

# FACTORS UNDERLYING COVID-19 BOOSTER VACCINE UPTAKE

# AMONG FULLY VACCINATED ADULTS IN BELGIUM

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# Main conclusion:

Age, region of residence and confirmed COVID-19 infection history influence booster uptake in Belgium

### **Booster Campaigns**

#### First Booster

- Winter of 2021
- Age ≥ 18
- Received primary course

#### **Second Booster**

- Autumn of 2022
- Age  $\geq 50$
- Received 1<sup>st</sup> booster

## **Data Collection**

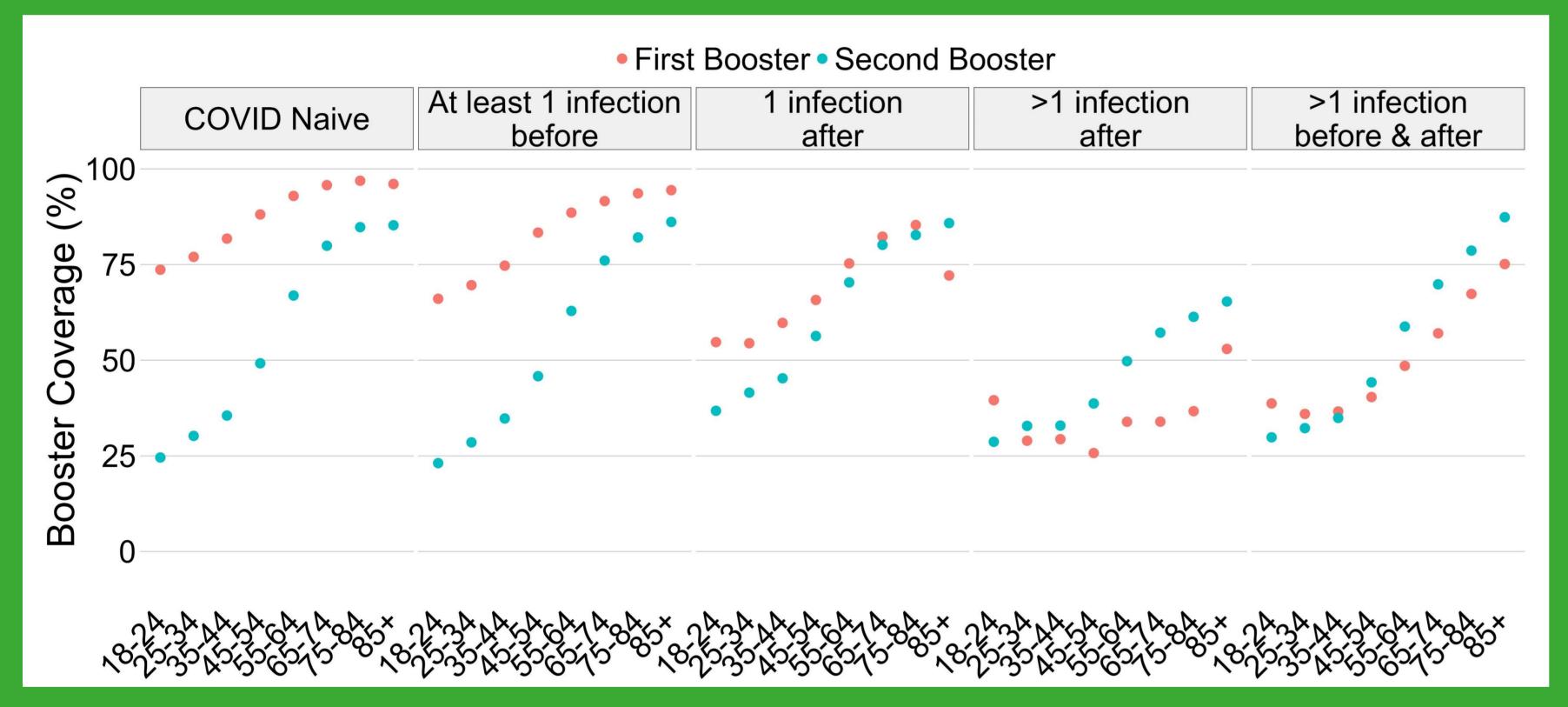
#### **Tools for data collection** Data linkage Belgian social security identification number National COVID-19 vaccine registry Vaccinnet+ **Exhaustive** LINK-VACC project National laboratory TestResult Database Covid19lab.healthdata.be

**Exhaustive** 

## **Study Population**

- Belgian resident
- Received primary course COVID-19 vaccination
- Alive on 1<sup>st</sup> of January 2022
- Age  $\geq$  18

# BOOSTER UPTAKE ACROSS AGE GROUP AND CONFIRMED **COVID-19 INFECTION HISTORY**



"before" and "after" are relative to the preceding vaccination event, i.e. the primary course for the first booster and the first booster for the second booster. The number of persons in the preceding vaccination event is used as denominator in the coverage.

### Conclusions

- Age is positively associated with booster uptake
- Region of residence is associated with booster uptake
- ✓ COVID-naïve individuals were more likely to get the first booster

# **Statistical Analysis**

A quasibinomial logistic regression model was applied with having received a booster as outcome and age group, sex, region of residence confirmed COVID-19 and infection history as variables. Odds ratio was calculated for each variable, which was used to determine the influence on the booster uptake.

- compared to those with one or more registered infections







Mean coverage ± SD <sup>1</sup>

72.65%

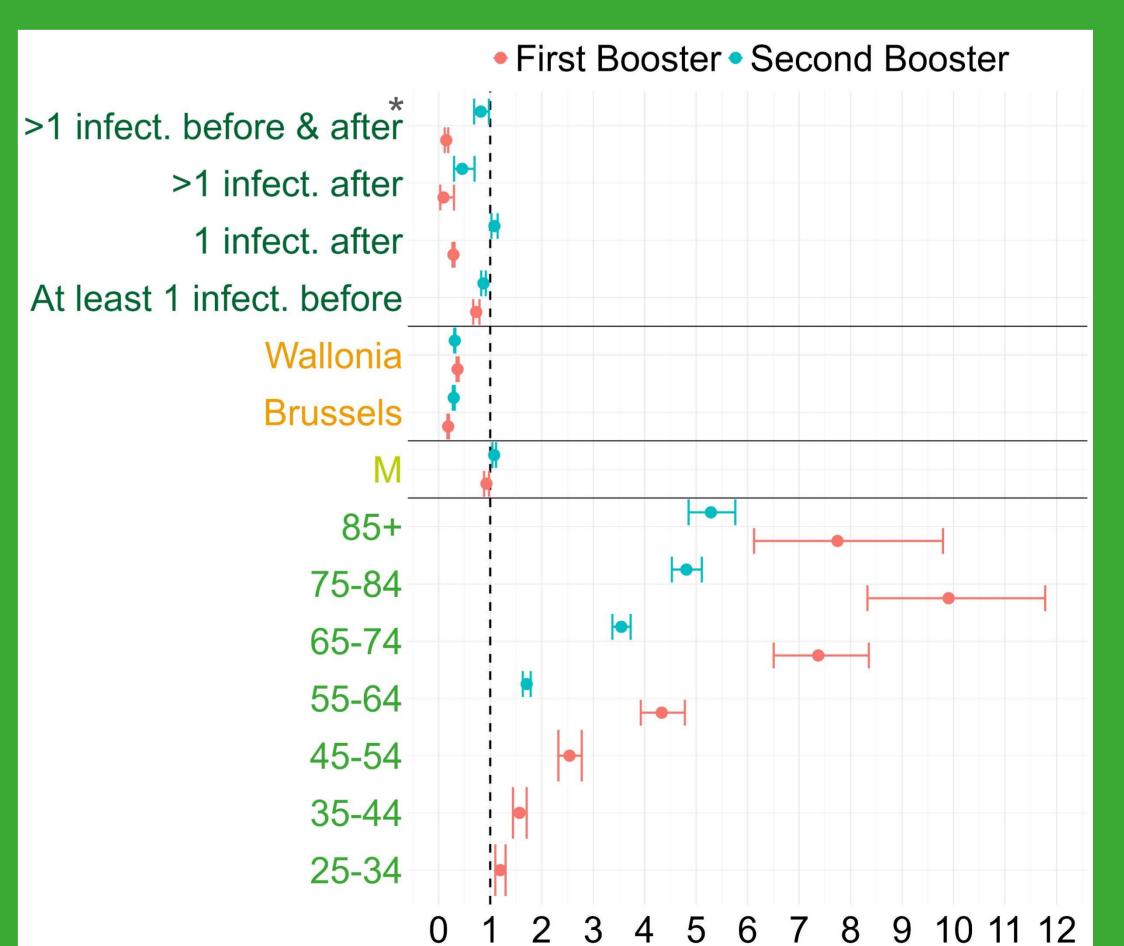
 $57.54\% \pm 21.71\%$ 

Second booster (age ≥ 50)

60.65%

 $27.29\% \pm 22.45\%$ 

# **ODDS RATIO**



Reference levels: Flanders (Region of residence), Female (Sex), COVIDnaïve (Infection history), 18 - 24 (1st) 44 - 54 (2nd) (Age group)

\* ">1 infection before and after" implies multiple infections before and after preceding vaccination event

