

Table 1S. Questionnaire (Questionnaire for a volunteer)

Personal information:

1. Surname
2. Name
3. Middle name
4. Gender
5. Region and district of residence
6. Since what year have you been living in this region
7. Address of registration in the region according to the passport
8. Date of birth
9. Name of the parent or legal representative of the volunteer under 18
10. Your phone
11. Your e-mail
12. Field of activity
13. Place of work. position. type of activity

Special questions

1. Have you been given a PCR test for SARS CoV-2? Specify result and date.
 2. Have you been diagnosed with COVID-19? When was the diagnosis made?
Was it complicated by pneumonia?
 3. The presence of symptoms of acute respiratory infections on the date of filling out the questionnaire:
Runny nose. cough. fever. other symptoms. Date of symptom onset.
 4. Presence of chronic diseases: list
 5. Have you had family or work contact with people with COVID-19? Specify a date.
 6. Indicate where you are on the date of filling out the questionnaire:
In the hospital
Quarantined at the observatory
In quarantine at home
At home (I follow the announced regime)
I continue to work
 7. Have you left the country in the last 3 months? Specify the country and date of return.
 8. Have you traveled to other regions of the country in the last 3 months? Indicate from which region the return was and the date of return.
 9. Have you taken immunomodulatory drugs since January 2020?
Specify one immunomodulator from the pop-up list. How long?
 10. Smoking (No/Yes/Quit)
 11. Have you been vaccinated against COVID-19?
The name of the vaccine. Date of first injection. date of second injection
 - 11a. Reactions to the vaccine. indicate the reaction
 - 11b. Have you had a PCR test for COVID-19 after vaccination? Specify result and date
 - 11c. Have you been tested for antibodies to COVID-19 after vaccination? Specify result and date
- Consent to participate in the study and the processing of personal data
Consent to send the results of the study to the specified e-mail.
Date of filling out the Questionnaire (day. month. year)

Table 2S. Distribution of volunteers by occupation

Occupation	Examined	
	<i>n. persons</i>	Share. % (95% CI)
Health workers	2218	36.6 (35.4–37.8)
Unemployed	982	16.2 (15.3–17.2)
Pensioners	643	10.6 (9.9–11.4)
Other	447	7.4 (6.7–8.1)
Pupils	421	7.0 (6.3–7.6)
Education	345	5.7 (5.1–6.3)
School children	189	3.2 (2.7–3.6)
Office workers	156	2.6 (2.2–3.0)
Business	122	2.0 (1.7–2.4)
Students	120	2.0 (1.6–2.4)
Manufacturing	98	1.6 (1.3–2.0)
The science	80	1.3 (1.1–1.6)
Preschool children	77	1.3 (1.0–1.6)
The Arts	57	1.0 (0.7–1.2)
Agriculture	32	0.5 (0.4–0.7)
Transport	23	0.4 (0.2–0.6)
Military personally	22	0.4 (0.2–0.6)
IT-sphere	22	0.4 (0.2–0.5)
TOTAL	6054	100

Table 3S Age distribution of seropositive volunteers according to the quantitative content of Nc Abs

Age groups years	Examined people	Level of Nc Abs . BAU/ml									
		17–31		32–124		125–332		333–666		> 667	
		<i>n</i>	% (95% CI)	<i>n</i>	% (95 CI)	<i>n</i>	% (95% CI)	<i>n</i>	% (95% CI)	<i>n</i>	% (95% CI)
1–17	670	47	7.0 (5.2–9.2)	178	26.6 (23.3–30.1)	178	26.6 (23.3–30.1)	124	18.5 (15.6–21.7)	100	14.9 (12.3–17.9)
18–29	702	53	7.5 (5.7–9.8)	208	29.6 (26.3–33.2)	169	24.1 (20.9–27.4)	118	16.8 (14.1–19.8)	100	14.2 (11.7–17.1)
30–39	962	62	6.4 (5.0–8.2)	255	26.5 (23.7–29.4)	234	24.3 (21.6–27.2)	196	20.4 (17.9–23.1)	149	15.5 (13.3–17.9)
40–49	954	62	6.5 (5.0–8.2)	238	24.9 (22.2–27.8)	222	23.3 (20.6–26.1)	182	19.1 (16.6–21.7)	196	20.5 (18.0–23.2)
50–59	973	51	5.2 (3.9–6.8)	209	21.4 (18.9–24.2)	212	21.8 (19.2–24.5)	192	19.7 (17.3–22.4)	248	25.5 (22.8–28.4)
60–69	972	62	6.4 (4.9–8.1)	202	20.8 (18.3–23.5)	181	18.6 (16.2–21.2)	186	19.1 (16.7–21.8)	268	27.6 (24.8–30.5)
70 +	821	78	9.5 (7.6–11.7)	171	20.8 (18.1–23.8)	185	22.5 (19.7–25.5)	137	16.7 (14.2–19.4)	163	19.9 (17.2–22.7)
TOTAL	6054	415	6.9 (6.2–7.5)	1461	24.1 (23.1–25.2)	1381	22.8 (21.8–23.9)	1135	18.7 (17.8–19.7)	1224	20.2 (19.2–21.3)

Table 4S. Age distribution of seropositive volunteers according to the quantitative content of RBD Abs

Age groups. years	Examined. people	Level of RBD Abs BAU/ml					
		22.6–220		220–450		> 450	
		<i>n</i>	% (95 CI)	<i>n</i>	% (95% CI)	<i>n</i>	% (95% CI)
1–17	670	193	28.8 (25.4–32.4)	193	28.8 (25.4–32.4)	233	34.8 (31.2–38.5)
18–29	702	180	25.6 (22.5–29.0)	177	25.2 (22.4–28.6)	305	43.5 (39.7–47.2)
30–39	962	230	23.9 (21.2–26.7)	242	25.2 (22.4–28.0)	443	46.1 (42.9–49.3)
40–49	954	182	19.1 (16.6–21.7)	215	22.5 (19.9–25.3)	517	54.1 (50.9–57.3)
50–59	973	136	14.0 (11.9–16.3)	149	15.3 (13.1–17.7)	651	66.9 (63.8–69.8)
60–69	972	157	16.2 (13.9–18.6)	144	14.8 (12.6–17.2)	627	64.5 (61.4–67.5)
70 +	821	154	18.8 (16.1–21.6)	110	13.4 (11.1–15.9)	506	61.6 (58.2–65.0)
Overall	6054	1232	20.4 (19.4–21.4)	1230	20.3 (19.3–21.3)	3282	54.2 (52.9–55.5)

Table 5S. Age distribution of the main types of coronavirus vaccines used

Age groups, years	Examined people	Sinopharm/BIBP		AZD 1222		GameCOVIDVac		Coronavac		mRNA 1273		Others	
		<i>n</i>	%. (95% CI)	<i>n</i>	%. (95% CI)	<i>n</i>	%. (95% CI)	<i>n</i>		<i>n</i>	(95% CI)	<i>n</i>	%. (95% CI)
1–17	670	6	13.3 (5.1–26.8)	1	2.2 (0.06–11.8)	8	17.8 (8.0–32.1)	6	13.3 (5.1–26.8)	17	37.8 (23.8–53.5)	7	15.6 (6.5–29.5)
18–29	702	180	36.5 (32.3–40.9)	113	22.9 (19.3–26.9)	94	19.1 (15.7–22.8)	45	9.1 (6.7–12.0)	48	9.7 (7.3–12.7)	13	2.6 (1.4–4.5)
30–39	962	272	35.7 (32.3–39.2)	153	20.1 (17.3–23.1)	156	20.4 (17.6–23.5)	83	10.9 (8.8–13.3)	81	10.6 (8.5–13.0)	18	2.4 (1.4–3.7)
40–49	954	262	31.6 (28.5–34.9)	160	19.3 (16.7–22.2)	203	24.5 (21.6–27.6)	99	11.9 (9.8–14.4)	75	9.1 (7.2–11.2)	30	3.6 (2.5–5.1)
50–59	973	235	27.1 (24.2–30.2)	204	23.6 (20.8–26.5)	187	21.6 (18.9–24.5)	141	16.3 (13.9–18.9)	76	8.8 (7.0–10.9)	23	2.7 (1.7–4.0)
60–69	972	262	32.6 (29.4–35.9)	211	26.2 (23.2–29.4)	148	18.4 (15.8–21.3)	106	13.2 (10.9–15.7)	56	7.0 (5.3–8.9)	21	2.6 (1.6–4.0)
70+	821	209	35.0 (31.2–39.0)	136	22.8 (19.5–26.4)	129	21.6 (18.4–25.1)	69	11.6 (9.1–14.4)	43	7.2 (5.3–9.6)	11	1.8 (0.9–3.3)
Overall	6057	1426	32.4 (31.1–33.8)	978	22.3 (21.0–23.5)	925	21.1 (19.9–22.3)	549	12.5 (11.5–13.5)	396	9.0 (8.2–9.9)	123	2.8 (2.3–3.3)