

Survey on testing for SARS-CoV-2

1. **What tests is your country using and what is their intended purpose?** Please specify if tests are diagnostic (RT-PCR or antigen) or to assess immunity (antibody). Please provide information regarding test manufacturers/ brands used.
2. **For each type of test in use (or where future use is planned), what quantities does your country foresee in the next 3 -6 months?**
3. **What is your country's approach regarding mass testing?**

COUNTRY	DIAGNOSTIC TESTING		IMMUNITY TESTING	
	Test type	Quantity	Test type	Quantity
EU/EEA + UK				
Austria	RT-PCR	Depending on extent of monitoring activities, estimations of up to 7 million (however there are considerations regarding pooling of samples).	<ul style="list-style-type: none"> • Antibody (ELISA) Test: for defined research questions or in addition to RT-PCR in case of negative PCR. • Antibody (Lateral-Flow) Tests: not currently endorsed by official bodies but consideration being given to areas of possible meaningful use (e.g. epidemiological studies, evaluations on seroconversion, supplementary use before hospital discharge, etc.) 	Antibody (ELISA): Depending on extent of their supplementary use, estimations of up to 3.5 million. Antibody (lateral-Flow): Depending on extent of a meaningful supplementary use, estimates of up to 1 million.
Cyprus	RT-PCR	Two large scale testing schemes have been announced, each consisting of 20,000 tests. Approximately 1500 additional tests are being done daily outside of these testing schemes.	Ministry of Health does not recommend rapid tests for detection of IgM/ IgG. However, some private laboratories are currently performing these tests. Plans to use antibody testing to assess immunity in the population at	-

			a later stage.	
Croatia	RT-PCR	Approx. 100,000 tests in next 6 months.	Plans to start sero-epidemiological survey(s) using EIA test to assess seroprevalence among general population and some specific population groups (e.g. HCWs).	-
Czechia	RT-PCR	Quantity of tests is sufficient for a period of six months.	Rapid tests used when there is insufficient RT-PCR capacity for patients at later stage (to find out if they are recovered or if they have antibodies). Also used when testing randomized sample of population for antibodies.	Quantity of tests is sufficient for a period of six months.
Germany	RT-PCR	Approx. 900.000 / week, the capacities are being further increased, difficult to predict capacities in 3-6 months, but likely to be at least 1.3 million tests / week.	On a case-by-case basis to confirm diagnosis if PCR is negative but symptoms concordant to COVID19 - To assess immunity, antibody tests are not being recommended (but nevertheless already used in laboratories). Under discussion: to use antibody tests as an offer to test personnel who cares for COVID19 patients.	Not monitoring antibody capacities at the moment.
Ireland	RT-PCR <ul style="list-style-type: none"> • Accuscience Allplex 2019 n-COV Molecular Assay + Extraction Consumables Z-Path-COVID-19-CE GENESIG KIT BY PRIMERDESIGN • Aquilant Scientific SARS-CoV-2 PCR Assay and Extraction Kit • Syntec Credo Vita PCR Sars Cov-2 Kit 	100,000 tests per week (from 18th May 2020)	-	-

	<p>Genemark Sars Cov 2 Panel CO-Diagnostics USA Test Kit</p> <ul style="list-style-type: none"> • Cruinn Diagnostics <p>CerTest Viasure PCR Kit + Consumables Cepheid Gene Xpert Covid 19 Test Kit</p> <ul style="list-style-type: none"> • Serosep <p>RespiBio SARS- CoV-2 Assay kit - 240 tests</p> <ul style="list-style-type: none"> • Launch Diagnostics <p>Anatolia Geneworks Bosphore Sars Cov - 2 PCR Assay</p> <ul style="list-style-type: none"> • Roche Diagnostics <p>COVID Assay for Cobas 6800 equipment COVID Assay for MagNa Pure equipment</p> <ul style="list-style-type: none"> • Abbott Molecular <p>Test Kits and Extraction Consumables</p> <ul style="list-style-type: none"> • Idexx <p>OPTI-SARS-CoV-2 RT-PCR</p> <ul style="list-style-type: none"> • Shanghai ZJ Bio-Tech Co., Ltd. <p>Novel Coronavirus (2019-nCoV) Real Time Multiplex RT-PCR Kit Viral RNA Isolation Kit (Preloaded for Auto-Extraction)</p>			
Italy	<p>RT-PCR</p> <p><u>Also, but only in case of urgent diagnosis:</u> rapid diagnostic tests (Point of care tests) based on molecular detection of viral genes.</p>	<p>RT-PCR: about 7,000,000 or more in next 3 months</p>	<p>Serological tests for IgG detection (Kit of CLIA and/or ELISA type) are used for a national epidemiological study</p> <ul style="list-style-type: none"> • Tests purchased from ABBOTT 	<p>150,000</p>
Latvia	<p>RT-PCR</p> <ul style="list-style-type: none"> • QIAamp Viral RNA Mini extraction 	<p>Around 2200-2600 samples per day.</p>	<p>Validating detection of antibody against SARS-CoV-2 using blood samples from RNA-positive patients</p>	<p>-</p>

	<p>Kits:</p> <ul style="list-style-type: none"> • NucliSENS® easyMag • Seegene STARMag 96 x 4 Universal Cartridge Kit • Abbott M2000SP Instrument • IndiMag Pathogen Kit • Ribospin™ vRD (GeneAll). • Natch CS 		and epidemiologic sites.	
Malta	<p>RT-PCR</p> <ul style="list-style-type: none"> • ABI diagnostics 	In the coming 3 months: 65,000 to 110,000	<p>Currently validating COVID-19 serological assays to assess population immunity.</p> <p>Manufacturers:</p> <ul style="list-style-type: none"> • Abbott • Euroimmune • Eagle 	20,000
Netherlands	RT-PCR	28.000 tests per day in June, increasing to approximately 31.000 tests per day in September.	Antibody tests are used, mainly for research purposes.	Still uncertain. One million antibody tests have been delivered, a portion of which will be used in the coming months.
Portugal	RT-PCR	In the next 3 - 6 months: around 489.000 tests (same as last 3 months). Despite decrease in the confirmed cases, diagnosis surveys are planned in especial groups of the population and the strength of the sentinel COVID-19 surveillance.	ELISA and/or CLIA as a complement for the RT-PCR mainly in hospitalized and severe COVID-19 cases. ELISA and/or CLIA tests are also used for seroepidemiological studies in especific groups of the population like healthcare workers.	15,000 tests (IgA, IgG and IgM) for a national population survey to be conducted over one year. Other seroepidemiological studies planned in

				coming months. An increase in number of serological tests is foreseen in the next 3-6 months.
Slovakia	RT-PCR	In the next 3-6 months: predicted about 450,000 – 900,000.	-	-
Sweden	<p>RT-PCR</p> <p><u>Molecular platforms with associated detection kits or in-house methods:</u></p> <p>ABI 7500 Abbott m2000 BD Max CFX96 CFX384 LightCycler 480 qTower86 Quantstudio 5 Quantstudio 6 Flex/Pro Quantstudio 7 Flex/Pro Quantstudio 12K RotorGene Q cobas6800 GeneXpert MIC</p> <p><u>Other kits used:</u></p> <p>TATAA GrandPerformance SARS-COV-2 Detection/Screening kit (CE-IVD) TaqMan FAST Virus 1-step MM(4x) Panther Fusion, path-ID</p>	Approx. 50 – 100 000 tests per week.	-	-

	Seegene CFX 96, Inhouse på MIC Rapid PCR: GeneXpert			
United Kingdom	RT-PCR <ul style="list-style-type: none"> • Abbott • AusDiagnostics • BD • BGI • BioMérieux • Cepheid • Hologic • Novacyt • Perkin Elmer • Qiagen • Roche Diagnostics • Thermo Fisher 	UK testing strategy is currently for 100,000 tests a day. Looking to increase significantly, in particular when starting use of antibody tests to assess if an individual has previously had COVID-19.	Currently only using antibody testing for seroprevalence. In the event of a validated test, will also use to assess if an individual has raised antibodies against COVID-19.	-
	Test type	Quantity	Test type	Quantity
Norway	RT-PCR <ul style="list-style-type: none"> • Roche covid-19 assay • Roche cobas 6800 covid-19 assay • EasyMag covid19 assay • Geneexpert covid-19 assay • TibMolBio covid-19 assay 	Expect approx. 15-20,000 persons per week the next few weeks. To be reduced if epidemic intensity lowers. Probably less than 10,000 tests a week during summer.	Abbot Arcitect In-house flowcytometry (illumine) EuroImmune DiaSorin Roche kit Wantai SARS-CoV-2 Ab ELISA kit	Probably a couple of hundred each week if the epidemic is not evolving.
Switzerland	RT-PCR <ul style="list-style-type: none"> • Kits by TibMolBio (=Roche kits) • Kits by Seegene • Kits by Altona • Kits by CDC • Kits by Lifereiver 	In total, approx. 280'000 diagnostic tests have been conducted. Depending on the evolution of the pandemic, future needs could range from a few thousand tests (end of pandemic) to 1 million tests (big	Antibody tests not currently recommended but information from laboratories indicates the following tests are being/will be employed in serosurvey and possibly for private customers <ul style="list-style-type: none"> • Luminex (in house test) 	No estimate.

	<ul style="list-style-type: none"> • Kits by Thermofischer • Kits by Perkin Elmer • Kits by Qiagen <p>+ BD Max Platforms (BecktonDickinson) + GeneXpert Platforms (Cepheid) + COBAS Platforms (Roche)</p>	second wave).	<ul style="list-style-type: none"> • EuroImmun IgG • Epitope Diagnostics IgG • Roche Test (Elecsys) 	
Montenegro	RT-PCR	Currently 6000 tests monthly (18,000 for three months / 36,000 for six months).	Plans to conduct serosurvey using ELISA test (possibly Euroimmun IgG and IgA testing devices).	Representative serosurvey should be based on a sample size of cca. 4000 tested persons.