

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

10/04/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
113,525	2,373	2.1%	Ca. 53,913**
(+5,323*)	(+ 266*)		

⁻ Changes since the last report are marked blue in the text -

*Change from previous day; **Estimate

Summary (as of 10/04/2020, 12:00 AM)

- In total, 113,525 COVID-19 cases and 2,373 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 (232), Baden-Wuerttemberg (203), Hamburg (193) and Saarland (187).
- Most cases (69%) 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.
- As of 10/04/2020 countries and regions are not longer classified as international risk areas.

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 113,525 (+5,323) laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated at the RKI, including 2,373 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 (10/04/2020, 12:00 AM)

Federal State	Total Number of cases	Number of new cases	Cases/100,000 pop.	Number of deaths
Baden-Wuerttemberg	22,433	830	203	570
Bavaria	30,363	1,536	232	703
Berlin	4,349	147	116	42
Brandenburg	1,691	113	67	37
Bremen	454	9	66	13
Hamburg	3,551	231	193	53
Hesse	5,694	452	91	111
Mecklenburg-Western Pomerania	586	14	36	11
Lower Saxony	7,114	310	89	161
North Rhine-Westphalia	23,028	1,067	128	446
Rhineland-Palatinate	4,440	104	109	51
Saarland	1,854	161	187	36
Saxony	3,402	141	83	59
Saxony-Anhalt	1,121	46	51	18
Schleswig-Holstein	2,029	97	70	38
Thuringia	1,416	65	66	24
Total	113,525	5,323	137	2,373

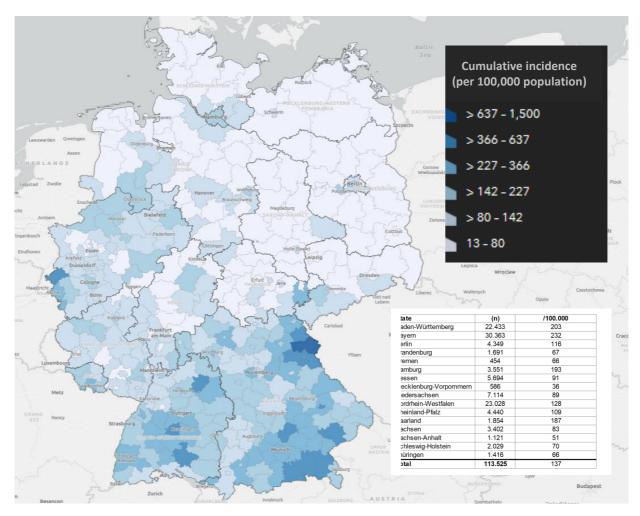


Figure 1: Number and cumulative incidence (per 100,000 population) of the 113,525 electronically reported COVID-19 cases in Germany by county and federal state (10/04/2020, 12:00 AM).

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 42,840 cases, onset of symptoms is unknown and therefore date of reporting is shown (see Figure 2).

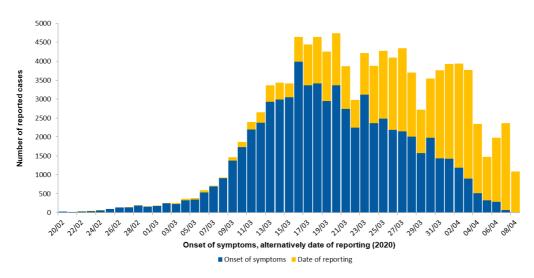


Figure 2: Number of electronically reported COVID-19 cases in Germany by date of symptom onset and alternatively by date of reporting from 20/02/2020 (10/04/2020, 12:00 AM)

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, 891 were children under 5 years of age, 2,239 children aged 5 to 14 years, 78,250 persons aged 15 to 59 years, 21,970 persons aged 60 to 79 years and 9,990 persons aged 80 years and older (see Figure 3). The age of 185 notified cases is unknown. The median age of cases is 50 years.

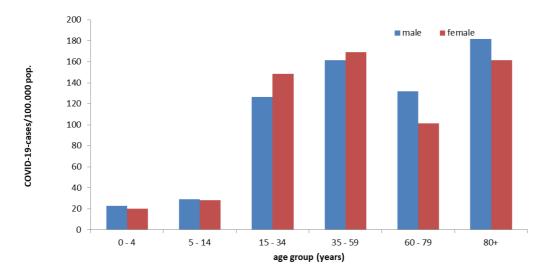


Figure 3: Electronically reported COVID-19 cases/100,000 population in Germany by age group and sex (n=112,968) for cases with information available (10/04/2020, 12:00 AM)

Clinical aspects

Information on symptoms is available for 86,721 of the notified cases. The most common symptoms are cough (52%), fever (42%) and rhinorrhoea (22%). Pneumonia was reported in 2,032 cases (2%). Hospitalisation was reported for 13,057 (15%) of 86,518 COVID-19 cases with information on hospitalisation available.

Approximately 53,913 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 2,373 COVID-19 related deaths reported in Germany concerned 1,426 (60%) men and 944 (40%) women (sex was unknown in 3 cases, age was unknown in one case). The median age was 82 years. Of all deaths, 2,043 (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 2,369 of the 2,373 deaths; 10/04/2020, 12:00 AM)

	Age groups (years)					
Sex	<60	60 - 69	70 - 79	80 - 89	≥90	
male	87	153	398	622	166	
female	29	57	169	460	228	

SARS-CoV-2 infections among health care workers

Of notified cases with a SARS-CoV-2 infection, at least 5,100 were reported among staff working 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. Among these 5,100 persons 71% were female and 29% male. The median age was 42 years.

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

Estimation of the reproduction number (R)

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=1.1 (95% confidence interval: 0.9-1.4) and is based on 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

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 10/04/2020, 754 hospitals or departments are reporting (+74 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 18,669 intensive care beds were registered, of which 11,060 (59%) are occupied and 7,609 beds are currently available (Table 3).

Table 3: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (10/04/2020, 7:01 am)

	Number of patients	Percentage	Changes to previous day*
Currently in ICU	2,204		
- of these: mechanically ventilated	1,810	79%	
Discharged from ICU	2,475		
- of these: deaths	733	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

As of 10/04/2020 countries and regions are not longer classified as international risk areas.

Due to pandemic spread, there is a global risk of acquiring COVID-19. In a considerable number of countries there are outbreaks with sometimes large numbers of cases; the exact numbers of cases in other countries are not known. Therefore there is a risk of transmission in Germany as well as in a vast number of regions worldwide.

All persons entering Germany are required to remain in quarantine for 14 days. https://www.bundesregierung.de/breg-de/themen/coronavirus/neue-einreiseregeln-1739634 (German)

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-gesetzespaket-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 indivduals https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248