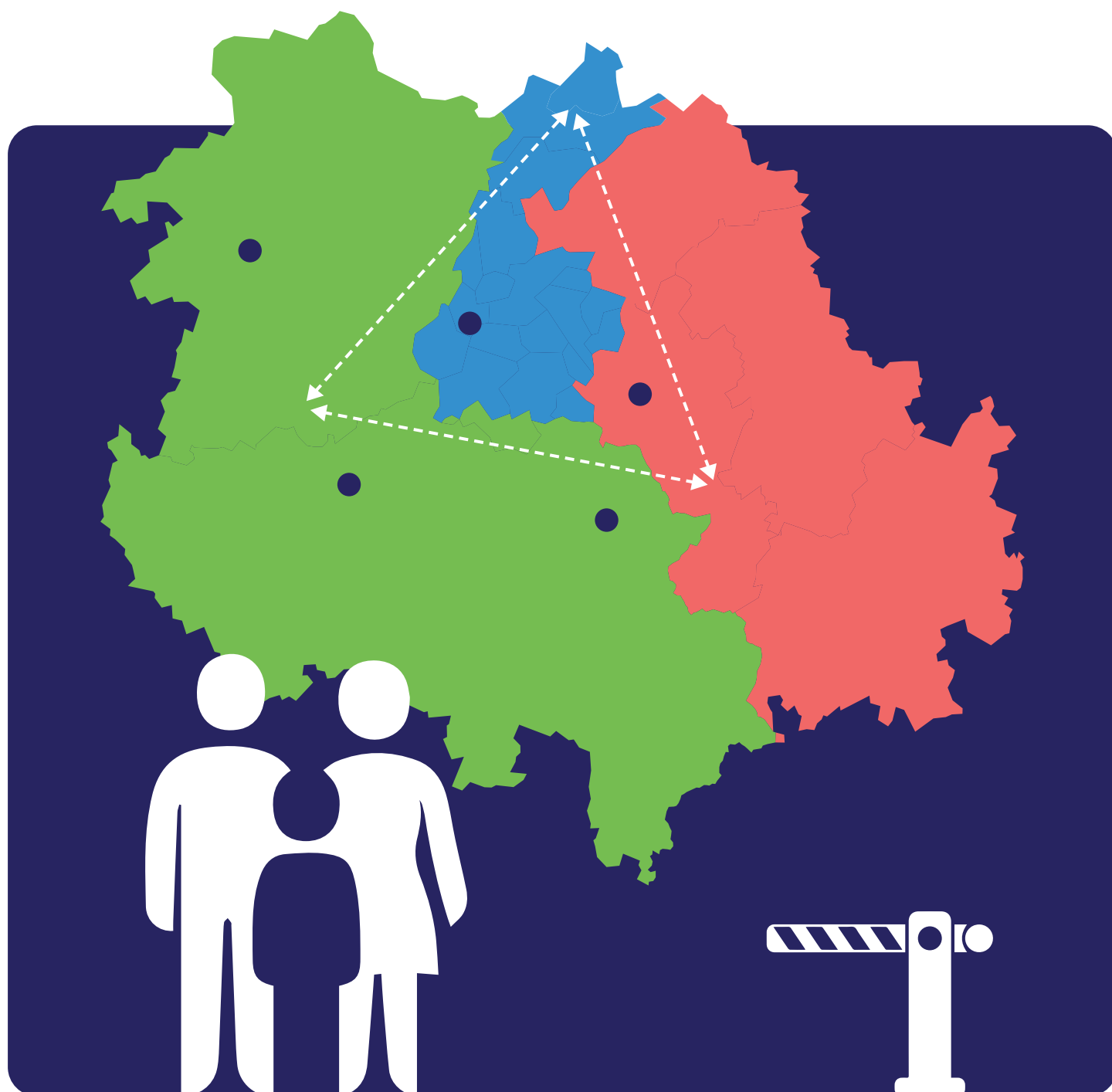


Impact of COVID-19 on the Meuse-Rhine Euregion

December 16, 2021



Background

This fact sheet describes the results of the project 'The impact of COVID-19 on the Meuse-Rhine Euregion (EMR)'. The EMR is the cross-border region between the Netherlands, Belgium and Germany. The aim of the project was to assess the impact of COVID-19 on this area.

The outcomes of this project could serve as an example of effects of COVID-19 for other border regions in the European Union, or even more broadly.

Citizens of the EMR were selected for the survey by means of drawing a sample from the Dutch region of South Limburg, the German regions of Heinsberg, Düren and Aachen, and the Belgian regions of Limburg, Liège and the German-speaking community. The study consisted of two rounds in which participants were asked to complete an online questionnaire and to draw blood by finger prick, from which antibodies against COVID-19 were measured. A total of 30,000 test kits were sent out. In the first round of this study, 4,766 people from the Netherlands, Germany and Belgium participated. Of these, 3,339 people (70%) also participated in the second round.

The partner organisations involved are GGD Zuid Limburg, euPrevent Foundation, Maastricht UMC+, Gesundheitsamt des Kreises Düren (Health Department of Düren District), Gesundheitsamt des Kreises Heinsberg (Health Department of Heinsberg District), Gesundheitsamt der Städte-Region Aachen (Health Department of the Aachen Municipality), Sciensano and the German-speaking Community of Belgium. The project was subsidised by the Interreg V-A EMR programme.



Study

Round 1 April 13 - August 4



Blood sampling (at home) by finger prick



Online questionnaire

Round 2 September 21 - November 22



Blood sampling (at home) by finger prick



Online questionnaire

Study population

Blood tests and completed questionnaires

Round 1: April-June 2021

- 6,018 people responded
- 4,766 complete participations (completed questionnaire + successful blood collection)

Round 2: September - October 2021

- 3,708 people responded
- 3,339 full participations in rounds 1 and 2 (completed questionnaire + successful blood collection)

Number of participants per country

Round 1:

- Netherlands: 2,429 participants
- Germany: 1,352 participants
- Belgium: 985 participants

Round 2:

- Netherlands: 1,694 participants
- Germany: 988 participants
- Belgium: 657 participants.

The different numbers of participants were corrected with a weighting factor in order to obtain results that are as representative as possible of the population of the three EMR countries in terms of gender and age.

Number of participants:

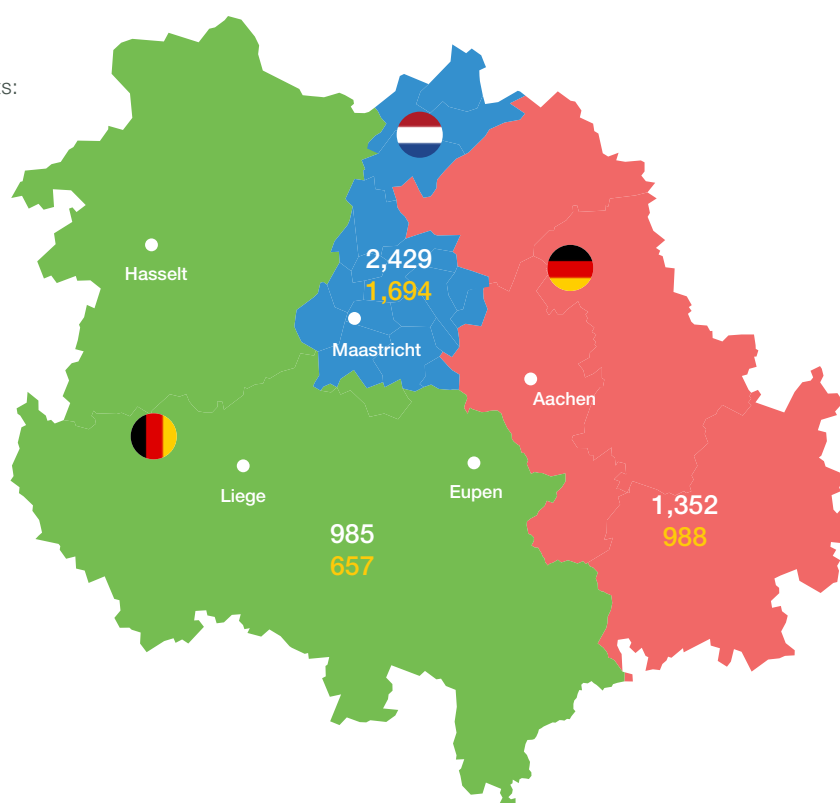
○ Round 1

● Round 2

● Germany

● Belgium

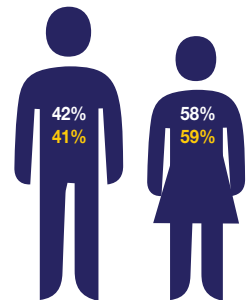
● Netherlands



Study population

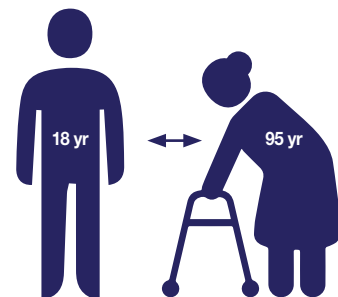
Gender

In round 1, 2,742 women (58%) and 2,022 men (42%) participated. Of the participants in round 1, 1,963 women (59%) and 1,374 men (41%) also participated in round 2.



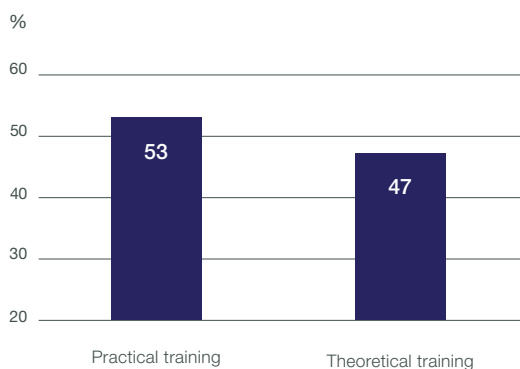
Age

The average age of the participants in the first round was 52 years and in the second round 55 years.



Education

Of the participants in both rounds, 53% had received a practical education (e.g., Mavo, MBO) and 47% had received a theoretical education (e.g., HBO, college or university).



COVID-19 measures

Investigated measures

- Wearing a face mask
- Maintaining social distance (1.5 metres)
- Limiting group size
- Reducing travel
- Requiring a QR code (entry pass) for certain activities (only in round 2)
- Staying at home and testing in case of symptoms (only in round 2)

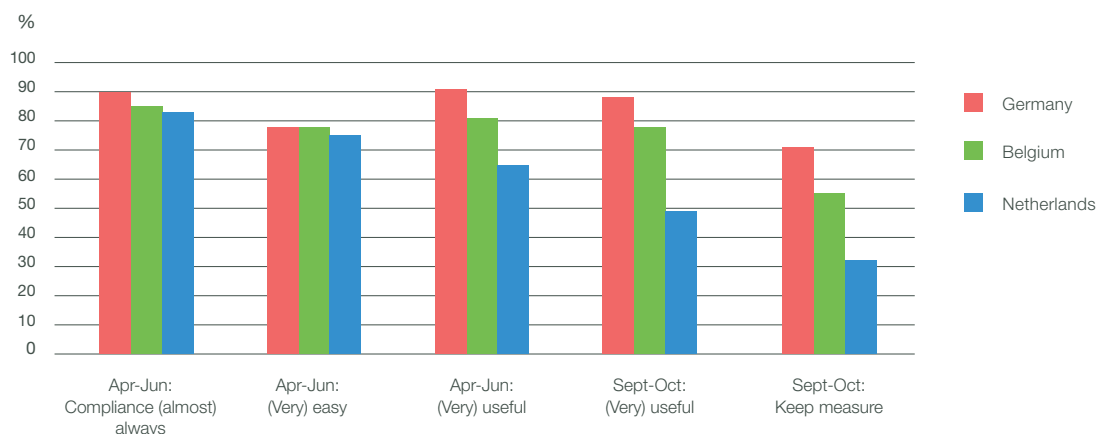


In April-June 2021, the citizens were asked to what extent they complied with the measures during the two months prior to the study and whether they found compliance with the measures easy. In both April-June and September-October 2021, the participants were asked whether they found the measures useful. In addition, in September-October 2021, they were asked to what extent they thought it was important to maintain the measures. The results are discussed for each measure.

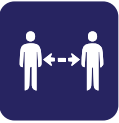


Wearing a face mask

More than 80% of citizens indicated in April-June that they (almost) always comply with wearing a face mask, and the vast majority also found it easy and useful. The percentage of citizens in the Netherlands who find wearing a face mask useful decreased from 65% in April-June to 49% in September-October. Although the results of the EMR countries were largely similar in the first round, we could see a difference in how important citizens in the EMR countries think it is to keep this measure. For example, the Netherlands was least supportive (32%) of keeping the face mask and Germany the most (71%).

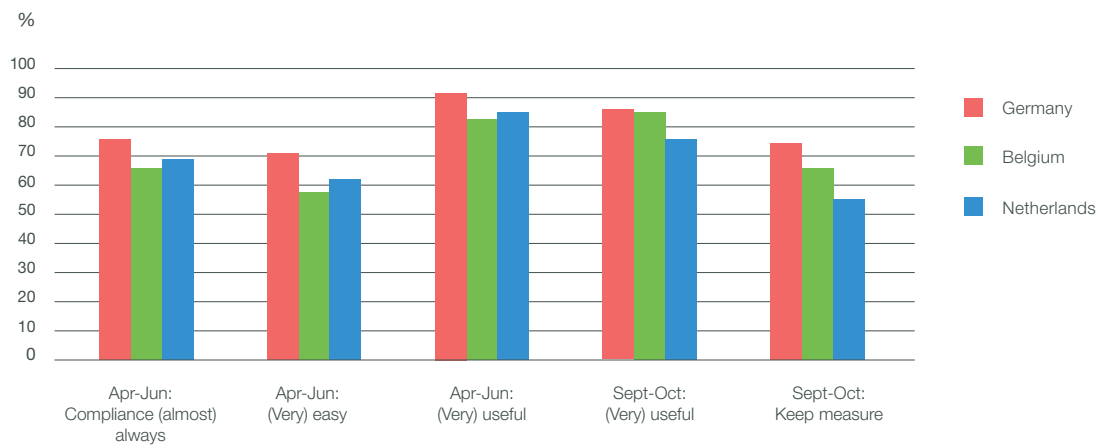


COVID-19 measures



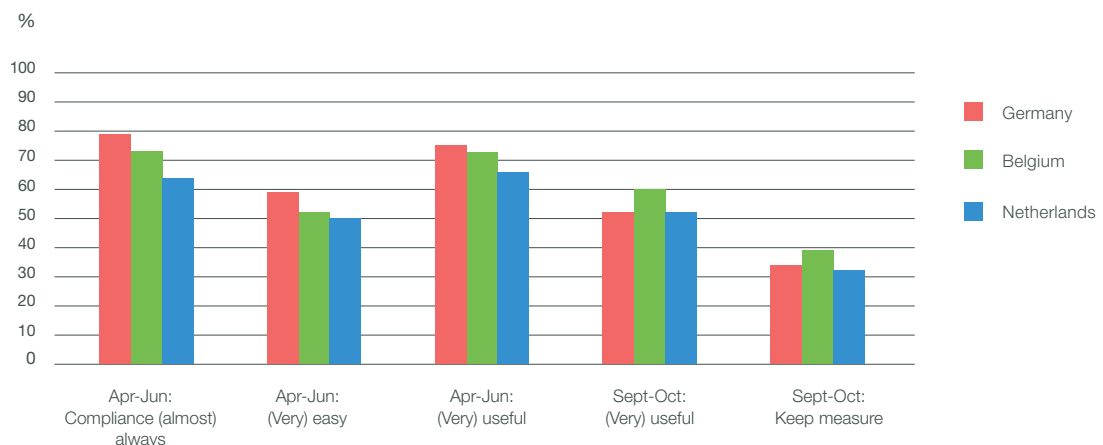
Maintaining social distance (1.5 metres)

In April-June, more than 80% of the citizens found maintaining 1.5 metres distance (very) useful. In September-October, this was still over 75% in all EMR countries. More than half of the citizens indicated that they found it (very) important to maintain this measure. This percentage was higher in Germany and Belgium, compared to the Netherlands.



Limiting group size

Compared to the other measures, limiting the group size was less frequently perceived as easy. In September-October, citizens were less likely to perceive this measure as (very) useful. Across the EMR, less than 40% of citizens indicated that they felt it was important to keep this measure. Compared to the other measures, maintaining a restriction on group size had the least support in EMR countries.

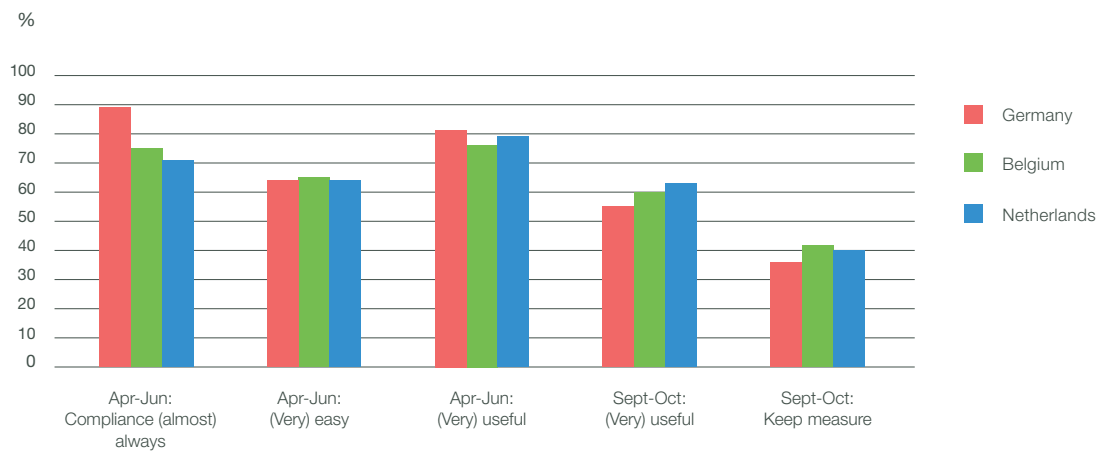


COVID-19 measures



Restricting travel

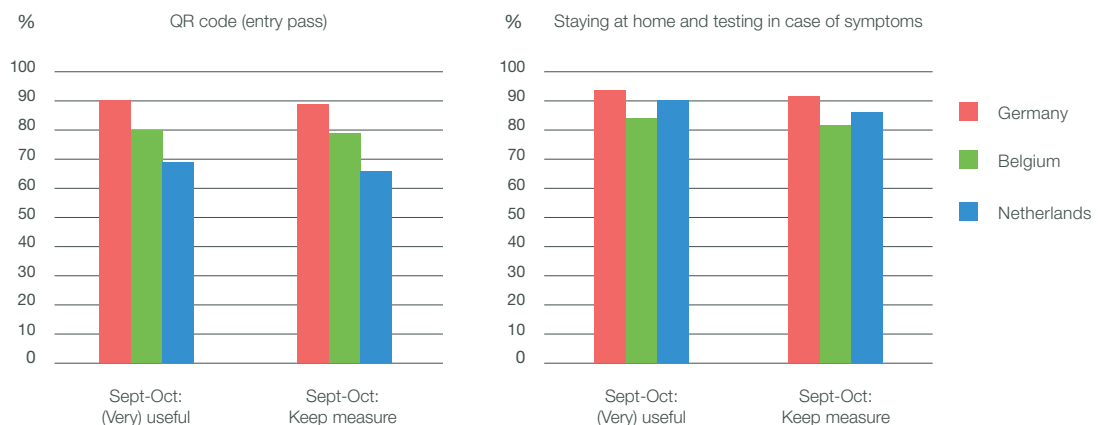
In April-June, German citizens were most likely to report reduced travel. This measure was considered less useful in all EMR countries in September-October, compared to April-June. Less than 45% of citizens indicated that it was important to keep this measure. Citizens in the EMR countries are the most like-minded regarding the maintenance of travel restrictions.



Requiring a QR code and staying at home and testing in case of symptoms



The majority of citizens indicated that they found both the QR code (entry pass) and staying at home and testing in case of symptoms useful and considered it important to keep these measures. Support for the QR code was highest among German citizens and lowest among Dutch citizens. The citizens in all three EMR countries found the measure staying at home and testing in case of symptoms most important to keep compared to the other measures.



Mobility between EMR countries

Crossing the border for a short visit

The number of times per month that citizens crossed the border into a neighbouring EMR country for a short visit changed during the corona pandemic. Examples of reasons for a short visit are shopping, visiting a restaurant and refuelling.

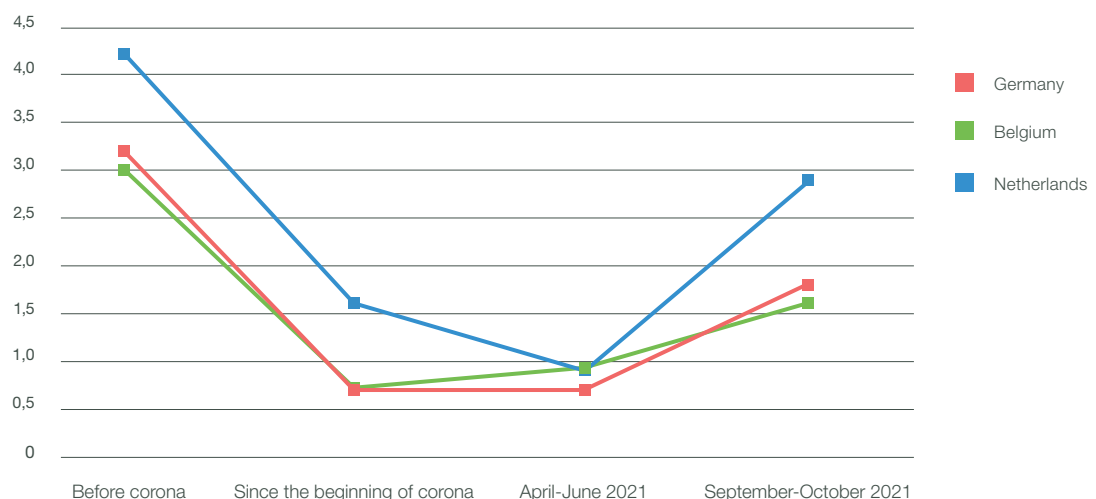


Before corona, this was on average **3.0 (Belgium)** to **4.2 (Netherlands)** times per month. **Since the beginning of corona**, this decreased to an average of **0.69 (Belgium)** to **1.6 (Netherlands)** times per month. Citizens reported crossing the border for a short visit on average **0.72 (Germany)** to **0.97 (Belgium)** times per month in **April-June**.

In **September-October**, this had increased again to an average of **1.6 (Belgium)** to **2.9 (Netherlands)** times per month. The results are in line with the measures in place at the time. Dutch citizens engaged in most cross-border traffic during the periods studied.



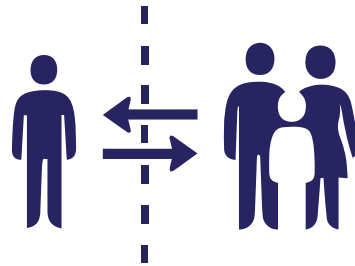
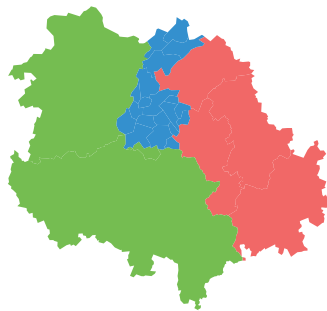
Crossing the border for a short visit (average per month)



Mobility between EMR countries

Visiting family, friends and acquaintances across the border

The number of times that citizens visited family, friends or acquaintances across the border changed during the corona pandemic.



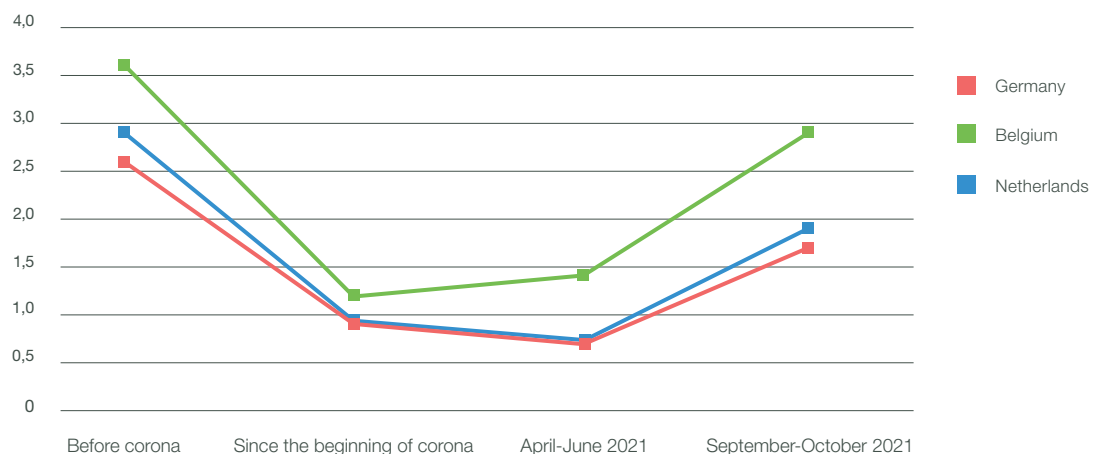
Before corona, this was on average **2.6 (Germany)** to **3.6 (Belgium)** times per month.

Since the start of corona, this dropped to an average of **0.87 (Germany)** to **1.1 (Belgium)** times per month. Citizens reported in **April-June** that they visited family, friends or acquaintances across the border an average of **0.74 (Germany)** to **1.4 (Belgium)** times and in **September- October** this had increased to an average of **1.8 (Germany)** to **2.9 (Belgium)** times per month.

These results are in line with the measures in place at the time. The number of cross-border visits to family, friends or acquaintances has doubled in all three countries since the summer of 2021, but is still significantly lower than before corona. Belgian citizens visited family, friends or acquaintances the most during the periods studied.



Crossing the border to visit family, friends or acquaintances (average per month)



Mobility between EMR countries



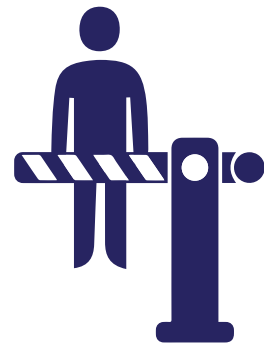
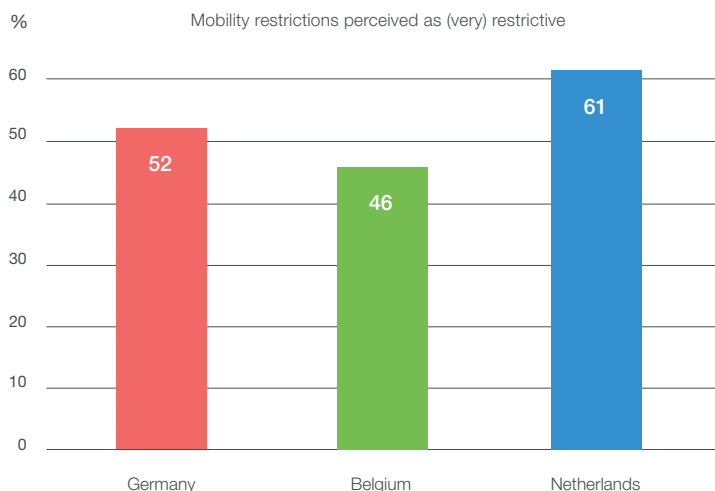
Working and studying abroad

2% of participants reported **working in a country other than their country** of residence. Less than 1% of participants reported **studying in a country other than their country** of residence.



Mobility Limitations

In **April-June**, about half of the citizens experienced the mobility restrictions between EMR countries during the corona pandemic as (very) restrictive. In the **Netherlands** this was **61%** of citizens, in **Belgium** **46%** and in **Germany** **52%**.



This percentage was even higher within the group of people with family, friends or acquaintances living in a neighbouring EMR country. Two-thirds of the group of citizens with family, friends or acquaintances living across the border experienced the mobility restrictions between the countries as (very) restrictive.

Vaccination against COVID-19



Reasons for vaccination

The three most frequently cited reasons for vaccination against corona were similar in all three EMR countries: to prevent serious illness due to corona infection, protection of family and to return to the old normal. In all three countries, the reason 'return to the old normal' shifted from first place in April-June to third place in September-October.



Vaccination Rate

In **September-October**, **87%** of **Dutch** citizens, **96%** of **Belgian** citizens and **94%** of **German** citizens were fully vaccinated against COVID-19. Full vaccination means two vaccinations, one vaccination with the Janssen vaccine, or a combination of having undergone a corona infection and one vaccination. Vaccination rates in this study are slightly higher than those of the general adult population in South Limburg (84%), Belgium (86%), and North Rhine-Westphalia (81%).

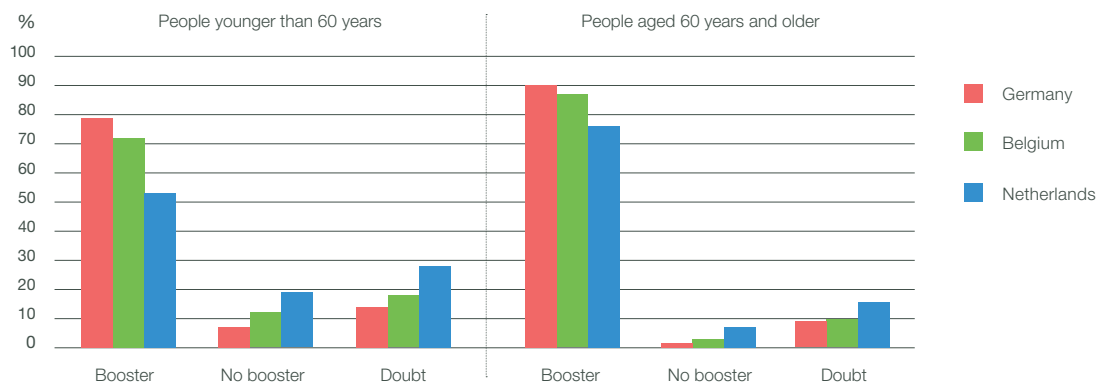
Vaccination rate in this study	NL	BE	DE
Fully vaccinated	87%	96%	94%
Partially vaccinated	5%	1%	3%
Not vaccinated	8%	3%	3%

On average, 2% of citizens were still unsure about getting vaccinated and 3% said they did not want to get vaccinated.



Booster

In September-October, the majority of citizens indicated that they would take a booster vaccination against COVID-19 as soon as the opportunity presented itself. This percentage was higher among citizens aged 60 years and older, and among German citizens. In the Netherlands a higher proportion of citizens were hesitant compared to Belgium and Germany.



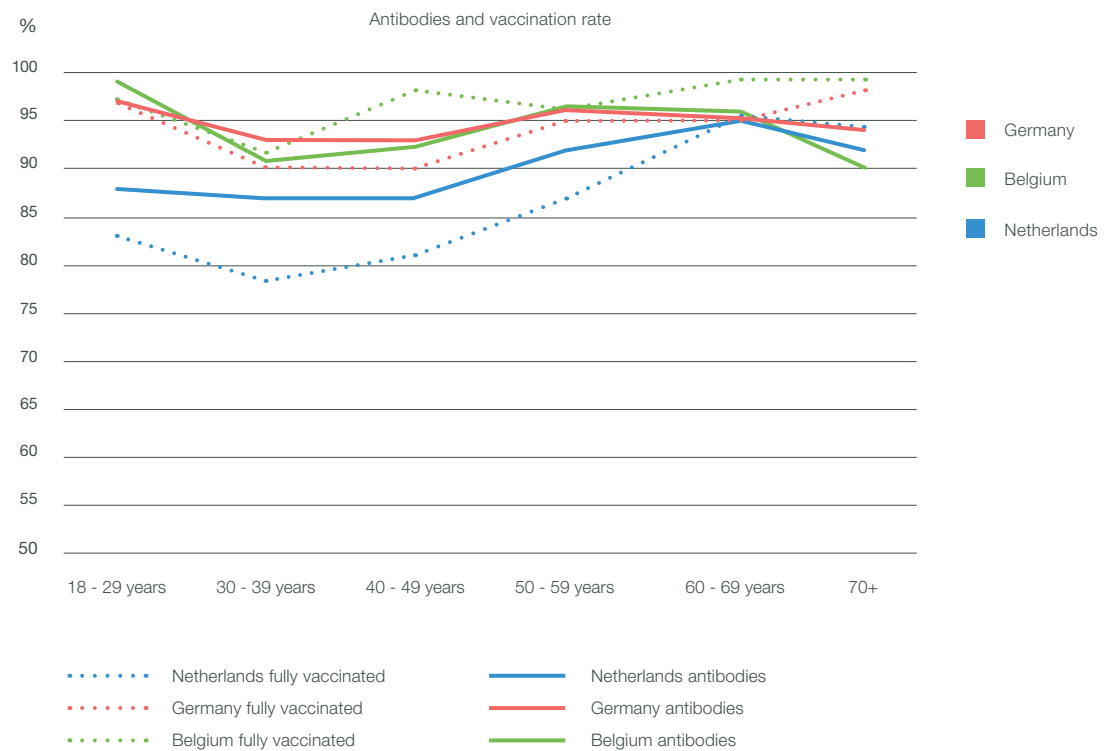
Antibodies against COVID-19



Analysis of blood samples

On average, **93%** of citizens in this study had **antibodies against COVID-19** at the time of blood collection (September-October). In the **Netherlands** this was on average **90%**, in **Belgium 94%**, and in **Germany 95%**. Citizens in the Netherlands were slightly less likely to have antibodies than citizens in Belgium and Germany.

The results refer to the (IgG) antibodies against the spike protein of the SARS-CoV-2 virus at the time of blood collection. The number of citizens with antibodies is generally high in all countries.



Summary

The study consisted of two rounds, in April-June and in September-October 2021. In **both rounds**, participants were asked to complete an online **questionnaire** and take a blood sample by finger prick, from which **antibodies** against COVID-19 were measured.

Measures

- In April-June, the vast majority (~60-80%) of citizens in the Netherlands, Belgium, and Germany indicated that they had (almost) always complied with the applicable **corona measures** and that they found these measures **easy and useful**. These percentages were highest among the German citizens.
- Maintaining **social distance (1.5 meters)** was consistently considered (very) useful by more than three-quarters of citizens. Therefore, more than half of citizens indicated that they found it (very) important to keep this measure.
- In Germany and Belgium, citizens still considered wearing a **face mask** useful, while this proportion dropped markedly in the Netherlands. Therefore, support for maintaining the face mask requirement was lowest among the Dutch citizens.
- **Restrictions on group size and travel** were considered less useful by citizens in the three EMR countries, compared to April-June. Support for maintaining these measures was low in all three EMR countries.
- The majority of citizens indicated that they found both the **QR code** (entry pass) and **staying at home and testing** in case of symptoms useful and considered it important to keep these measures. Support for the QR code was highest among German citizens and lowest among Dutch citizens.

Mobility

- A large proportion of the citizens experienced the **mobility restrictions** between countries during the corona pandemic as (very) **restrictive**. Crossing the border into an EMR neighbouring country to visit family, friends or acquaintances or for any other reason decreased during the corona pandemic.
- As measures related to border closure were lifted, the number of visits across the border increased. Though border crossings have doubled in all three countries since the summer of 2021, there were still significantly fewer than before corona.

Vaccination and antibodies in September-October

- On average, **93%** of all citizens were fully **vaccinated** against COVID-19. The most frequently cited reasons for vaccination were similar in all three EMR countries: to prevent illness, protect family and return to normal. The willingness to take a **booster vaccination** was highest among citizens aged 60 years and older.
- Analysis of the blood samples showed that on average 93% of citizens had **antibodies** against COVID-19.

Points of interest from the study



- Because the number of participants varied per round, the study results were corrected with a weighting factor. As a result, the study is representative of the population in the three EMR countries in terms of gender and age.
- Blood collection via finger prick was not successful for all participants. This may have resulted in bias.
- More people were vaccinated in this study, compared to the general population.

Websites



<https://euprevent-covid-tool.eu/>

<https://euprevent.eu/nl/covid-19/>

<https://www.ggdzl.nl/professionals/projecten-en-onderzoeken/impact-van-covid-19-op-de-euregio-maas-rijn/>