforce development  |
| Response 12. Preparedness 13. Emergency Operations Centers 14. Linking public health and security authorities 15. Medical countermeasures and personnel deployment 16. Risk communication  |
| Other hazards 17. Points of entry 18. Chemical events 19. Radiation emergencies |

**Table S3:** The top 20 countries with GHS overall scores and Joint External Evaluation (JEE) and countries with higher mortality (deaths/million) rate. Ten countries among the top-20 in overall GHSI also listed among the top-20 countries with higher mortality outcome (deaths/million). Five countries among the top-20 in JEE score also listed among the top-20 countries with higher mortality outcome (deaths/million).

|  |  |  |  |
| --- | --- | --- | --- |
| **Serial Number** | **Global Health Security Index4** | **Joint External Evaluation 25** | **Mortality rate due to COVID-19 as of July 15th 2020 6 (Countries above 1 M population)** |
|  | Country  | Average Score  | Country  | ReadyScore | Country  | Deaths/Million  |
| 1 | **United States** | 83.5 | **Canada** | 93 | Belgium  | 844 |
| 2 | **United Kingdom** | 77.9 | Singapore | 93 | United Kingdom  | 664 |
| 3 | **Netherlands** | 75.6 | Australia | 92 | Spain  | 608 |
| 4 | Australia | 75.5 | South Korea | 92 | Italy  | 579 |
| 5 | **Canada** | 75.3 | Japan | 92 | Sweden  | 549 |
| 6 | Thailand | 73.2 | United Arab Emirates | 91 | France  | 461 |
| 7 | **Sweden** | 72.1 | **Armenia** | 90 | United States | 422 |
| 8 | Denmark | 70.4 | **Switzerland** | 89 | Peru | 376 |
| 9 | South Korea | 70.2 | New Zealand | 89 | Chile  | 376 |
| 10 | Finland | 68.7 | **United States** | 87 | Netherlands | 358 |
| 11 | **France** | 68.2 | Finland | 86 | Ireland | 354 |
| 12 | Slovenia | 67.2 | **Belgium** | 85 | Brazil  | 350 |
| 13 | **Switzerland** | 67 | Oman | 84 | Ecuador | 291 |
| 14 | Germany | 66 | Slovenia | 82 | Mexico  | 282 |
| 15 | **Spain** | 65.9 | Bahrain | 80 | Canada | 233 |
| 16 | Norway | 64.6 | Thailand | 76 | Switzerland | 227 |
| 17 | Latvia | 62.9 | Saudi Arabia | 76 | Panama | 222 |
| 18 | Malaysia | 62.2 | Kyrgyzstan | 75 | Armenia  | 200 |
| **19** | **Belgium** | 61 | Lithuania | 74 | North Macedonia | 189 |
| 20 | **Portugal** | 60.3 | Kuwait  | 74 | Portugal | 165 |

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