



Coronavirus Disease 2019 (COVID-19) Daily Situation Report of the Robert Koch Institute

21/06/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
189,822 (+ 687*)	8,882 (-1*)	4.7%	ca. 174,900**

*Change from previous day; **Estimate

COVID-19 cases are notified to the local public health department in the respective districts, in accordance with the German Protection against Infection Law (IfSG). The data are further transmitted through the respective federal state health authority to the Robert Koch Institute (RKI). This situation report presents the uniformly recored nationwide data on laboratory-confirmed COVID-19 cases transmitted to RKI.

– Changes since the last report are marked *blue* in the text –

Summary (as of 21/06/2020 12:00 AM)

- The number of newly transmitted COVID-19 cases to RKI continues to decrease in comparison to previous weeks. The cumulative nationwide incidence over the past 7 days was **3.9** cases per 100,000 inhabitants. A total of **146** districts transmitted zero cases.
- In total, **189,822** laboratory-confirmed COVID-19 cases and **8,882** deaths due to COVID-19 have been electronically reported to the RKI in Germany.
- COVID-19 outbreaks continue to be reported in nursing homes and hospitals.
- Outbreaks of COVID-19 have been reported in several federal states (including in institutions for asylum seekers and refugees, in meat processing plants and logistics companies, among seasonal harvest workers and in connection with religious events and family gatherings).

Epidemiological Situation in Germany

Geographical distribution of cases

Epidemiological analyses are based on validated cases notified electronically to the RKI in line with the Protection Against Infection Law (Data closure: 12:00 AM daily). Since January 2020, a total of **189,822 (+687)** laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated by the RKI (see Table 1). A total of **146** districts reported no cases in the past 7 days. Information on laboratory-confirmed cases is also available on the RKI website at https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Fallzahlen.html and <https://corona.rki.de>.

Table 1: Number and cumulative incidence (per 100,000 population) of laboratory-confirmed COVID-19 cases and deaths for each federal state electronically reported to RKI, Germany (21/06/2020, 12:00 AM).

Federal State	Total number of cases	Number of new cases	Cases/100,000 pop.	Cases in the last 7 days	7-day incidence per 100,000 pop.	Number of deaths	Number of deaths/100,000 pop.
Baden-Wuerttemberg**	35,272	0	319	129	1.2	1,824	16.5
Bavaria	47,843	16	366	228	1.7	2,565	19.6
Berlin	7,804	71	208	455	12.1	211	5.6
Brandenburg	3,388	5	135	45	1.8	163	6.5
Bremen	1,645	9	241	56	8.2	49	7.2
Hamburg	5,163	3	280	19	1.0	259	14.1
Hesse	10,575	19	169	217	3.5	500	8.0
Mecklenburg-Western Pomerania	792	1	49	10	0.6	20	1.2
Lower Saxony**	13,136	0	165	210	2.6	618	7.7
North Rhine-Westphalia	40,921	549	228	1,638	9.1	1,663	9.3
Rhineland-Palatinate	6,907	4	169	64	1.6	234	5.7
Saarland	2,778	2	280	10	1.0	168	17.0
Saxony**	5,408	0	133	61	1.5	221	5.4
Saxony-Anhalt	1,842	3	83	84	3.8	57	2.6
Schleswig-Holstein	3,134	1	108	15	0.5	152	5.2
Thuringia	3,214	4	150	39	1.8	178	8.3
Total	189,822	687*	228	3,280	3.9	8,882	10.7

*Outbreaks in North Rhine-Westphalia and Berlin are primarily responsible for the increasing case numbers when compared to the numbers of the previous day.

** No data was submitted to the RKI by the states of Baden-Württemberg, Lower Saxony and Saxony

Distribution of cases over time

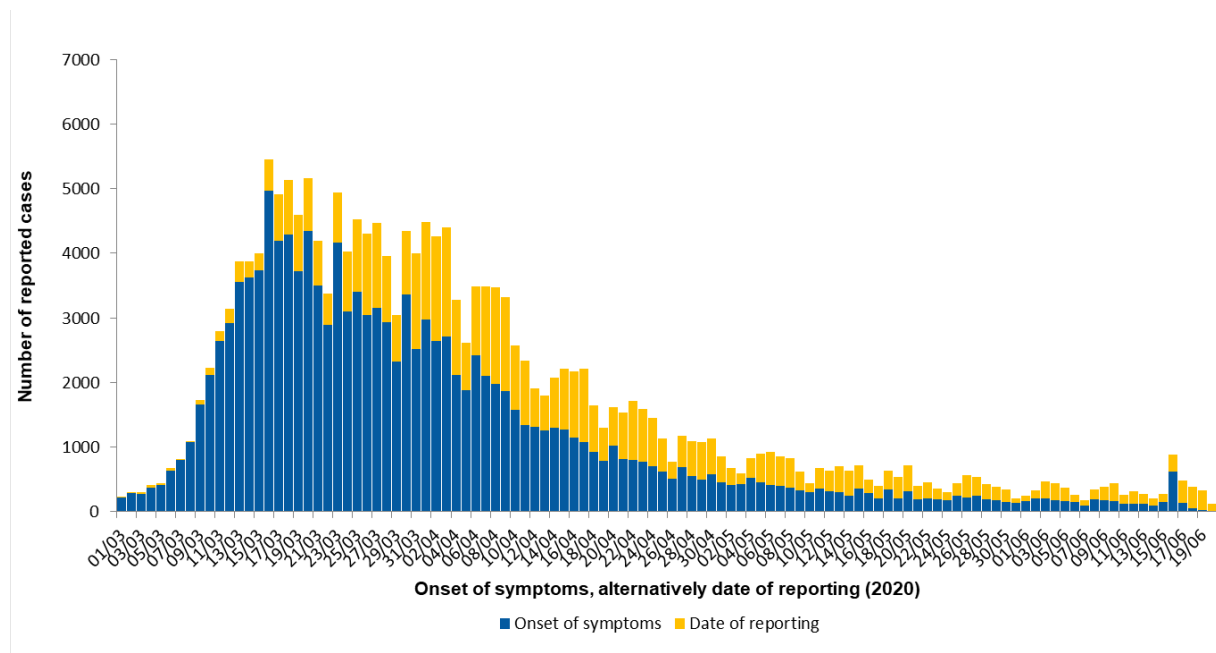


Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by date of symptom onset or alternatively by date of reporting from 01/03/2020 (21/06/2020, 12:00 AM).

Clinical aspects

Approximately **174,900** people have recovered from their COVID-19 infection. Since the exact date of recovery is unknown in most cases, an algorithm was developed to estimate the number of recovered cases.

In total, **8,882** COVID-19-related deaths have been reported in Germany (4.7% of all confirmed cases). So far, three deaths among COVID-19 cases under 20 years of age have been reported to the RKI. Pre-existing medical conditions were reported for all three.

Table 2: Number of notified COVID-19 deaths by age group and gender electronically reported to RKI (Data available for 8,877 of notified deaths; 21/06/2020, 12:00 AM)

Gender	Age group (in years)										
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+
Male		2	6	17	49	228	624	1,343	2,084	556	6
Female	1		3	6	20	83	221	655	1,866	1,062	45
Total	1	2	9	23	69	311	845	1,998	3,950	1,618	51

Occupation, accommodation or care in facilities

In accordance with the Protection Against Infection Law, the RKI receives information on occupation, accommodation or care in a facility relevant for infection control for reported COVID-19 cases

Since information on occupation, accommodation or care in these facilities is missing in **26%** of cases, the proportion of cases working, accommodated or cared for in these facilities reported here should be considered minimum values. Among the COVID-19 cases reported from the above mentioned facilities, the proportion of cases that actually acquired their infection in these facilities is unknown.

Note: The report is a snapshot and is continuously updated.

Table 3: Notified COVID-19-cases according to possible occupation, accommodation or care in facilities relevant for transmission of infectious diseases electronically reported to RKI (188,787* cases, no data available for 48,466 cases; 21/06/2020, 12:00 AM)

Facility according to		Total	Hospitalised	Deaths	Recovered (estimate)
§ 23 IfSG (e.g. hospitals, outpatient clinics and practices, dialysis clinics or outpatient nursing services)	Cared for / accommodated in facility	3,265	2,335	613	2,500
	Occupation in facility	13,674	632	20	13,500
§ 33 IfSG (e.g. day care facilities, kindergartens, facilities for after school care, schools or other educational facilities, children's homes, holiday camps)	Cared for / accommodated in facility*	2,850	63	1	2,600
	Occupation in facility	2,665	134	8	2,600
§ 36 IfSG (e.g. facilities for the care of older, disabled, or other persons in need of care, homeless shelters, community facilities for asylum-seekers, repatriates and refugees as well as other mass accommodation and prisons)	Cared for / accommodated in facility	17,532	4,011	3,489	13,600
	Occupation in facility	9,764	419	46	9,600
§ 42 IfSG (e.g. kitchens in the catering trade, in inns, restaurants, canteens, cafés, or other establishments with or for communal catering)	Occupation in facility	3,517	181	4	2,600
Neither cared for, accommodated in nor working in a facility		87,054	15,563	3,384	81,800

*for care according to § 33 IfSG only cases under 18 years of age are taken into account, as other information may be assumed to be incorrect.
IfSG: Protection Against Infection Law

Outbreaks

A high 7-day incidence rate was observed in **four** districts, primarily due to localised outbreaks: The districts of **Gütersloh** and **Warendorf** (both North Rhine-Westphalia) and the cities of **Magdeburg** (Saxony Anhalt) and Neukölln (city district of Berlin).

The increase in the 7-day incidence in the district Guetersloh is due to an outbreak in a meat processing plant. **More than one thousand** employees tested positive for SARS-CoV-2. The affected plant was temporarily closed at short notice and all employees are being quarantined **as well as their household members**. In addition, all schools and day-care centres in the district have been closed since 18th of June until the end of the summer holidays (11th of August 2020s). The town of Verl, located in the affected district, has enforced a quarantine zone for those areas in which higher numbers of the processing plant's employees are housed. **The outbreak in Guetersloh is linked to an outbreak in Warendorf. Employees of the meat processing company are residents of neighbouring districts.**

In Magdeburg, an outbreak affecting several now closed schools has led to an increase in the 7-day incidence.

In Neukölln, a district of Berlin, an outbreak is linked to members of a religious community. So far 85 cases are linked to this outbreak.

Once again there were major outbreaks in retirement- and nursing homes. In the district of Verden residents and nursing staff have been tested positive for SARS-CoV-2.

Further outbreaks were reported among members of religious communities, eg. from Berlin, Hesse and Mecklenburg-Western Pomerania.

Estimation of the reproduction number (R)

The presented case numbers do not fully reflect the temporal progression of incident COVID-19-cases, since the time intervals between actual onset of illness and diagnosis, reporting, as well as data transmission to the RKI vary greatly. Therefore, a nowcasting approach is applied to model the true temporal progression of COVID-19 cases according to illness onset. Figure 2 shows the result of this analysis.

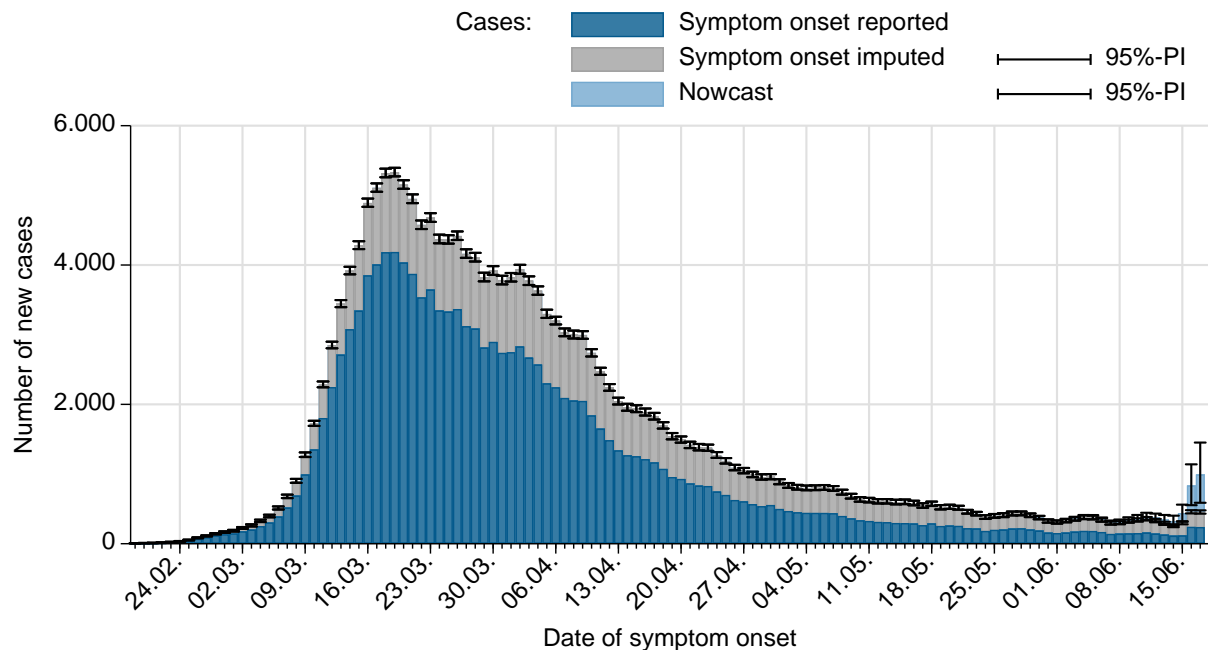


Figure 2: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 21/06/2020, 12 AM, taking into account cases up to 17/06/2020).

The reproduction number, R , is defined as the mean number of people infected by one infected person. R can only be estimated based on statistical analyses such as nowcasting and not directly extracted from the notification system.

The sensitive R -value reported can be estimated by using a 4-day moving average of the number of new cases estimated by nowcasting. This 4-day value reflects the infection situation about one to two weeks ago. This value reacts sensitively to short-term changes in case numbers, such as those caused by individual outbreaks. This can lead to relatively large fluctuations, especially if the total number of new cases is small. The current estimate of the 4-day R -value is **2.88** (95%-prediction interval: **2.16 – 3.73**) and is based on electronically notified cases as of 21/06/2020, 12:00 AM.

Similarly, the 7-day R -value is estimated by using a moving 7-day average of the nowcasting curve. This compensates for fluctuations more effectively, as this value represents a slightly later course of infection of about one to a little over two weeks ago. The 7-day R -value is estimated at **2.03** (95% prediction interval: **1.60 – 2.49**) and is based on electronically notified cases as of 21/06/2020, 12:00 AM. In light of the still low daily case numbers, both R -values should be interpreted with caution and in their course over several days.

Estimates of the reproduction numbers (R -value and 7-day R -value) were between 2 and 3 during the last few days. This is mainly related to local outbreaks which are described above, the outbreak in North Rhine-Westphalia playing a particularly important role in this context. Since case numbers in Germany are generally low, these local outbreaks have a relatively strong influence on the value of the

reproduction number. Further developments need to be monitored closely during the upcoming days, especially in regard to whether case numbers are increasing outside of outbreak contexts.

Sample calculations as well as an excel sheet presenting both R-values with daily updates can be found under www.rki.de/covid-19-nowcasting. A detailed methodological explanation of the more stable 7day R-value is also available there. More general information and sample calculations for both R-values can also be found in our FAQs (<http://www.rki.de/covid-19-faq>).

A detailed description of the methodology is available at https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/17/Art_02.html (Epid. Bull. 17 | 2020 from 23/04/2020)

Risk Assessment by the RKI

General assessment

At the global and the national level, the situation is very dynamic and must be taken seriously. The number of newly reported cases is currently decreasing. The RKI currently assesses the risk to the health of the German population overall as **high** and as **very high** for risk groups. This assessment may change at short notice based on new insights.

Infection risk

The risk of infection depends heavily on the regional spread, living conditions and also on individual behaviour.

Disease severity

In most cases, the disease is mild. The probability of progression towards serious disease increases with increasing age and underlying illnesses.

Burden on health system

The burden on the health care system depends on the geographical distribution of cases, health care capacity and initiation of containment measures (isolation, quarantine, physical distancing etc.). The burden is currently low in many regions, but may be high in some locations.

Measures taken by Germany

- Corona-Warn-App
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/WarnApp/Warn_App.html
- Information on assessment on high risk international areas (19/06/2020)
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Risikogebiete_neu.html (in German)
- Specialist group's report on Rmdesivier (18/06/2020)
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/COVRIIN.html (in German)
- Regulations for persons entering Germany in connection with the novel coronavirus SARS-CoV-2 (15/06/2020)
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/BMG_Merkblatt_Reise_nde_Tab.html (in German)
- Information on additional regulations at the regional level regarding control measures such as physical distancing or quarantine regulations for persons entering from other countries can be

accessed here: <https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-bundeslaender-1745198> (in German)

- (Non-medical) face masks must be worn on public transport and in shops in all federal states.
- Data on current disease activity can be found in the daily situation reports and on the RKI dashboard:
<https://corona.rki.de/>
- A distance of 1.5 metres to other individuals must be maintained in public spaces:
<https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeszkanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248> (in German)