



## Factsheet Measles and diphtheria on Bonaire PIENTER 3 study results

### Background

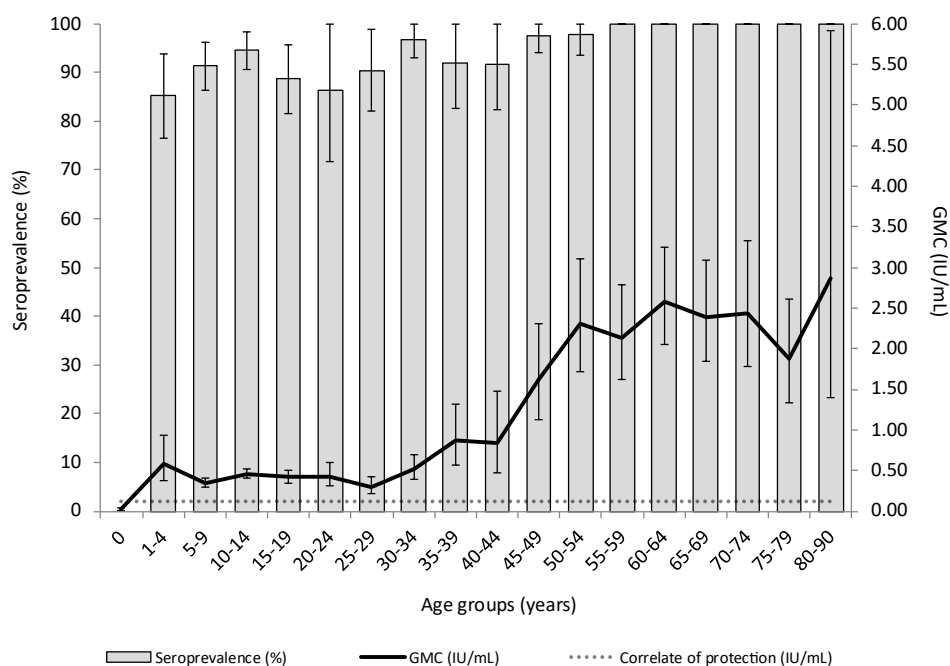
Venezuela has been facing a prolonged humanitarian crisis since mid-2010s, including disruption of the health system which has caused large outbreaks of diseases included in the National Immunization Program. Large numbers of Venezuelans have fled to surrounding countries which has led to outbreaks of measles and diphtheria and fatalities elsewhere in the (region of the) Americas. Hence, one of the main priorities of the Health Study on Caribbean Netherlands was to assess the population immunity against measles and diphtheria on Bonaire given its near distance to Venezuela.

### Results

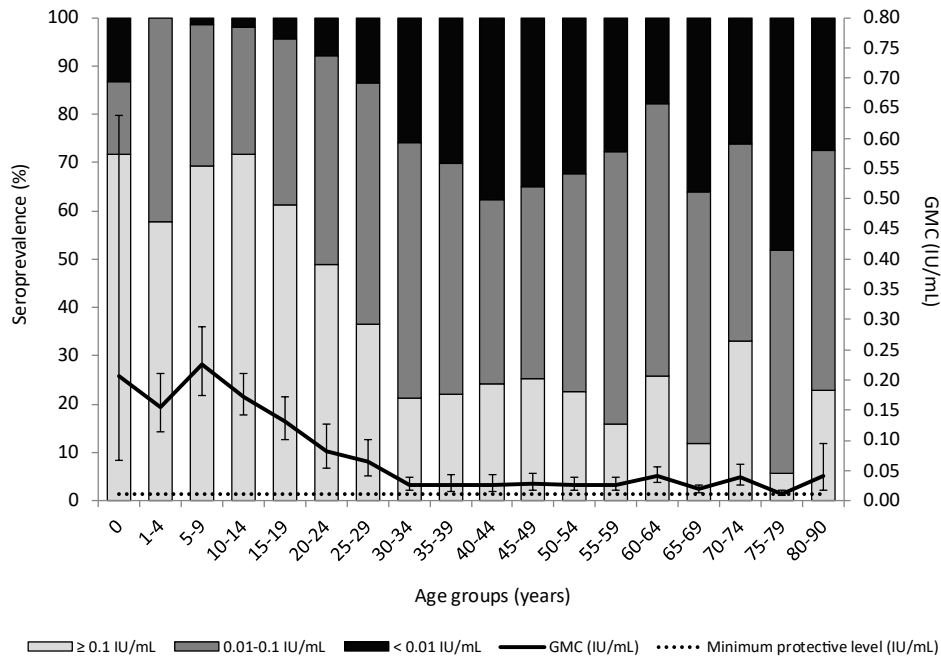
The population-wide sero-protection for measles was suboptimal on Bonaire, especially for those aged <5 years originating from the Dutch Caribbean islands (and Surinam), and for adolescents from other Latin American countries. The proportion of persons with a minimum protective level against diphtheria was also rather low (< 80%), especially among women from 30 years and older, and those originating from the Dutch Caribbean islands and Latin America.

Figure. Weighted age-specific seroprevalence and geometric mean concentration (GMC) (with 95% CIs) of measles (a) and diphtheria (b) IgG antibodies in the general population of Bonaire, Caribbean Netherlands, 2017.

A)



B)



### Conclusion/discussion

As refugees were arriving constantly, health authorities on Aruba, Bonaire and Curaçao were advised to be on alert to detect cases early and prevent potential transmission. Facilitation of rapid supply of antitoxins against diphtheria was also recommended. We further advised to verify the vaccination status of refugees (at arrival) strictly and offer vaccination if applicable. Risk groups, including those in close contact with refugees, were also recommended to update their vaccinations to reduce susceptibility.

### Publication

[Risk of Measles and Diphtheria Introduction and Transmission on Bonaire, Caribbean Netherlands, 2018.](#)

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