

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

20/06/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
189,135	8,883	4.7%	ca. 174,700**
(+601*)	(+11*)		

*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 record 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 20/06/2020 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 2.5 cases per 100,000 inhabitants. A total of 143 districts transmitted zero cases.
- In total, 189,135 laboratory-confirmed COVID-19 cases and 8,883 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 189,135 (+601) 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 143 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 (20/06/2020, 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	36	319	139	1,3	1.824	16,5
Bavaria	47.827	28	366	217	1,7	2.566	19,6
Berlin	7.733	130	206	452	12,1	211	5,6
Brandenburg	3.383	9	135	45	1,8	163	6,5
Bremen	1.636	10	240	55	8,1	49	7,2
Hamburg	5.160	4	280	19	1,0	259	14,1
Hesse	10.556	53	168	217	3,5	500	8,0
Mecklenburg-Western Pomerania	791	0	49	9	0,6	20	1,2
Lower Saxony	13.136	39	165	240	3,0	618	7,7
North Rhine- Westphalia	40.372	216	225	1.200	6,7	1.663	9,3
Rhineland-Palatinate	6.903	20	169	61	1,5	234	5,7
Saarland	2.776	2	280	9	0,9	168	17,0
Saxony	5.408	26	133	61	1,5	221	5,4
Saxony-Anhalt	1.839	21	83	92	4,2	57	2,6
Schleswig-Holstein	3.133	2	108	14	0,5	152	5,2
Thuringia	3.210	5	150	46	2,1	178	8,3
Total	189.135	601*	228	2.876	3,5	8.883	10,7

^{*}Outbreaks in Northrhine-Westphalia, Berlin and Hesse are primarily responsible for the increasing case numbers when compared to the numbers of the previous day.

Distribution of cases over time

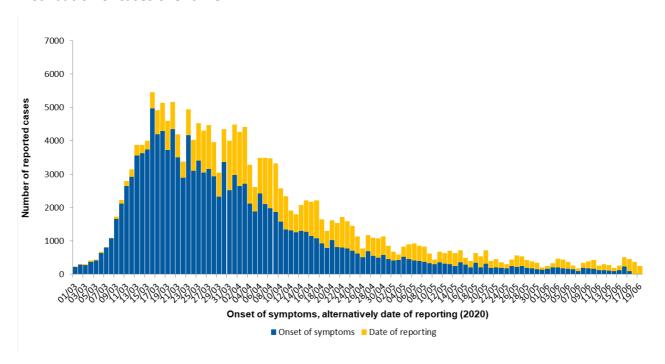


Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by date of symptom onset or alternatively by date of reporting from 01/03/2020 (20/06/2020, 12:00 AM).

Clinical aspects

Approximately 174,700 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, 8,883 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 8,878 of notified deaths; 20/06/2020, 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	2,085	556	6
Female	1		3	6	20	83	221	655	1,866	1,062	45
Total	1	2	9	23	69	311	845	1998	3951	1618	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.

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 (188,103* cases, no data available for 48,365 cases; 20/06/2020, 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	3,258	2,334	613	2,500
	Occupation in facility	13,669	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*	2,826	62	1	2,500
	Occupation in facility	2,659	135	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 asylumseekers, repatriates and refugees as well as other mass accommodation and prisons)	Cared for / accommodated in facility	17,524	4,008	3,487	13,600
	Occupation in facility	9,767	417	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	3,093	178	4	2,600
Neither cared for, accommodated in nor working in a facility		86,942	15,548	3,385	81,700

^{*}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 Berlin (city district of Neukölln).

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. Contact tracing is ensured at the present time. 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 will be closed from 18.06. until the end of the summer holidays (11.08.2020).

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 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.

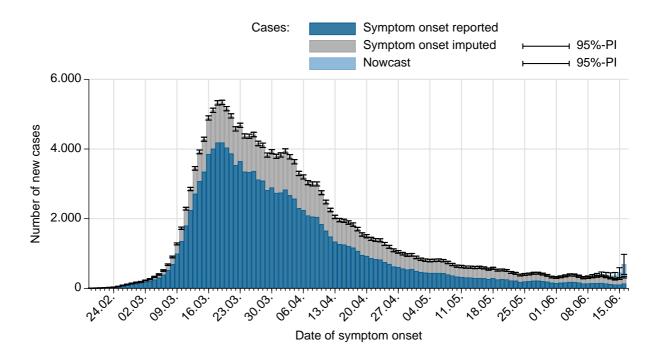


Figure 2: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 20/06/2020, 12 AM, taking into account cases up to 16/06/2020).

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 1.79 (95%-prediction interval: 1.33 - 2.23) and is based on electronically notified cases as of 20/06/2020, 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 1.55 (95% predictation interval: 1.25 - 1.83) and is based on electronically notified cases as of 20/06/2020, 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 above 1 during the last few days. This is mainly related to local outbreaks which are described above. In addition elevated 7-day incidences are only observed in those federal states which are affected by these outbreaks. Since case numbers in Germany are generally low, these outbreaks have a relatively strong influence on the value of the reproduction number. A nationwide increase in case numbers is not anticipated.

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 (https://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
- 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 Reisende Tab.html
- From 15 June, borders will open within Europe, making travel possible again provided the COVID-19 activity in destination countries permits this (12/06/2020) https://www.auswaertiges-amt.de/de/ReiseUndSicherheit/covid-19/2296762
- 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/

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

- A distance of 1.5 metres to other indivduals must be maintained in public spaces:

https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248 (in German)