

Changes in the notification of HIV diagnoses during the COVID-19 pandemic in Peru

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We report a decline in the reporting of HIV diagnoses in Peru throughout the COVID-19 pandemic.

In 2020, 5170 HIV diagnoses were reported in Peru, representing a 33% decrease in the average number of HIV diagnoses between 2017 and 2019 (n=7746). At a regional level, the median number of HIV diagnoses reported in 2017–2019 was 139 (IQR 77–311) and in 2020 was 114 (IQR 60–157) (p≤0.001). Twenty-one of 25 regions reported a decrease in HIV diagnoses in 2020 compared with 2017–2019. Regions in the north of Peru showed the largest decrease in the number of HIV diagnoses (figure 1).

While a true decrease in HIV transmission is possible due to social distancing measures, the limitations COVID-19 has placed on healthcare systems may have worsened existing issues with testing in Peru, further delaying HIV diagnosis and treatment. Public health interventions

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| Region | 2017–2019 | 2020 | Change in percentage ¹ | p value ² |
|---------------|-----------|------|-----------------------------------|----------------------|
| Amazonas | 231 | 114 | -50.6 | 0.0001 |
| Ancash | 148 | 87 | -41.3 | |
| Apurimac | 15 | 9 | -40.0 | |
| Arequipa | 316 | 136 | -57.0 | |
| Avacucho | 55 | 37 | -32.3 | |
| Cajamarca | 68 | 46 | -32.7 | |
| Callao | 477 | 315 | -33.9 | |
| Cusco | 139 | 148 | +6.7 | |
| Huancavelica | 23 | 13 | -42.6 | |
| Huanuco | 104 | 61 | -41.2 | |
| Ica | 226 | 130 | -42.4 | |
| Junin | 167 | 125 | -25.3 | |
| La Libertad | 467 | 258 | -44.8 | |
| Lambayeque | 130 | 157 | +21.1 | |
| Lima | 3397 | 2267 | -33.3 | |
| Loreto | 523 | 280 | -46.4 | |
| Madre de Dios | 95 | 72 | -24.2 | |
| Moquegua | 52 | 33 | -34.9 | |
| Pasco | 13 | 13 | 0 | |
| Piura | 311 | 228 | -26.7 | |
| Puno | 83 | 64 | -22.6 | |
| San Martin | 178 | 140 | -21.3 | |
| Tacna | 109 | 60 | -44.8 | |
| Tumbes | 77 | 81 | +5.2 | |
| Ucayali | 342 | 296 | -13.4 | |

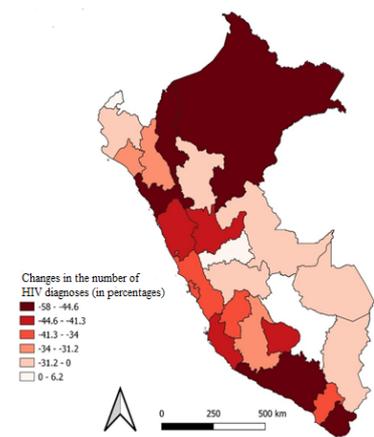


Figure 1 Notification of HIV diagnoses in 2020 and in 2017–2019 in Peru.¹ Calculated as: (average number of HIV new infections reported between 2017 and 2019 – number of HIV new infections reported in 2020) / average number of HIV new infections reported between 2017 and 2019. ²Two-sided p value from the signed-rank test. Legend: the changes in percentages between 2020 and the baseline period (2017–2019) were used to describe the changes in HIV diagnoses notified for the 25 regions in Peru. This was calculated as: $100 \times (\text{average number reported in 2017 to 2019} - \text{number reported in 2020}) / (\text{average number reported in 2017–2019})$. Data were retrieved from the national open-access dataset of the HIV national programme in Peru.¹ The Wilcoxon signed-rank test was used to compare the medians of the number of HIV diagnoses reported at a regional level between 2017–2019 and 2020. The spatial representation of the changes in new cases of HIV reported were illustrated at a regional level using Quantum Geographic Information System and a map obtained from the Humanitarian Data Exchange.²

should shield timely HIV testing and early ART initiation during crises in Peru.

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