

## Question in Project:

FReDA-W2a - Questions about infection with and vaccination against COVID-19 (English Version)

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## Question Topic:

Public health/ Prevention

## Construct:

Vaccination status

## General Information:

**\*Note: The item was tested in German. This is an English translation of the original German wording.**

## Question Text:

Are you vaccinated against COVID-19 (Corona)?  
*[Sind Sie gegen COVID-19 (Corona) geimpft?]*

## Answer Categories:

Yes, I am fully vaccinated. *[Ja, ich bin vollständig geimpft.]*  
Yes, but I do not have full immunization coverage. *[Ja, aber ich habe keinen vollen Impfschutz.]*  
No *[Nein]*

## Cognitive Techniques:

Comprehension Probing

## Findings for Question:

The majority of respondents (83%,  $n = 110$ ) reported being fully vaccinated against COVID-19. Six test persons did not yet have full vaccination protection and 16 were not vaccinated against COVID-19. The aim of the pretest was to investigate what the test persons understood by "being fully vaccinated" and "not having full vaccination protection" (N1\_F5A and N1\_F5B, see Appendix).

In each case, half of the respondents ( $n = 66$ ) were asked what they understood by the two terms (comprehension probing). "Being fully vaccinated" was interpreted by respondents as follows: The majority of respondents (83%,  $n = 110$ ) reported being fully vaccinated against COVID-19. Six test persons did not yet have full vaccination protection and 16 were not vaccinated against COVID-19. The aim of the pretest was to investigate what the test persons understood by "being fully vaccinated" and "not having full vaccination protection" (N1\_F5A and N1\_F5B, see Appendix).

In each case, half of the respondents ( $n = 66$ ) were asked what they understood by the two terms (comprehension probing). "Being fully vaccinated" was interpreted by respondents as follows:

1. 48% interpreted "being fully vaccinated" as having received a double vaccination ("*double vaccination with appropriate vaccines,*" TP146; "*vaccinated twice,*" TP150)
2. 29% understood this to mean having received a triple vaccination including the booster vaccine ("*Vaccinated 2x and boosted,*" TP102; "*This means I received both the two basic vaccines and the booster vaccine,*" TP113)
3. 21% referred mainly to a dual vaccination, but also mentioned booster vaccination ("*I have received the first two vaccinations and cannot boost until 1-2 months,*" TP80; "*Have the dual vaccination, booster is still missing,*" TP92)
4. One person understood this to mean (also) having received a single vaccination after recovery ("*One vaccination after recovery,*" TP143)

The answers to the comprehension probe, what the respondents understood by "not having full vaccination protection", showed the following picture:

1. 70% understood "not having full vaccination protection" to mean having received only one vaccination so far ("*Only first vaccination, no second vaccination yet,*" TP71; "*Only the first vaccination of Biontech or Moderna was given,*" TP79).
2. 26% understood this to mean not yet having received a booster vaccination ("*That one or two vaccinations have already been given but not yet boosted,*" TP84; "*Only two vaccinations have been given after 6 months,*" TP95)
3. Two respondents referred to vaccine breakthroughs in their responses ("*That one is vaccinated against Corona but can still get it with mild symptoms,*" TP97; "*The previous vaccine is only 40% effective or not effective at all,*" TP108)

In summary, slightly more than a quarter of respondents associated "complete" vaccine protection with receiving a booster vaccination. With the exception of one respondent (TP166), all respondents who mentioned booster vaccination but had not yet received it according to their response to Question 5 reported being fully vaccinated. Thus, based on

current data, one would not overestimate the proportion of fully vaccinated individuals. However, it is likely that the meaning of "full vaccination coverage" will change in the near future (and with increasing "privileges" for boosted individuals), so that dual vaccination will no longer be interpreted as full vaccination coverage.

## **Recommendations:**

It is likely that there will be regular booster vaccinations in the future, adapted to new virus variants, for example. In the course of this, the definition of "complete vaccination protection" will most likely change (several times) in the coming weeks and months, which can easily lead to incorrect answers from the respondents. Therefore, we recommend asking (initially) only whether respondents have been vaccinated against COVID-19 at all (see question 1 below).

If the current vaccination status is of analytical interest, respondents who answer this question in the affirmative could subsequently be asked a question that makes clear which vaccinations they have already received. There are (at least) two possible ways to do this.

In order to have to adapt the question as little as possible, the answer options for this question should be kept as general as possible and supplemented by explanations or examples in brackets, which can be adapted from survey wave to survey wave (see question 2, option 1).

Alternatively, questions can ask about the most recent vaccination received, as this question can be easily adapted to new developments in the pandemic (see question 2, option 2).

### **Question 1: Have you been vaccinated against COVID-19 (Corona)?**

Yes

No

*If question 1 = yes:*

### **Question 2 (Option 1): Which of the following statements is applicable about your vaccination protection?**

I have current vaccination protection (e.g., received booster vaccination or received second vaccination less than 6 months ago)

My immunization protection is not current (e.g., booster vaccination missing) or not yet complete (e.g., only received one vaccination or less than 14 days have passed since second vaccination)

### **Question 2 (Option 2): What was your most recent vaccination against COVID-19?**

Booster vaccination

Second vaccination (with vaccine that requires TWO vaccinations)

First vaccination (with vaccine that requires only ONE vaccination)

First vaccination (with vaccine requiring TWO vaccinations)