



Coronavirus Disease 2019 (COVID-19)

Daily Situation Report of the Robert Koch Institute

09/11/2020 - UPDATED STATUS FOR GERMANY

Total (cumulative)		Previous 7 days	
Confirmed cases	Deaths	Confirmed cases	7-day incidence
671,868	11,352	115,566	139 cases/ 100,000 pop
(+13,363*)	(+63*)	(+2,780*)	
Proportion of deaths	Recovered	7-day incidence of people ≥ 60 years	No. of districts with 7- day incidence > 50
1.7 %	ca. 429,600**	94 cases/ 100,000 pop	363
	(+10,200**)		(+2*)

*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 09/11/2020, 12:00 AM)

- Currently, an increase of transmissions in the population in Germany can be observed. Therefore, the entire population is strongly encouraged to commit itself to infection prevention and control.
- The nationwide incidence over the past 7 days increased further to **139** cases per 100,000 population.
- Since the beginning of September, the proportion of cases in older age groups has been increasing again. The 7-day incidence of people ≥ 60 years has further increased to currently **94** cases/100.000 population.
- The 7-day incidence in Bavaria, Berlin, Bremen, Hesse, North Rhine-Westphalia and Saxony is higher than the national total 7-day incidence.
- Almost all districts have a high 7-day incidence. Only **7** districts have an incidence ≤25 cases/100,000 population. As of today, **42** districts have an incidence of >25-50 cases /100,000 population, **97** districts have an incidence of >50-100 cases/100,000 population, **266** districts have an incidence of >100 cases/100,000 population and of these, **15** districts have an incidence of >250 cases/100,000 population.
- The nationwide increase is caused by increasingly diffuse transmission, with numerous clusters in connection with private gatherings, celebrations or public events, but also in community institutions, nursing and long-term care homes, as well as in occupational settings or related to religious events.
- The number of COVID-19 patients requiring intensive care has almost tripled in the past 2 weeks from **1,362** patients on **26/10/2020** to **3,005** patients on **09/11/2020**.
- In total, **671,868** laboratory-confirmed COVID-19 cases and **11,352** deaths associated with COVID-19 have been transmitted to the RKI in Germany.

Epidemiological Situation in Germany

In accordance with the international standards of WHO¹ and ECDC², RKI considers all laboratory confirmations of SARS-CoV-2, irrespective of the presence and severity of clinical symptoms, as COVID-19 cases. Thus, in the following report the term "COVID-19 cases" covers acute SARS-CoV-2 infections as well as cases of COVID-19 disease.

General current assessment

After a temporary stabilisation of case numbers at a higher level in late August and early September, there is currently an increase of transmission within the population in all federal states. The proportion of COVID-19 cases in older age groups is currently increasing. The reported R-values were stable well above 1 since the beginning of October. Over the past few days the R-value has been fluctuating around 1. This means that each person infected with SARS-CoV-2 will infect on average one other person. As the number of infected persons is currently high in Germany, this means that the daily number of newly infected persons will remain high.

There are outbreaks in various districts throughout Germany, which are associated with different situations, including large celebrations in the family and circle of friends, in occupational settings, and in old people's and nursing homes. In addition, in many districts there is an increasingly diffuse spread of SARS-CoV-2, without traceable transmission chains.

Currently, however, the number of illnesses among older people is on the rise again. As they more often have a severe course due to COVID-19, the number of serious cases and deaths is also increasing. These can be avoided if we prevent the spread of the SARS-CoV-2 virus with the help of infection control measures.

It is therefore still necessary for the entire population to be committed to infection prevention and control, e.g. by consistently observing rules of distance and hygiene - also outdoors -, by ventilating indoor spaces and, where indicated, by wearing a community mask correctly. Crowds of people - especially indoors - should be avoided.

¹ World Health Organization, https://www.who.int/publications/i/item/WHO-2019-nCoV-Surveillance_Case_Definition-2020.1

² European Centre for Disease Prevention and Control, <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>

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 **671,868 (+13,363*)** laboratory-confirmed cases of COVID-19 have been reported to and validated by the RKI (Table 1).

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 (09/11/2020, 12:00 AM). The number of new cases includes positive cases notified 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	100,752	1,706	908	15,438	139.1	2,120	19.1
Bavaria	133,808	3,173	1,020	22,521	171.6	2,923	22.3
Berlin	39,624	241	1,080	6,794	185.1	295	8.0
Brandenburg	10,516	220	417	1,742	69.1	217	8.6
Bremen	7,133	66	1,047	1,376	202.0	87	12.8
Hamburg	17,139	285	928	2,347	127.1	304	16.5
Hesse	54,043	882	859	10,327	164.2	758	12.1
Mecklenburg-Western Pomerania	3,745	52	233	807	50.2	30	1.9
Lower Saxony	46,322	1,320	579	7,467	93.4	823	10.3
North Rhine-Westphalia	171,631	3,426	956	29,801	166.0	2,355	13.1
Rhineland-Palatinate	26,352	631	644	4,857	118.6	320	7.8
Saarland	8,426	99	854	1,324	134.2	201	20.4
Saxony	26,680	802	655	6,313	155.0	405	9.9
Saxony-Anhalt	6,734	151	307	1,269	57.8	93	4.2
Schleswig-Holstein	10,000	177	344	1,521	52.4	201	6.9
Thuringia	8,963	132	420	1,662	77.9	220	10.3
Total	671,868	13,363	808	115,566	139.0	11,352	13.6

*Quality checks and data cleaning by the health authorities and regional offices can lead to corrections to cases previously transmitted (e.g. detection of duplicate reports). This can occasionally lead to negative values for the number of new cases

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 for 345,196 cases (51%) thus their date of reporting is provided in Figure 1.

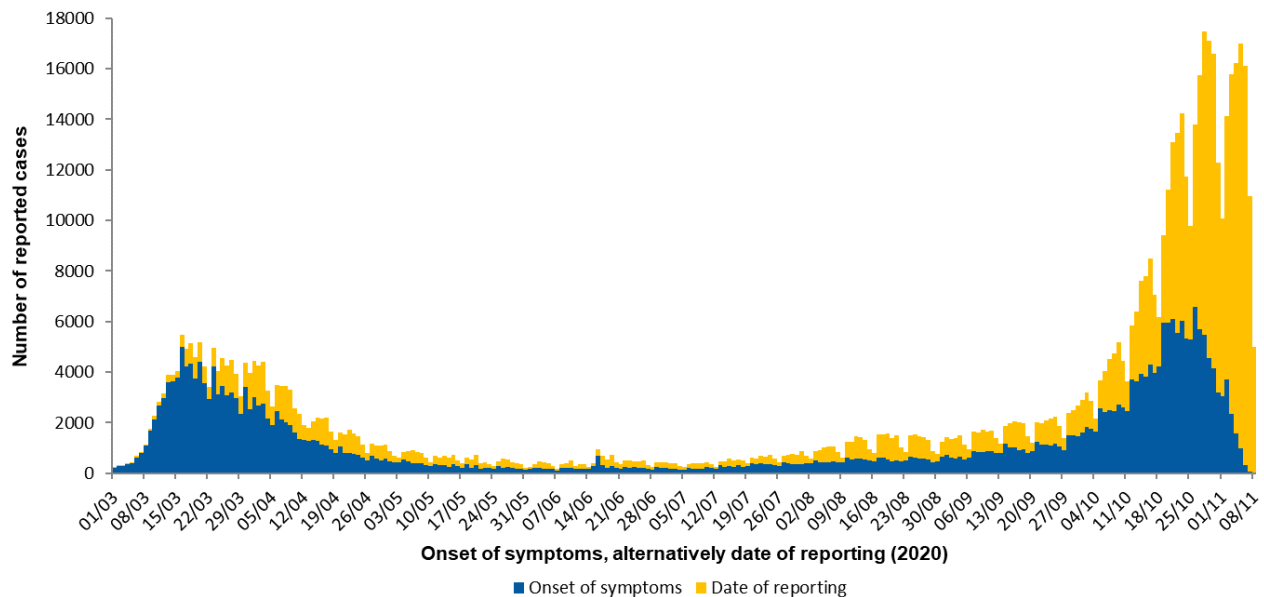


Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by the date of symptoms onset or – if unknown – alternatively by date of reporting since 01/03/2020 (09/11/2020, 12:00 AM).

Occupation, accommodation or care in facilities

In accordance with the Protection Against Infection Act (Infektionsschutzgesetz, IfSG), 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 53% of cases, the numbers 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.

The number of COVID-19 cases was highest among persons cared for or employed in care facilities according to § 36 IfSG, among persons employed in medical facilities according to § 23 IfSG and among persons cared for in educational facilities according to § 33 IfSG (Table 2). The number of deaths was particularly high among persons cared for in facilities according to §§ 23 and 36.

Among the cases reported as working in medical facilities (§ 23 IfSG), 74% were female and 26% male. Their median age was 40 years. The high number of cases among people cared for or working in various care facilities (§ 36 IfSG) is consistent with numerous reported outbreaks, especially in nursing homes. The high number of cases among persons working in the food sector (§ 42 IfSG) is largely due to outbreaks in meat processing plants.

Table 2: Notified COVID-19-cases according to possible occupation, accommodation or care in facilities relevant for transmission of infectious diseases according to the Protection Against Infection Act (IfSG), reported to RKI (667,806* cases, no data available for 356,629 cases; 09/11/2020, 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	5,848	3,772	811	4,200
	Occupation in facility	20,659	800	25	19,000
§ 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*	17,122	210	2	14,100
	Occupation in facility	8,248	261	8	7,000
§ 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	24,662	4,926	4,038	18,400
	Occupation in facility	13,945	539	45	12,800
§ 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	8,206	309	5	7,600
Neither cared for, accommodated in nor working in a facility		212,487	22,843	4,053	185,500

*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. Due to changes in data registration, not all data entries for cases ascertained in the most recent version of the surveillance software could be taken into account. This will be corrected in the coming days.

Outbreaks

An increased incidence of >25 cases in 7 days/100,000 population was reported for almost every district (405 of 412). By now, in 266 urban and rural districts the incidence is above 100 cases/100,000 population, including 15 districts with an incidence of over 250 cases/100,000 population; additionally, 97 districts have a 7-day incidence of >50 -100 cases/100,000 population and 42 districts have a 7-day incidence of > 25 – 50 cases/100,000 population. The dashboard (<https://corona.rki.de>) shows all affected districts.

In most districts the transmission is diffuse most of the times, with several cases clustering in the context of celebrations with family and friends, but increasingly as well in community facilities and retirement and nursing homes. On some occasions, specific large outbreaks have been the cause for large increases in the affected districts. At the same time, many small outbreaks in hospitals, facilities for asylum seekers and refugees, various occupational settings and in the context of religious gatherings continue to contribute to the increase of incidence.

Estimation of the reproduction number (R)

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 (Figure 2) and not directly extracted from the notification system.

4-day R-value	7-day R-value
1.09	0.98
(95%-prediction interval: 0.90 – 1.28)	(95%-prediction interval: 0.87 – 1.07)

Delays in reporting of case numbers at weekend days can lead to cyclical fluctuations of the 4-day R-value. The 7-day R-value is less affected because all week days are used to determine the value.

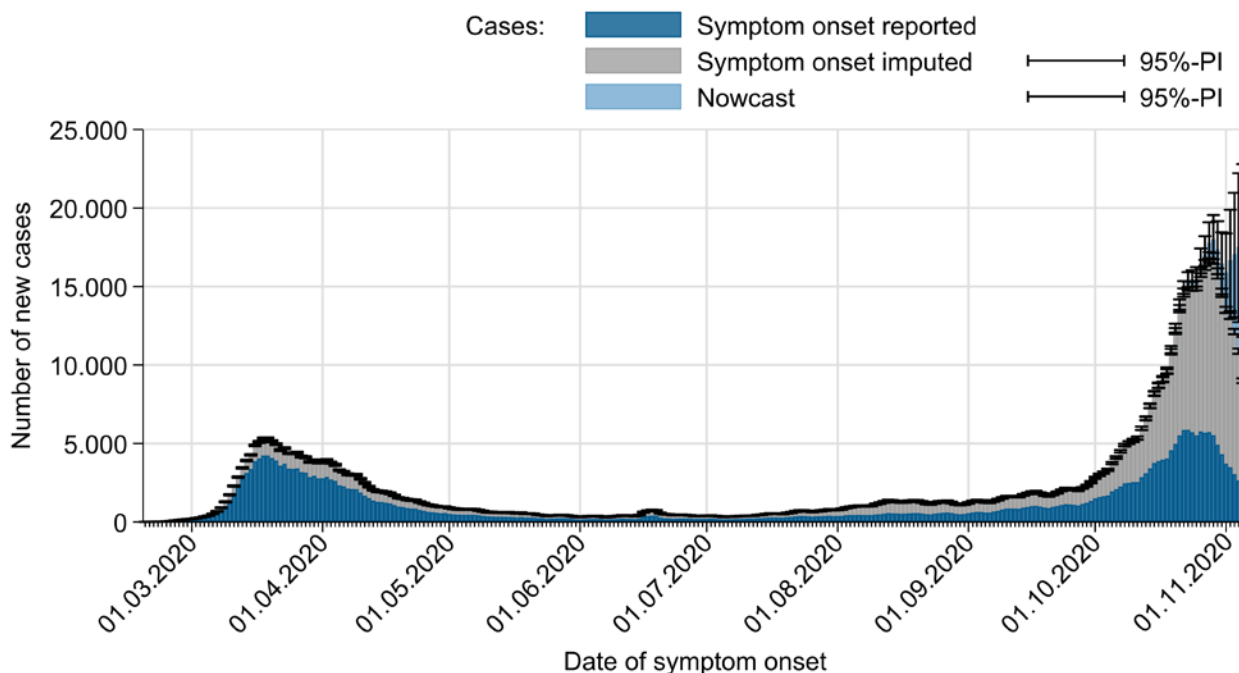


Figure 2: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 09/11/2020, 12 AM, taking into account cases up to 05/11/2020).

The reported R-values have been stable well above 1 in October. Over the past few days the R-value has been fluctuating around 1.

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 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).

DIVI intensive care register

The German Interdisciplinary Association for Intensive and Emergency Medicine (DIVI) has in collaboration with RKI established a registry to document the number of available intensive care beds as well as the number of COVID-19 cases treated in participating hospitals on a daily basis. Since 16/04/2020, all hospitals with intensive care beds are required to report (<https://www.intensivregister.de/#/intensivregister>).

As of 09/11/2020, a total of 1,287 hospitals or departments reported to the DIVI registry. Overall, 29,351 intensive care beds were registered, of which 20,970 (73%) are occupied, and 8,381 (28%) are currently available. The number of COVID-19 cases treated in participating hospitals is shown in Table 3.

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

Table 3: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (08/11/2020, 12:15 PM).

	Number of patients	Percentage	Change to previous day*
Currently in ICU	3,005		+101
- of these: with invasive mechanical ventilation	1,688	56%	+83
Discharged from ICU	23,382		+303
- of these: deaths	5,289	23%	+88

*The interpretation of these numbers must take into account the number of reporting hospitals and therefore the number of reported patients may change from day to day. On certain days, this can explain an occasionally important decrease or increase in the cumulative number of discharged patients or deaths compared with the day before.

Risk Assessment by the RKI

In view of the recent further increase in case numbers, the risk assessment of the RKI was adapted to the epidemiologic situation on 26/10/2020. The current version can be found here:

<https://www.rki.de/EN/Content/infections/epidemiology/outbreaks/COVID-19/Risk-assessment.html>

Measures taken in Germany

- National Testing Strategy – who will be tested for SARS-CoV-2 in Germany (05/11/2020) *(in German)*
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Teststrategie/Nat-Teststrat.html
- SARS-CoV-2 test criteria for schools during the COVID 19 pandemic (12/10/2020) *(in German)*
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Teststrategie/Testkriterien-Schulen.pdf
- Preventive measures in schools during the COVID 19 pandemic (12/10/2020) *(in German)*
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Praevention-Schulen.pdf
- Selected and regularly updated information on COVID-19 in English
<https://www.rki.de/EN/Content/infections/epidemiology/outbreaks/COVID-19/COVID19.html>
- Information on the designation of international risk areas
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Risikogebiete_neu.html
- The ministry of health has published a record of all measures implemented in Germany since 27/01/2020 *(in German)*
<https://www.bundesgesundheitsministerium.de/coronavirus/chronik-coronavirus.html>
- Regulations for persons entering Germany in connection with coronavirus SARS-CoV-2/COVID-19 (08/11/2020)
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/BMG_Merkblatt_Reise_nde_Tab.html
- Corona-Warn-App
<https://www.rki.de/EN/Content/infections/epidemiology/outbreaks/COVID-19/CWA/CWA.html>
- Orders concerning travel after the determination of an epidemic situation of national significance by the German Bundestag (29/09/2020)
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/BMG_Merkblatt_Reise_nde_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: *(in German)*

<https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-bundeslaender-1745198>

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