



Coronavirus Disease 2019 (COVID-19)

Daily Situation Report of the Robert Koch Institute

30/09/2020 - UPDATED STATUS FOR GERMANY

Total (cumulative)		Previous 7 days	
Confirmed cases	Deaths	Confirmed cases	7-day incidence
289,219 (+1,798*)	9,488 (+ 17*)	12,065 (-29*)	14.5 cases/ 100,000 population
Proportion of deaths	Recovered	No. of districts reporting cases	No. of districts with 7- day incidence > 50
3.3 %	ca. 256,000** (+ 1,800**)	404/412 (+ 2*)	2 (-1*)

**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 30/09/2020, 12:00 AM)

- After a temporary stabilisation of case numbers at a higher level, a further increase in reported COVID-19 cases is currently evident in the population of Germany. Therefore, the situation must still be carefully monitored.
- The cumulative nationwide incidence over the past 7 days was 14.5 cases per 100,000 inhabitants. The 7-day incidence exceeded 50 cases/100,000 inhabitants in **2** districts: the cities of Hamm and Remscheid. **In a further 39 districts, it exceeded 25 cases/100,000 inhabitants.** A total of **8** districts transmitted zero cases over the past 7 days.
- The 7-day incidence in Berlin, Bremen and Hamburg was considerably higher, **in North Rhine-Westphalia noticeably higher** and in **Bavaria and Hesse slightly higher** than the national mean 7-day incidence.
- In total, **289,219** laboratory-confirmed COVID-19 cases and **9,488** deaths associated with COVID-19 have been electronically transmitted to the RKI in Germany.
- A large number of COVID-19-related outbreaks continue to be reported in various settings. Case clusters are being reported particularly in the context of religious or family events, in nursing homes and hospitals, facilities for asylum-seekers and refugees, community facilities, various occupational settings, and among travellers.

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, further increase is currently observed in the population in some federal states. The proportion of COVID-19 cases in the older age groups is currently slightly increasing, while the proportion of cases among travel returnees is decreasing since calendar week 34. The 4-day R-value has been predominantly greater than 1 since the second week of September.

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 and religious settings, or, especially in cases among younger people, outbreaks originating from travel returnees. The current development must be further carefully monitored.

Since calendar week 30, the proportion of deaths among COVID-19 cases has been consistently below 1% and is thus markedly lower than among cases in the spring, particularly in April. It is unlikely that the virus has changed to become less pathogenic. Rather, the low proportion of deaths can be explained as follows: On the one hand, recent infections have occurred mainly among young people, who rarely experience a severe course of disease. On the other hand there is also broader testing, which means more milder cases are identified. Additionally, as the number of cases increases, the true proportion of severe courses of disease and deaths only becomes apparent some time after diagnosis. If the trend continues and elderly and vulnerable people are increasingly infected with SARS-CoV-2, an increase in hospitalisations and deaths is to be expected. Severe cases and deaths can only be prevented through decreased transmission of SARS-CoV-2.

It is therefore still necessary for the entire population to be committed to infection 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 if possible and celebrations should be limited to the closest circle of family and friends.

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 **289,219 (+1,798)** laboratory-confirmed cases of COVID-19 have been electronically reported to and validated by the RKI (Table 1). A total of **8** districts reported no cases in the past 7 days; however on 16/06/2020 a total of 139 districts reported zero cases.

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 (30/09/2020, 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	49,421	213	446	1,616	14.6	1,885	17.0
Bavaria	67,996	233	520	2,025	15.5	2,664	20.4
Berlin	14,500	173	387	995	26.5	228	6.1
Brandenburg	4,258	7	170	110	4.4	169	6.7
Bremen	2,435	50	357	188	27.5	59	8.6
Hamburg	7,837	87	426	427	23.2	270	14.7
Hesse	18,945	157	302	1,042	16.6	551	8.8
Mecklenburg-Western Pomerania	1,180	12	73	45	2.8	20	1.2
Lower Saxony	20,162	136	253	872	10.9	684	8.6
North Rhine-Westphalia	69,822	538	389	3,468	19.3	1,872	10.4
Rhineland-Palatinate	10,698	68	262	447	10.9	254	6.2
Saarland*	3,297	0	333	37	3.7	177	17.9
Saxony	7,202	51	177	318	7.8	234	5.7
Saxony-Anhalt	2,619	6	119	123	5.6	68	3.1
Schleswig-Holstein	4,772	48	165	267	9.2	162	5.6
Thuringia	4,075	19	190	85	4.0	191	8.9
Total	289,219	1,798	348	12,065	14.5	9,488	11.4

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.

*No cases were transmitted from Saarland yesterday.

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 107,779 cases (37%), thus their date of reporting is provided.

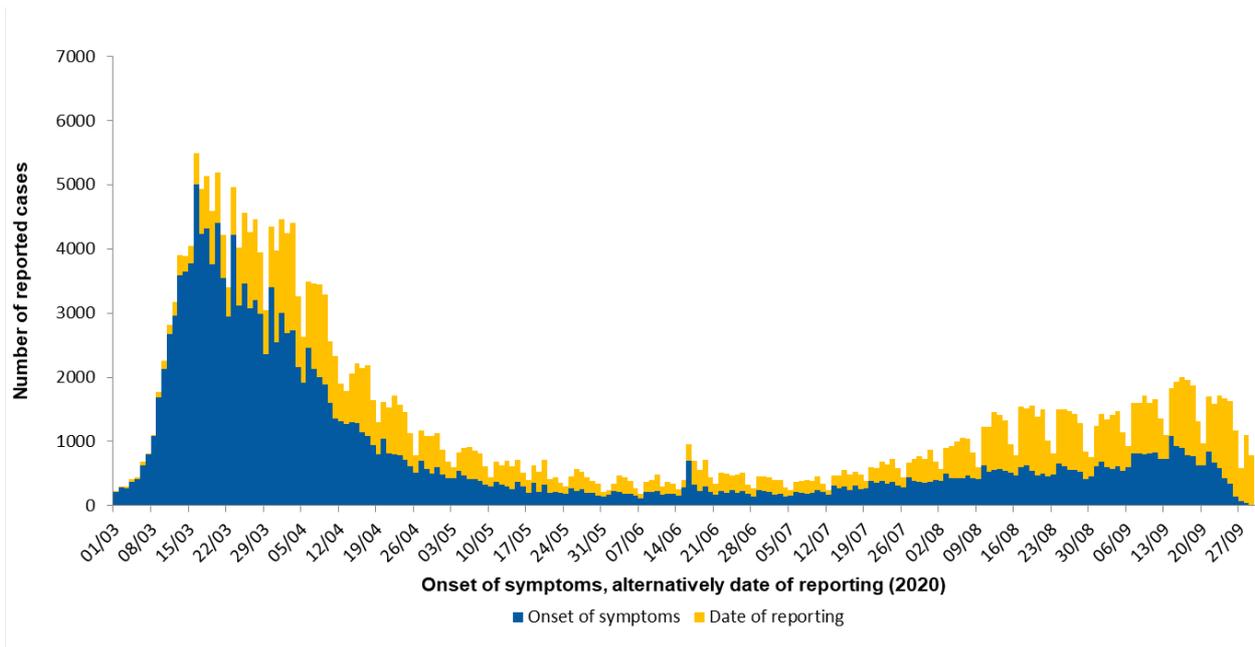


Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by the date of symptoms onset or – if unknown – alternatively by date of reporting since 01/03/2020 (30/09/2020, 12:00 AM).

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 26% 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.

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 (287,172* cases, no data available for 75,072 cases; 30/09/2020, 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	4,252	2,949	699	3,400
	Occupation in facility	16,233	704	23	15,800
§ 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*	9,197	137	1	8,000
	Occupation in facility	4,532	199	8	4,100
§ 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	20,191	4,419	3,712	16,000
	Occupation in facility	11,189	479	40	10,900
§ 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	6,288	264	5	6,000
Neither cared for, accommodated in nor working in a facility		140,218	18,984	3,680	128,100

*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.

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

Among the cases reported as working in medical facilities (§ 23 IfSG), 73% were female and 27% 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.

Outbreaks

An increased incidence of >25 cases in 7 days/100,000 population was reported from 41 districts, including the cities of Hamm and Remscheid with 7-day incidences of > 25 cases/100,000 population.

The increased incidence in the city of Hamm is largely due to 180 cases in connection with a wedding. More than 300 identified guests were tested and are under quarantine (<https://www.hamm.de/corona>). Stricter distancing measures have been implemented in Hamm (<https://www.hamm.de/aktuelles/weitere-corona-massnahmen-beschlossen>).

In the city of Remscheid the high incidence is primarily due to smaller outbreaks in day care centres and schools with spread to outside contacts. Stricter control measures have been implemented (https://remscheid.de/corona#chapter146380100000143530-1015_sp_main_iterate_1_0).

The increased incidence in Dingolfing-Landau following a COVID-19 outbreak at an industrial company and associated logistic partners dropped to just under 50 cases/100,000 population today. Mass testing was implemented. The district administration has decreed the implementation of stricter control measures (<https://www.landkreis-dingolfing-landau.de/media/3063/allgemeinverfuegung-ldl-20200925.pdf>).

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

Currently, COVID-19 cases are predominantly due to transmission at family and other private events. The proportion of travel returnees among the cases is decreasing. The number of COVID-19-related outbreaks reported in nursing homes, hospitals, facilities for asylum seekers and refugees, community facilities, various occupational settings and in connection with religious events has increased.

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
0.96	1.00
(95%-prediction interval: 0.78 – 1.17)	(95%-prediction interval: 0.91– 1.12)

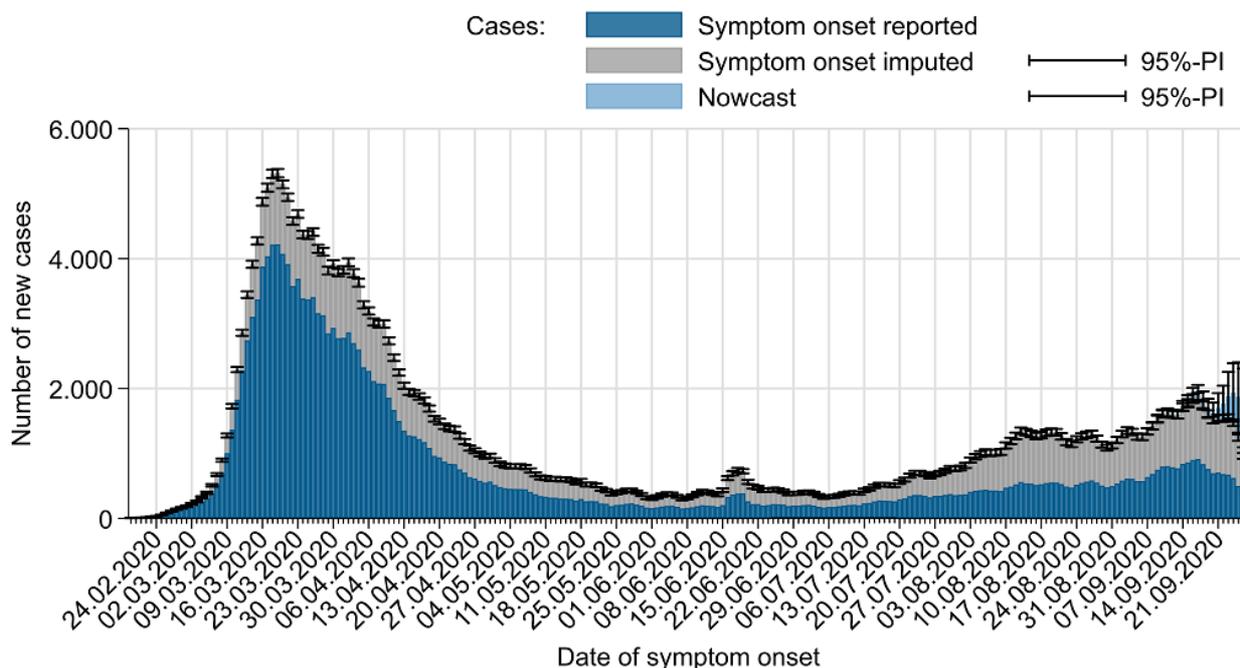


Figure 2: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 30/09/2020, 12 AM, taking into account cases up to 26/09/2020).

The reported R values have been predominantly greater than 1 since the second week in September. **Although the R values are slightly lower today, this development must continue to be monitored closely.**

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>

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

As of 30/09/2020, a total of **1,286** hospitals or departments reported to the DIVI registry. Overall, **30,679** intensive care beds were registered, of which **21,972** (72%) are occupied, and **8,707** (28%) are currently available. The number of COVID-19 cases treated in participating hospitals is shown in Table 3.

Table 3: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (30/09/2020, 12:15 PM).

	Number of patients	Percentage	Change to previous day*
Currently in ICU	355		3
- of these: mechanically ventilated	195	55%	0
Discharged from ICU	17,578		42
- of these: deaths	4,205	24%	9

*The interpretation of these numbers must take into account that 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.

Surveys on SARS-CoV-2 laboratory tests in Germany

To assess the SARS-CoV-2 test numbers, data from university hospitals, research institutions as well as clinical and outpatient laboratories throughout Germany are merged weekly at the RKI. These data are ascertained on a voluntary basis and are transmitted to RKI via an internet-based RKI test laboratory survey, via the network for respiratory viruses (RespVir), via the laboratory-based SARS-CoV-2 Surveillance established at the RKI (an extension of the Antibiotic Resistance Surveillance (ARS)) and via the enquiry of a professional association of laboratory medicine.

Since the beginning of testing in Germany up to and including week **39/2020**, **16,999,253** laboratory tests have been recorded to date, **328,566** of which have tested positive for SARS-CoV-2.

Up to and including week **39**, 252 laboratories have registered for the RKI test laboratory survey or in one of the other transmitting networks and transmit data upon reminder largely on a weekly basis. Since laboratories can register the tests of the previous calendar weeks at a later date, it is possible that the ascertained numbers can increase retrospectively. It should be noted that the number of tests is not the same as the number of persons tested, as the data may include multiple tests of individual patients (Table 4).

Table 4: Number of SARS-CoV-2-laboratory tests in Germany (as of 22/09/2020)

Calendar week 2020	Number of tests	Tested positiv	Proportion positive (%)	Number of reporting laboratories
Up to & including week 10	124,716	3,892	3.12	90
week 11	127,457	7,582	5.95	114
week 12	348,619	23,820	6.83	152
week 13	361,515	31,414	8.69	151
week 14	408,348	36,885	9.03	154
week 15	380,197	30,791	8.10	164
week 16	331,902	22,082	6.65	168
week 17	363,890	18,083	4.97	178
week 18	326,788	12,608	3.86	175
week 19	403,875	10,755	2.66	182
week 20	432,666	7,233	1.67	183
week 21	353,467	5,218	1.48	179
week 22	405,269	4,310	1.06	178
week 23	340,986	3,208	0.94	176
week 24	327,196	2,816	0.86	173
week 25	388,187	5,316	1.37	176
week 26	467,413	3,689	0.79	180
week 27	506,490	3,104	0.61	151
week 28	510,551	2,992	0.59	179
week 29	538,701	3,497	0.65	177
week 30	572,967	4,534	0.79	182
week 31	581,037	5,699	0.98	168
week 32	733,990	7,330	1.00	168
week 33	891,988	8,661	0.97	188
week 34	1,092,350	9,226	0.84	198
week 35	1,115,638	8,309	0.74	190
week 36	1,099,560	8,175	0.74	192
week 37	1,162,133	10,025	0.86	193
week 38	1,148,282	13,268	1.16	201
week 39	1,153,075	14,044	1.22	182
Total	16,999,253	328,566		

Testing of travellers at German points of entry

At several points of entry (airports, train stations, motorway service stations), SARS-CoV-2 test centres have been established. Some of the laboratories attached to those test centres have voluntarily provided aggregated statistics on the number of tests. For week 39/2020, 58,833 tests were reported from these entry points, of which 409 were positive (0.7%). It is not possible to say to which extent these 58,833 tests are included in those reported in Table 4.

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 18/09/2020. The current version can be found here: [Risk assessment for COVID-19](#)

Measures taken in Germany

- 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 <https://www.bundesgesundheitsministerium.de/coronavirus/chronik-coronavirus.html> (in German)
- Information from the Ministry of Health for travellers entering Germany: Frequently asked questions and answers <https://www.bundesgesundheitsministerium.de/coronavirus-infos-reisende/faq-tests-einreisende.html> (in German)
- Corona-Warn-App https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/WarnApp/Warn_App.html (in German)
- Regulations for persons entering Germany in connection with the novel coronavirus SARS-CoV-2 (15/09/2020) https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/BMG_Merkblatt_Reisende_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)
- 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: <https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248> (in German)
- (Non-medical) face masks must be worn on public transport and in shops in all federal states.