



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

09/04/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
108,202 (+4,974*)	2,107 (+ 246*)	1.9%	Ca. 49,900**

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

*Change from previous day; **Estimate

Summary (as of 09/04/2020, 12:00 AM)

- In total, **108,202** COVID-19 cases and **2,107** deaths due to COVID-19 have been electronically reported to the Robert Koch Institute in Germany.
- All 16 federal states are affected. The incidence (cases per 100,000) of COVID-19 is highest in Bavaria (**220**), Baden-Wuerttemberg (**195**) Hamburg (**180**) and Saarland (**171**).
- Most cases (70%) are between 15 and 59 years old; men (**51%**) and women (**49%**) are almost equally affected.
- **86%** of deaths, but only **16%** of all cases, occurred in persons aged 70 years or older.
- Reports on COVID-19 related outbreaks in nursing homes and hospitals are increasing. In some of these outbreaks, the number of deaths is relatively high.
- As of March 23/2020, gatherings of more than 2 persons (with the exception of families and household members) were banned in all states. Restaurants and businesses concerned with body care were closed.

Epidemiological Situation in Germany

Geographical distribution of cases

Epidemiological analyses are based on validated cases notified electronically to RKI according to the Protection Against Infection Law (Data closure: 12:00 AM daily).

Since January 2020, a total of **108,202 (+4,974)** laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated at the RKI, including **2,107** deaths (see Table 1 and Figure 1). In addition, diagnosis is ongoing for suspected cases in several federal states.

Information on confirmed cases are 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 notified laboratory-confirmed COVID-19 cases and deaths per federal state, Germany (09/04/2020, 12:00 AM)

Federal State	Total Number of cases	Number of new cases	Cases/100,000 pop.	Number of deaths
Baden-Wuerttemberg	21,603	923	195	519
Bavaria	28,827	1,263	220	635
Berlin	4,202	174	112	37
Brandenburg	1,578	106	63	30
Bremen	445	21	65	11
Hamburg	3,320	155	180	44
Hesse	5,242	277	84	100
Mecklenburg-Western Pomerania	572	17	36	11
Lower Saxony	6,804	419	85	141
North Rhine-Westphalia	21,961	1,032	122	384
Rhineland-Palatinate	4,336	188	106	50
Saarland	1,693	56	171	23
Saxony	3,261	117	80	52
Saxony-Anhalt	1,075	55	49	16
Schleswig-Holstein	1,932	105	67	34
Thuringia	1,351	66	63	20
Total	108,202	4,974	130	2,107

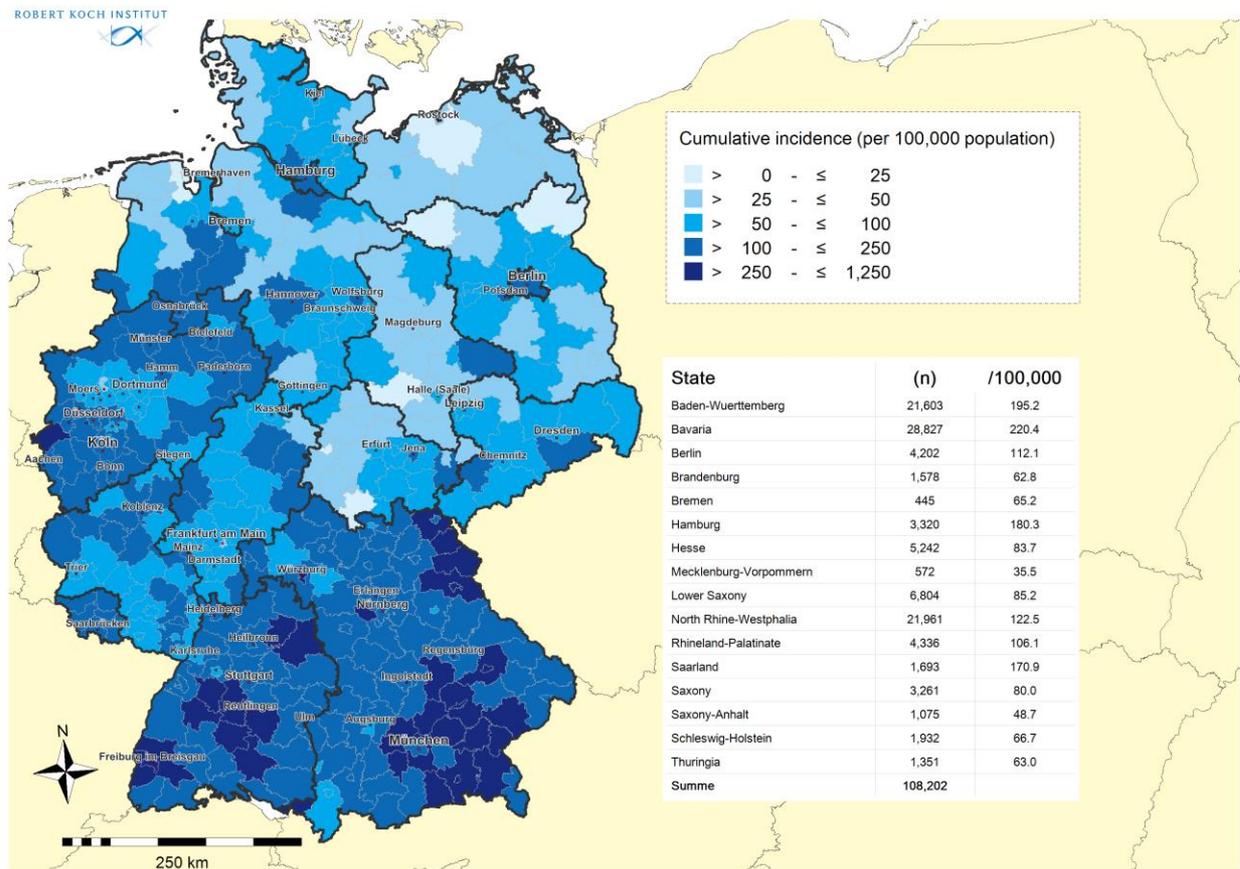


Figure 1: Number and cumulative incidence (per 100,000 population) of the 108,202 electronically reported COVID-19 cases in Germany by county and federal state (09/04/2020, 12:00 AM).

Please see the COVID-19 dashboard (<https://corona.rki.de/>) for information on number of COVID-19 cases by county (local health authority).

Distribution of cases over time

COVID-19 cases were first notified in Germany in January 2020. In 41,144 cases, onset of symptoms is unknown and therefore date of reporting is shown (see Figure 2).

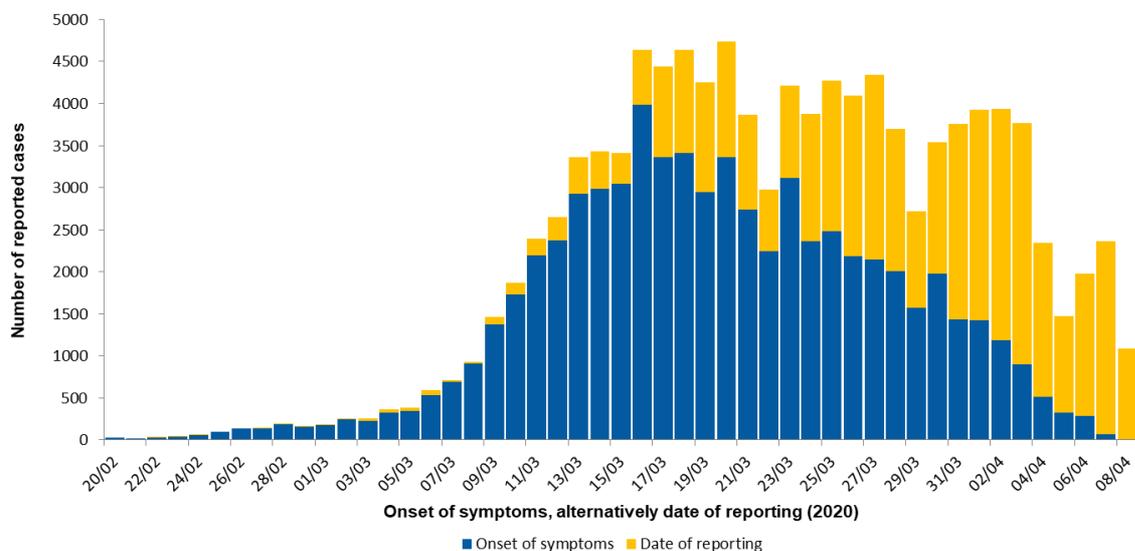


Figure 2: Number of electronically reported COVID-19 cases in Germany by date of symptom onset and alternatively by date of reporting from 20/02/2020 (09/04/2020, 12:00 AM)

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

Demographic distribution of cases

Of reported cases, 49% are male and 51% are female. Among notified cases, 855 were children under 5 years of age, 2,130 children aged 5 to 14 years, 74,926 persons aged 15 to 59 years, 20,925 persons aged 60 to 79 years and 9,160 persons aged 80 years and older (see Figure 3). The age of 206 notified cases is unknown. The median age of cases is 50 years.

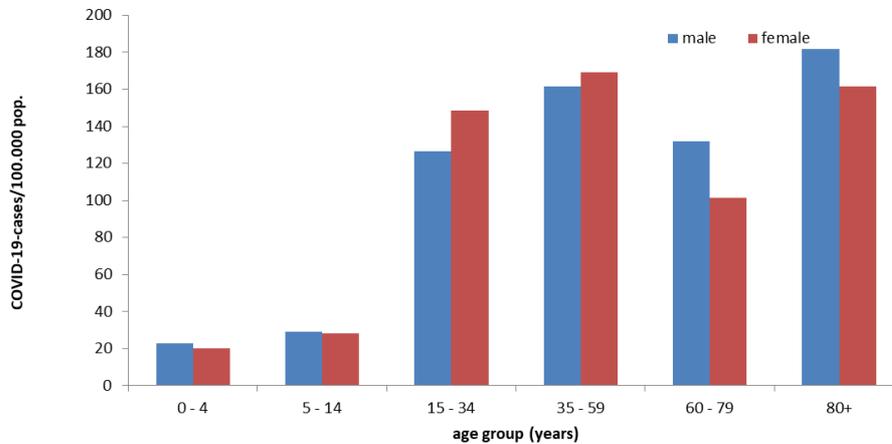


Figure 3: Electronically reported COVID-19 cases/100,000 population in Germany by age group and sex (n=107,612) for cases with information available (09/04/2020, 12:00 AM)

Clinical aspects

Information on symptoms is available for 82,152 of the notified cases. The most common symptoms are cough (52%), fever (42%) and rhinorrhoea (22%). Pneumonia was reported in 1,880 cases (2%). Hospitalisation was reported for 12,268 (15%) of 82,152 COVID-19 cases with information on hospitalisation available.

Approximately 49,900 persons are estimated to have recovered from their COVID-19 infection. As the exact date of recovery is unknown in most cases, an algorithm was developed to estimate the number of recovered cases.

The 2,107 COVID-19 related deaths reported in Germany concerned 1,286 (61%) men and 817 (39%) women (sex was unknown in 4 cases). The median age was 82 years and the range 26 to 105 years. Of all deaths, 1,819 (86%) were in persons 70 years or older, but only 16% of all cases were in this age group. Reports on COVID-19 related outbreaks in nursing homes are increasing. In some of these outbreaks, the number of deaths is relatively high.

Table 2: Number of COVID-19 cases notified as having died by age group and sex (available for 2,103 of the 2,107 deaths; 09/04/2020, 12:00 AM)

Sex	Age groups (years)				
	<60	60 - 69	70 - 79	80 - 89	>=90
male	76	133	362	567	148
female	26	52	146	401	192

SARS-CoV-2 infections among health care workers

Of notified cases with a SARS-CoV-2 infection, at least 4,700 were reported among health care staff in institutions as defined by §23 of the German Protection Against Infection law (IfSG), such as hospitals, outpatient clinics and practices, dialysis clinics or outpatient nursing services. Of the notified cases with SARS-CoV-2 infection among health care workers, 71% were female and 29% male. The median age was 42 years.

Estimation of the reproduction number (R_0)

The reproduction number, R_0 , is the mean number of persons infected by a case. R_0 can only be estimated and not directly extracted from the notification system. The current estimate is $R_0 = 1.1$ (95% confidence interval: 0.9-1.4) and is based on current electronically notified cases (09/04/2020 12:00 AM) and an assumed mean generation time of 4 days. Cases with disease onset on the preceding 3 days were excluded from the estimation as their low number due to incomplete reporting would lead to an unstable estimate. For more details on the methodology see [Epid. Bull. 17 | 2020 Online vorab: 9. April 2020 \[https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/17_20_SARS-CoV2_vorab.pdf?__blob=publicationFile\]\(https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/17_20_SARS-CoV2_vorab.pdf?__blob=publicationFile\)](https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/17_20_SARS-CoV2_vorab.pdf?__blob=publicationFile)

DIVI intensive care register

A registry of the German Interdisciplinary Association for Intensive and Emergency Medicine (DIVI), the RKI and the German Hospital Federation (DKG) was set up to document the capacities for intensive care as well as the number of COVID-19 cases treated in participating hospitals:

<https://www.intensivregister.de/#/intensivregister> .

As of 09/04/2020, 680 hospitals or departments are reporting (+92 since yesterday) to the registry. Migration of the registry to a new server has led to reporting delays, thus comparisons with data prior to 03/04/2020 are not meaningful. Currently, likely fewer than half of all ICU beds in Germany are captured by the registry. A total of 16,734 intensive care beds were registered, of which 9,695 (58%) are occupied and 7,039 beds are currently available (Table 3).

Table 3: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (09/04/2020, 8:15 am)

	Number of patients	Percentage	Changes to previous day*
Currently in ICU	1.888		
- of these: mechanically ventilated	1.464	78%	
Discharged from ICU	1.939		
- of these: deaths	579	30%	

*Due to the changing number of reporting hospitals from day to day this comparison is currently not meaningful

Assessment by the RKI

At the global and the national level, the situation is very dynamic and must be taken seriously. Severe and fatal courses occur in some cases. The number of cases, hospitalisations and fatalities in Germany continues to increase. The RKI currently assesses the risk to the health of the German population overall as **high** and as **very high** for risk groups. The probability of serious disease progression increases with increasing age and underlying illnesses. The risk of disease varies from region to region. The burden on the health care system depends on the geographical and age distribution of cases, health care capacity and initiation of containment measures (isolation, quarantine, social distancing etc.), and may be very high in some geographical regions. This assessment may change on short notice as a result of new findings.

Measures taken by Germany

International risk areas

- The following countries and regions are classified as international risk areas (31/03/2020) (https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Risikogebiete.html):
 - o Austria
 - o Egypt
 - o France
 - o Iran
 - o Italy
 - o Netherlands
 - o Spain
 - o Switzerland
 - o South Korea: the city of Daegu and the province of Gyeongsangbuk-do (North-Gyeongsang)
 - o United Kingdom of Great Britain and Northern Ireland
 - o United States of America

Due to pandemic spread, there is a global risk of acquiring COVID-19. Due to differences in surveillance systems, test strategies and reporting delays, the risk of infection cannot always be related to reported numbers. Therefore, all persons entering Germany are required to remain in quarantine for 14 days.

Other measures

- All arriving travellers in Germany are to remain in quarantine for 14 days: <https://www.bundesregierung.de/breg-de/themen/coronavirus/neue-einreiseregeln-1739634>
- RKI teams are currently supporting outbreak containment measures with a focus on outbreaks in retirement and health care homes as well as hospitals in several federal states.
- Outbreaks are ongoing in many districts, some with high case numbers. Data on current disease activity can be found on the dashboard <https://corona.rki.de/> and in the daily situation reports.
- A new federal law was implemented on 28/03/2020 for the protection of the public in the event of epidemic situations, granting the federal government additional competencies for the control of epidemics. <https://www.bundesgesundheitsministerium.de/presse/pressemitteilungen/2020/1-quartal/corona-gesetzpaket-im-bundesrat.html>
- As of 23/03/2020, gatherings of more than 2 persons (with the exception of families and household members) are banned in all federal states. Restaurants and businesses concerned with body care were closed. In public spaces, all persons must maintain a distance of 1.5 metres to other individuals <https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248>