



## Factsheet Pertussis Caribbean Netherlands PIENTER 3 study results

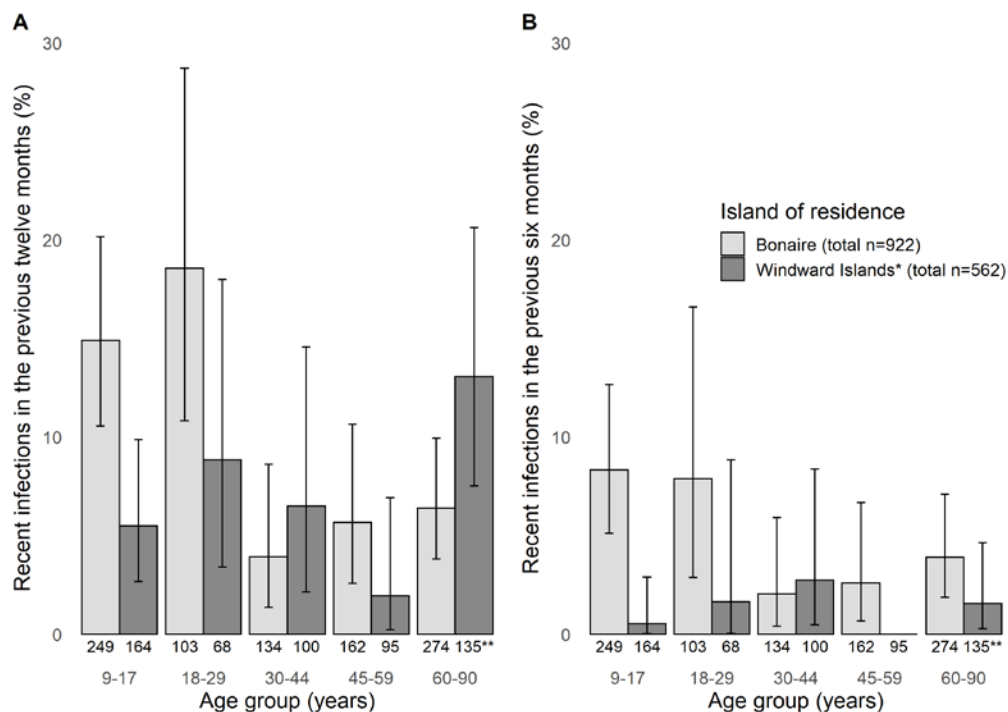
### Background

As in the Netherlands, registration of pertussis cases is mandatory for disease surveillance in Caribbean Netherlands (CN). Some cases are reported from neighboring islands annually, however insufficient laboratory facilities in CN hamper case confirmation and thus insights into circulation of the bacterium. Therefore, the seroepidemiological data from the Health Study CN was used to gain knowledge into potential circulation, and to investigate what factors contribute to the risk of infection.

### Results

An estimated 8.2% of CN residents aged  $\geq 9$  years were found to have been recently infected by *B. pertussis*. Risk factors for a recent infection were age 12–29 years (13.8–14.6%) and Dutch Caribbean or Surinamese origin (10.7%).

*Figure. Weighted age-specific prevalence (with 95% confidence intervals) of a recent infection in the previous twelve months (anti-Pt IgG concentration  $\geq 50$  (A)) or in the previous six months (anti-Pt IgG concentration  $\geq 100$  international units (IU)/mL (B)) in the general population of Caribbean Netherlands, 2017, by island of residence. \*The Windward Islands include St. Eustatius and Saba. \*\* Number of participants per age group and island of residence.*



### Conclusion/discussion

These data show that pertussis infections occur frequently among CN residents aged  $\geq 9$  years, although few clinical pertussis cases are reported. Transmission to vulnerable individuals seems likely and should be taken into account in optimizing vaccination programs.

## **Publication**

[Circulation of \*Bordetella pertussis\* in the Caribbean Netherlands: a population-based seroepidemiological study.](#)

Immink MM, Vos ERA, Janga-Jansen AVA, Baboe-Kalpoë S, Hulshof K, van Vliet J, Kerkhof J, den Hartog G, de Melker HE, van der Klis FRM, van der Maas NAT. International Journal of Infectious Diseases 2021; 111:21-27.