

## This is why Germany is tops in coronavirus testing

### Testing, testing, testing!

Germany is considered by many as exemplary in the fight against the COVID-19 pandemic, also in an international comparison. The strategy of early, comprehensive and targeted testing using laboratory diagnostics is a cornerstone of this success.

With more than 30 laboratory tests carried out per 1,000 inhabitants, Germany held already in April 2020 a leading position worldwide among all territorial states with higher population density. The test rate has continuously improved since: At the end of May it was over 46 per 1,000 inhabitants.

On 10 May, the number of direct tests (acute diagnostics with PCR tests) performed in medical laboratories in Germany exceeded the 3-million mark. Add to this over a quarter of a million indirect detections (antibody tests).

The number of tests carried out each week continues to rise; capacities for an even higher test volume are available.

Laboratory diagnostics is of central importance not only in coping with the current pandemic. Laboratory tests also provide sound findings for political decisions on whether and how the lockdown can be eased stepwise.

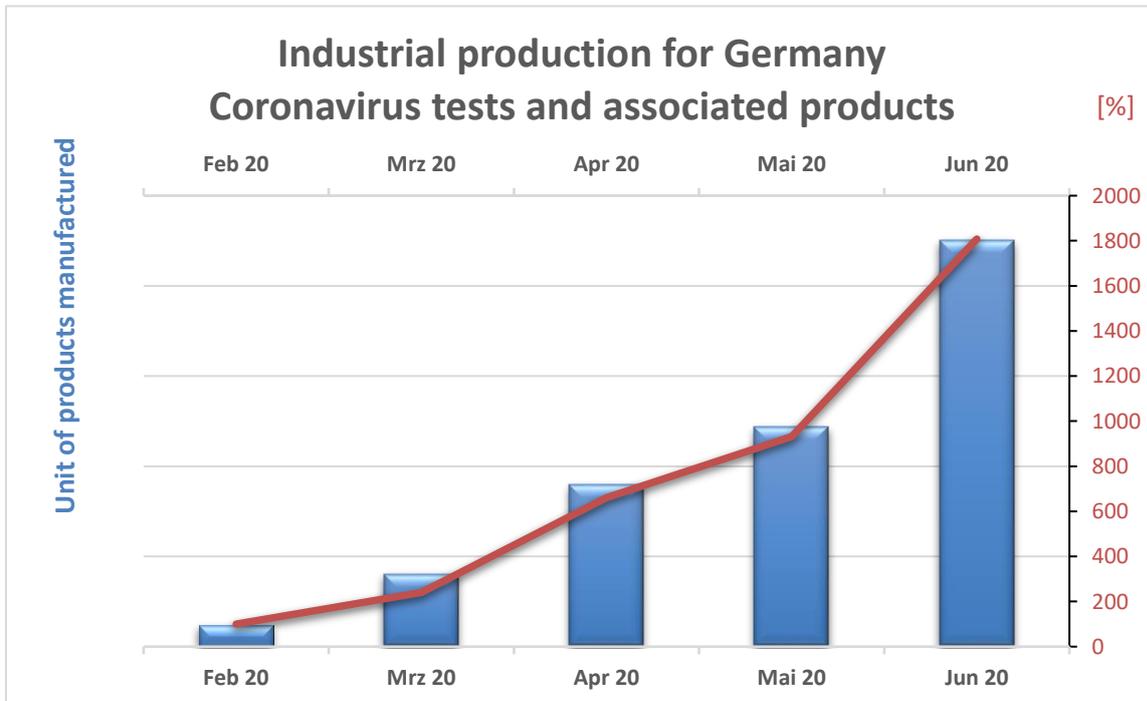


Fig.: Availability of coronavirus tests and associated products (e.g. swabs, extraction kits, devices) for Germany, increase in percent, VDGH membership survey of May 2020)

### **Four key success factors**

A few weeks after the outbreak in China (December 2019), researchers sequenced the genome of the coronavirus with the help of technologies from the life science research industry. The first industrially produced tests for the coronavirus became available from mid-February 2020.

There are four key success factors for Germany's excellent position in testing for the coronavirus SARS-CoV-2.

### **A strong-performing industry**

- 40,000 staff in the life science research and diagnostics industry in Germany stand for innovative strength, a pioneering spirit and fast response – for the benefit of healthcare.
- Production capacities worldwide and the availability of tests for Germany were promptly geared up tenfold. For this purpose, industry works in 24/7 mode and responds flexibly to further rising test volumes.
- A wide range of manufacturers ensure supplies of high-quality coronavirus tests and all associated products and services. These companies include multinational groups as well as small and medium-sized enterprises. No manufacturer alone can cover the immense worldwide demand for tests. Out of over 100 VDPH members, 65 businesses manufacture “coronavirus associated” products.
- The diagnostics industry stands for diversity. Different test methods and different applications are tailored to the various workflows in laboratories and doctors' practices, enabling comprehensive testing in the respective medical setting.

### **Efficient laboratory structures**

- Germany has good all-area healthcare by specialist medical laboratories in the outpatient and inpatient sectors. The technical equipment is regarded as outstanding.
- Medical know-how, highly qualified staff and the 24/7 commitment of all employees make it possible to cope with the rising volume of testing.
- Up to 200 medical laboratories are equipped for complex molecular diagnostics for the direct detection of the coronavirus.
- Medical laboratories are an integral part of the overall stable infrastructure in health research and healthcare.

### Decentralised markets

- Germany is the largest diagnostics market inside the EU. The life science research and diagnostics industry does a considerable amount of research and production in Germany.
- Competition between laboratories and manufacturers ensures innovations and the variety of test options.
- The partnerships between laboratories and diagnostics companies have grown and are reliable. They enable flexible and custom-tailored solutions for the best possible supplies of laboratory diagnostics.
- Trust in the market is important but cannot be taken for granted in times of crisis. Protectionism must not disrupt globalised production and supply chains.

### Proactive health policy

- Politicians have realized the importance of early targeted testing for the detection and interruption of infection chains.
- The federal government's test strategies are supplemented by many initiatives at the level of the German federal states and regionally, according to the given needs.
- Relying on scientific advice, the legislator has initiated more testing of symptom-free persons and in the environment of persons at special risk.
- The association "Verband der Diagnostica-Industrie e. V. (VDGH)" makes a strong commitment in the COVID-19 pandemic. The VDGH actively contributes its expert knowledge to the dialogue with public authorities, ministries and legislators.

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