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

12/07/2020 - UPDATED STATUS FOR GERMANY

- ABBREVIATED WEEK-END EDITION -

Confirmed cases	Deaths	Deaths (%)	Recovered
198,804	**9,063**	**4.6%**	**ca. 184,600****
(+ 248*)	(+ 3*)		

*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 Act (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 recorded 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 12/07/2020 12:00 AM)

- The cumulative nationwide incidence over the past 7 days was 2.6 cases per 100,000 inhabitants. Zero cases were transmitted from 125 of the 412 districts in Germany.
- In total, 198,804 laboratory-confirmed COVID-19 cases and 9,063 deaths due to COVID-19 have been electronically reported to the RKI in Germany.
- Currently, COVID-19-related outbreaks occur in various settings, including meat-processing plants, facilities for asylum-seekers and refugees, nursing homes and hospitals as well as in context of families or religious events.

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

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 198,804 (+248) laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated by the RKI (see Table 1). Of the 412 districts, 125 reported zero 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 (12/07/20, 12:00 AM). The number of new cases covers positive cases, which have been sent to the local health department at the same day, but also at previous days.

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*	36,041	0	326	177	1,6	1,837	16.6
Bavaria	49,204	20	376	417	3,2	2,612	20.0
Berlin	8,637	20	230	184	4,9	217	5.8
Brandenburg*	3,462	3	138	17	0,7	168	6.7
Bremen	1,689	0	247	11	1,6	55	8.1
Hamburg*	5,230	0	284	15	0,8	261	14.2
Hesse	11,162	40	178	212	3,4	514	8.2
Mecklenburg-Western Pomerania*	804	0	50	0	0,0	20	1.2
Lower Saxony	13,804	5	173	96	1,2	642	8.0
North Rhine-Westphalia	44,915	127	250	864	4,8	1,704	9.5
Rhineland-Palatinate	7,157	21	175	69	1,7	236	5.8
Saarland*	2,812	0	284	6	0,6	174	17.6
Saxony*	5,473	0	134	14	0,3	225	5.5
Saxony-Anhalt	1,917	10	87	33	1,5	62	2.8
Schleswig-Holstein	3,206	0	111	21	0,7	154	5.3
Thuringia	3,291	2	154	21	1,0	182	8.5
Total	198,804	248	239	2,157	2,6	9,063	10.9

* No cases were transmitted from Baden-Wuerttemberg and Saxony yesterday. There were technical problems with the transmission of data from Hamburg and Saarland, which is why no new cases were transmitted from these federal states either.

As a result of quality checks and data cleansing by the health authorities and regional offices, corrections to cases already transmitted (e.g. detection of duplicate reports) can lead to negative values for the number of new cases.

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Distribution of cases over time

The first COVID-19 cases in Germany were notified in January 2020. Figure 1 shows COVID-19 cases transmitted to RKI according to date of illness onset from 01.03.2020 onwards. Of these cases, the onset of symptoms is unknown in 59,911 cases (30%), thus their date of reporting is provided in Figure 1.
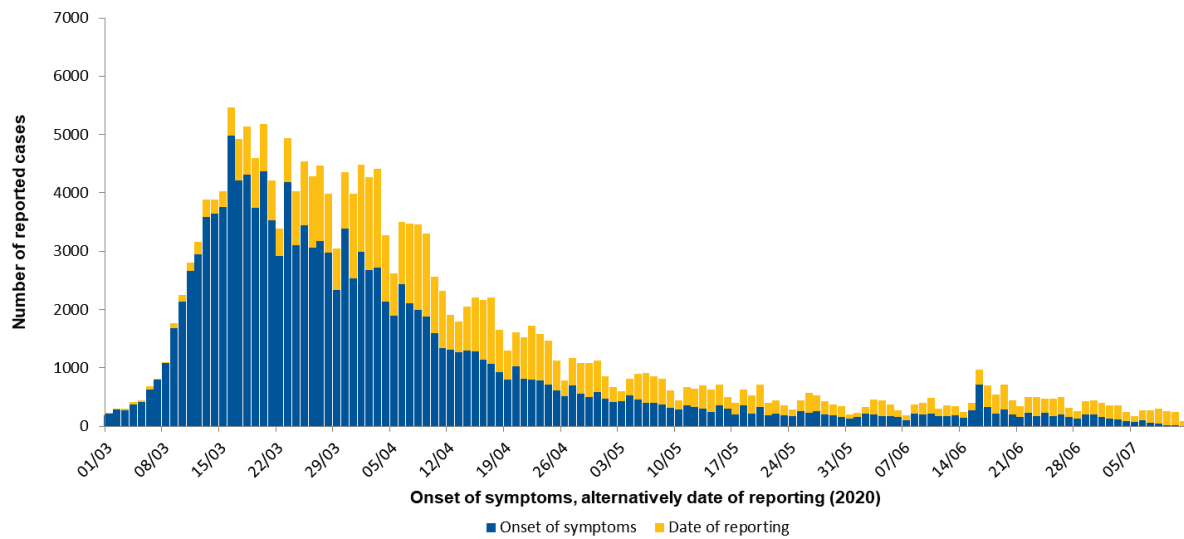

Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by date of symptom onset or -if unknown-alternatively by date of reporting from 01/03/2020 (12/07/20, 12:00 AM).

Clinical aspects

Approximately 184,600 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 this number.

In total, 9,063 COVID-19-related deaths have been reported in Germany (4.6% 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 9,058 of notified deaths; 12/07/20, 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	54	236	642	1,373	2,104	567	7
Female	1		3	6	22	85	231	669	1,904	1,085	44
Total	1	2	9	23	76	321	873	2,042	4,008	1,652	51

Occupation, accommodation or care in facilities

In accordance with the Protection Against Infection Act, 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 25% 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.

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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 (197,657* cases, no data available for 49,275 cases; 12/07/20, 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	3,478	2,499	644	2,700
	Occupation in facility	14,013	639	20	13,900
§ 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*	3,517	73	1	3,200
	Occupation in facility	2,796	148	7	2,700
§ 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	18,195	4,117	3,581	14,300
	Occupation in facility	10,025	423	43	9,900
§ 42 IfSG (e.g. meat processing plants or kitchens in the catering trade, in inns, restaurants, canteens, cafés, or other establishments with or for communal catering)	Occupation in facility	4,722	198	5	4,500
Neither cared for, accommodated in nor working in a facility		91,636	16,105	3,457	86,200

*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

Currently, COVID-19-related outbreaks occur in various settings, including meat-processing plants, facilities for asylum-seekers and refugees, nursing homes and hospitals as well as in the context of families or religious events.

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.

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.
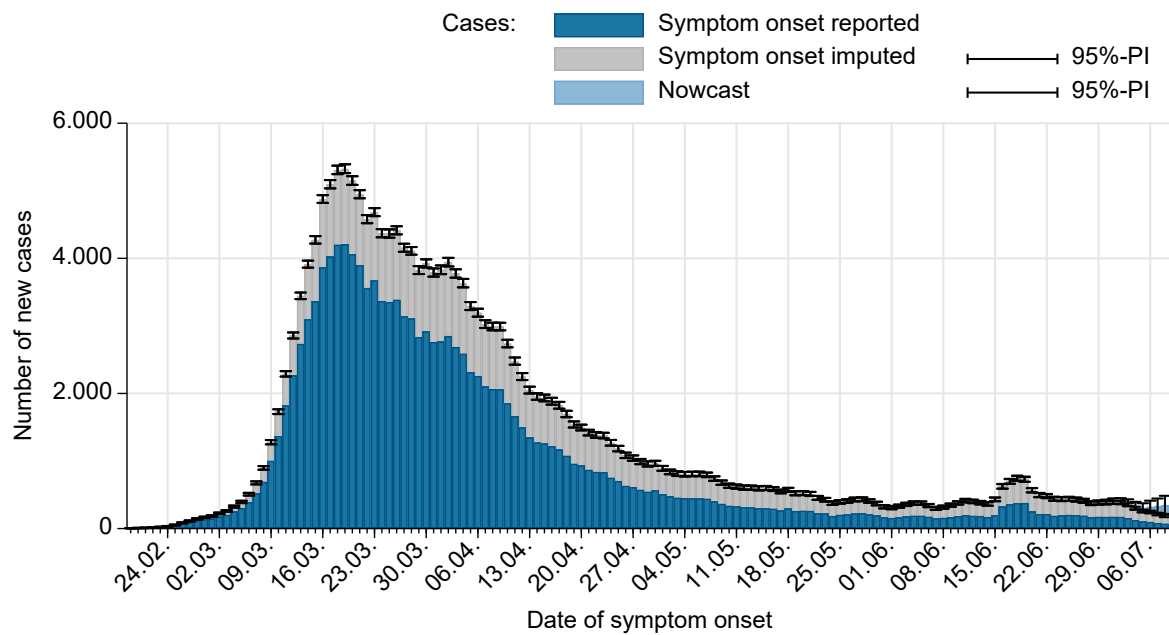
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Figure 2: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 12/07/20, 12 AM, taking into account cases up to 08/07/2020).

A sensitive R-value 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. Furthermore, outbreak dynamics may be influenced widespread testing performed among possibly exposed persons, leading to therapid detection of large numbers of additional COVID-19 cases. This can lead to relatively large fluctuations in the estimated R-value, especially if – as is currently the case in Germany - the total number of new cases is small.

The current estimate of the 4-day R-value is 1.04 (95%-prediction interval: 0.81 – 1.26) and is based on electronically notified cases as of 12/07/2020, 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 0.91 (95% prediction interval: 0.81 – 1.01) and is based on electronically notified cases as of 12/07/2020, 12:00 AM.

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 has been declining since mid of March. Currently, many districts are

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transmitting very few or no cases to the RKI. 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
- 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 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)*

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