

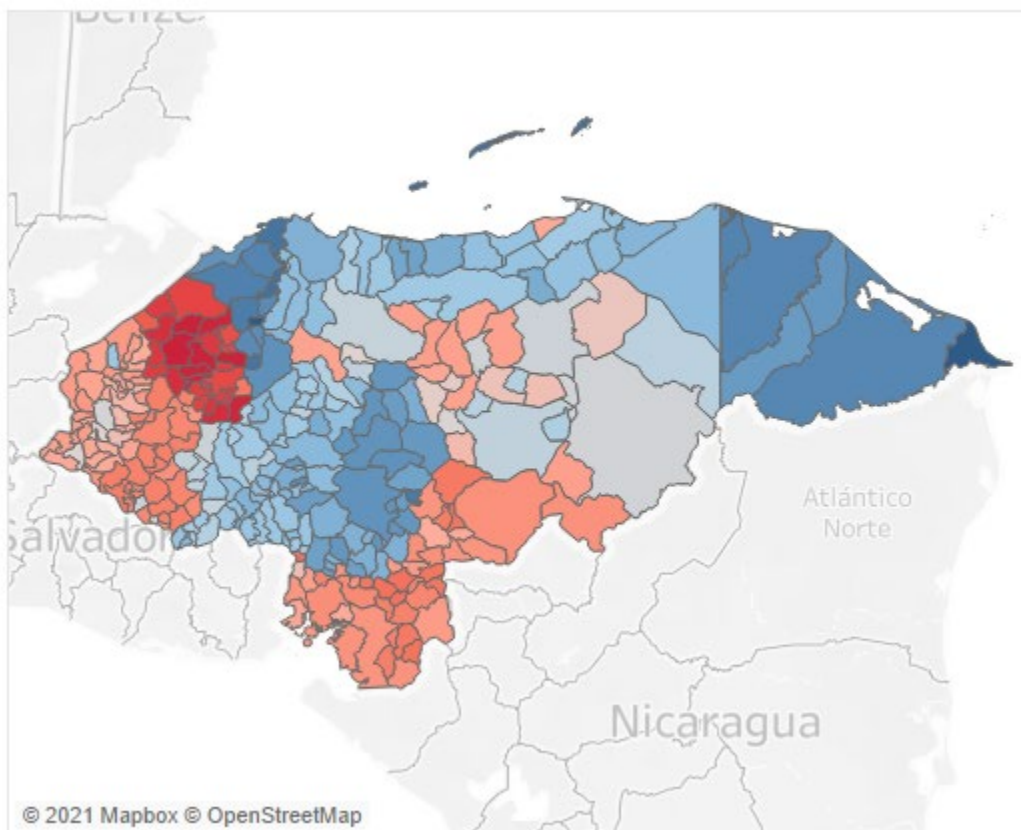
ASSESSING THE RISK OF COVID-19 IN HONDURAS

As COVID-19 vaccines are becoming available, governments will need to assess the number and location of the most vulnerable people within their populations. However, problematically, tracking data for most low- and middle-income countries are only available at the national level. To support the COVID-19 relief effort, the Gender, Climate Change, and Nutrition Integration Initiative (GCAN) was commissioned to develop a subnational dataset of key COVID-19 risk indicators and potential risk hotspots.

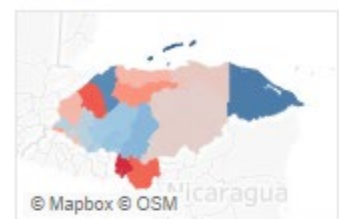
Based on patient data compiled and analyzed worldwide, the science community's consensus is that key COVID-19 risk factors include age, sex, and obesity. Being old, male, and obese increases both vulnerability to infection and the likelihood of negative outcomes. Based on each indicator's COVID-19 death hazard ratio, a composite index for the second-level subnational administrative units was constructed using exploratory factor analysis (a statistical technique that reduces the number of variables). The results of the subnational risk index (map a) and the risk indicators (maps b, c, and d) are presented visually below, resulting in hotspots (the redder colors) and cold spots (the bluer colors).

The age-related risk is notably high in three Departments, Valle, Choluteca, and Santa Bárbara. The sex-related risk (i.e., more male) is highest in the Santa Bárbara Department, followed by El Paraíso and Lempira. The obesity-related risk is shown to be high across the country and is highest in Gracias a Dios. Overall, the highest risk level is estimated in the Santa Bárbara Department.

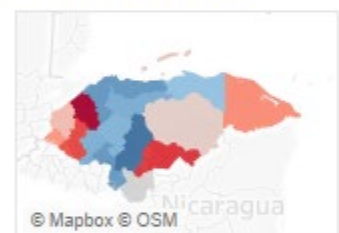
a. Risk index in Honduras



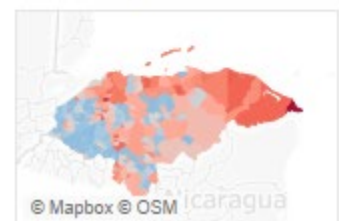
b. Age-related risk



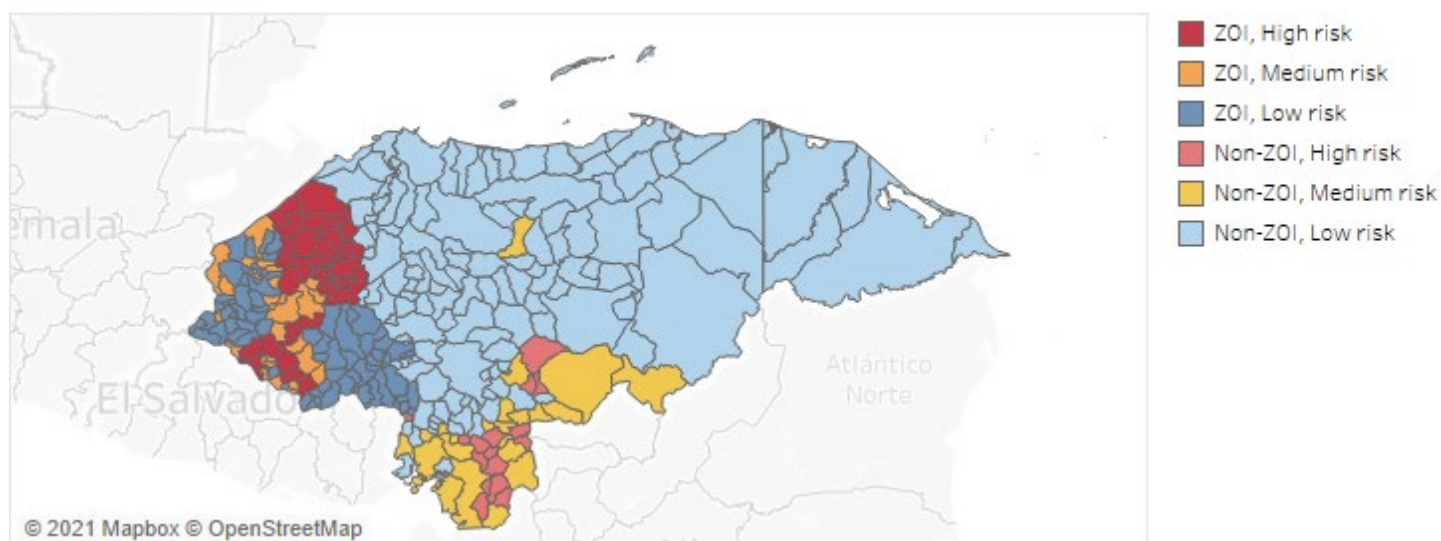
c. Sex-related risk



d. Obesity-related risk



e. Risk index classes



f. Distribution of adult population in each class of risks



The above figures categorize the risk index values into areas of low, medium, and high risk (map e) and visualize the number of adults (≥ 18 years old) in each category (figure f). ZOI indicates the zone of influence of the U.S. Government's Feed the Future program. Areas of high risk are in the Departments of Choluteca, El Paraíso, Lempira, Santa Bárbara, and Valle. Among these, Lempira and Santa Bárbara Departments are located in the ZOI. The total number of adults in the high risk areas is about 510,000 (8% of the country's total adult population).

Most of the high risk areas are in rural agricultural lands producing coffee and vegetables (Lempira and Santa Bárbara), melons (Choluteca), and grains and livestock¹. Thus, supporting interventions targeting agricultural laborers in rural areas should be encouraged. The country-wide lockdown in 2020 has impacted farming households that were not allowed to travel to their farms or had challenges selling produce. To minimize the virus transmission risk during future crop seasons, socially distanced farming practices may be promoted. Interventions practiced in other countries include collecting harvested grain at the farm gate to minimize farmers' travel to markets and draw on social networks to coordinate fieldwork on rotating days. Investments to improve the accessibility of safe water for personal hygiene and healthcare facilities are also urgently needed. Only 26% of health care facilities in Honduras reportedly has basic handwashing stations with soap and water².

This publication was prepared by Jawoo Koo (IFPRI), Carlo Azzarri (IFPRI), Aniruddha Ghosh (CIAT), and Wahid Quabili (IFPRI), under the Gender, Climate Change, and Nutrition Initiative (GCAN). GCAN was made possible with support from Feed the Future through the U.S. Agency for International Development (USAID) and is associated with the CGIAR Research Program on Climate Change, Agriculture and Food Security, which is carried out with support from CGIAR Fund Donors and through bilateral funding agreements. The fact sheet has not been peer reviewed. Any opinions are those of the authors and do not necessarily reflect the views of IFPRI, USAID, or Feed the Future. Copyright © 2021 International Food Policy Research Institute. Licensed for use under a Creative Commons Attribution 4.0 International License (CC BY 4.0)

¹ Honduras Livelihood Zone Map. FEWS NET, 2015. <https://fewsn.net/central-america-and-caribbean/honduras/livelihood-zone-map/march-2015>. Accessed 9 Feb 2021.

² Hygiene Baselines pre-COVID-19. WHO and UNICEF, 2020. <https://washdata.org/report/jmp-2020-covid-global-hygiene-snapshot>. Accessed 9 Feb 2021.