Statistical analysis was performed using simple linear regression, with $p<0.05$.

Results: From 2013 to 2022, 413 measles cases were recorded in Santa Catarina. One case was recorded in 2013, 304 in 2019, and 108 in 2020. Santa Catarina had first-dose MMR coverage above the recommended 95% in 2013, 2014, 2015, 2016, 2019, and 2022. For the second dose, the target was not met in any year of the period. There was a downward trend in first-dose vaccination (β -2.111; p=0.005), with a mean rate of 96.89% and a 9.24% reduction when comparing the first and last years. A stable trend was observed for the second dose, with a mean rate of 82.79%.

Conclusion: The study indicates a downward trend in first-dose coverage and stability in second-dose MMR coverage in Santa Catarina. Factors such as vaccine hesitancy, misinformation, limitations within SUS, and the COVID-19 pandemic influenced vaccination adherence. Thus, declining coverage reflects a multifactorial problem involving social, structural, and contextual aspects. Therefore, it is essential that surveillance and immunization actions meet Ministry of Health targets, and that information dissemination and public awareness about the importance of vaccination be reinforced, to prevent the resurgence of measles in Brazil.

Keywords: Measles, Immunization, Vaccination coverage.

https://doi.org/10.1016/j.bjid.2026.104926

302

EVALUATION OF VACCINE-INDUCED SEROREACTIVITY FROM AN EXPERIMENTAL PREVENTIVE HIV VACCINE IN THE CONTEXT OF A PUBLIC HEALTH SERVICE

Ana Caroline Coutinho Iglessias *,
Aline Barnabé Cano, Camilla Ferreira Santos,
Eduardo Prevelato Athayde Filho,
Lucas Rocker Ramos, Luciene Silva Arrifano,
Maria Felipe Faustino de Medeiros,
Mariza Vono Tancredi, Mateus Ettori Cardoso,
Natalia Mercedes Cabral Amdi,
Victoria Spinola Duarte de Oliveira,
José Valdez Ramalho Madruga,
Roberta Schiavon Nogueira

Centro de Referência e Treinamento DST/Aids-SP, São Paulo, SP, Brazil

Introduction/Objective: HIV infection remains a global public health challenge, reinforcing the importance of developing preventive vaccines. However, vaccine-induced seroreactivity (VISP/R) compromises the accuracy of current diagnostic tests, which do not distinguish between vaccine-induced antibodies and those produced by natural infection. This study aims to analyze the dynamics of HIV diagnostic tests used in public health services for the follow-up of individuals with VISP after participation in clinical trials.

Method: Longitudinal study with chart review of individuals vaccinated experimentally against HIV, using or not using pre-exposure prophylaxis (oral PrEP), followed in a public health service and undergoing regular tests such as serology, immunoblot and HIV RNA PCR. Follow-up took place from January 2023 to April 2025. Data were recorded in REDCap, analyzed in STATA/MP 19, and Wilcoxon and Mann-Whitney tests were used for statistical analysis.

Results: Thirty-eight individuals were followed after completion of the clinical trial: 61% white, mean age 37 years, all cisgender men, 89% men who have sex with men (MSM) and 87% with schooling ≥8 years. PrEP use was reported by 74%, predominantly in the daily regimen (88%), with a mean use of 2.65 years. During the period, 173 samples were collected, with 172 HIV RNA PCR results undetectable and one result with 25 copies, later confirmed as false positive after diagnostic investigation. Serologic tests were positive in 97.68% of samples. Two serologic kits were used (Architect® HIV Ag/Ab Combo and Vitros® HIV Combo), with higher median values for Vitros (45.0 vs. 20.7; $p<0.001$). Among the 168 immunoblots (DPP HIV 1 and 2 Bio-Manguinhos rapid immunoblot), 36% of samples were reactive for all bands. The GP120, GP41, GP160 and p24 bands showed positivity in 88%, 80%, 73% and 41% of samples, respectively, with 87% of tests reactive and 13% indeterminate.

Conclusion: The persistence of VISP/R after the end of the vaccine trial highlights the limitation of current diagnostic tests in distinguishing vaccine-induced immune response from HIV infection. These findings reinforce the need for diagnostic methods with greater specificity and feasibility for large-scale use in public services, promoting greater autonomy for individuals in choosing their care sites and preventing stigmatization associated with false-positive results.

Keywords: Vaccine, HIV, Vaccine-induced seroreactivity, False positive, Stigma.

https://doi.org/10.1016/j.bjid.2026.104927

303

EVALUATION OF THE IMPACT OF DENGUE IMMUNIZATION IN CHILDREN AND ADOLESCENTS AGED 10 TO 14 YEARS

Vitória da Silva Kanis *, Laís Vieira Roman,
Nicoli Mota, Maria Luísa Joaquim Cadorin,
Sarah Luísa Domingos Sehnem,
Wedlayne Souza dos Santos

Universidade do Sul de Santa Catarina (UniSul), Tubarão, SC, Brazil

Introduction: Vaccination is an effective strategy for disease prevention, with impact on mortality reduction and excellent cost-effectiveness, as shown by the Programa Nacional de Imunizações (PNI). In children and adolescents, whose immunity is still developing, adherence to the vaccination schedule is essential for protection. However, anti-vaccine movements and the infodemic that arose during the COVID-19 pandemic resulted in decreased vaccination coverage. In 2024, Brazil faced a dengue outbreak, with the greatest