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

12/04/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
120.479	2.673	2,2%	ca. 60.300**
(+ 2.821*)	(+ 129*)		

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

*Change from previous day; **Estimate

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

- In total, 120,479 COVID-19 cases and 2,673 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 (247), Baden-Wuerttemberg (218), Saarland (208) and Hamburg (203).
- Most cases (69%) are between 15 and 59 years old; men (49%) and women (51%) are almost equally affected.
- 86% of deaths, but only 17% 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 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 120,479 (+2,821) laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated at the RKI, including 2,673 deaths (see Table 1 and Figure 1). Delays in cases reporting and data transmission may occur over the Easter Holiday. 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

Federal State	Total Number of cases	Number of new cases	Cases/100,000 pop.	Number of deaths
Baden-Wuerttemberg	24,078	461	218	649
Bavaria	32,282	829	247	786
Berlin	4,567	109	122	50
Brandenburg	1,857	93	74	38
Bremen	480	11	70	15
Hamburg	3,742	79	203	56
Hesse	5,859	51	94	123
Mecklenburg-Western Pomerania	605	4	38	11
Lower Saxony	7,602	259	95	189
North Rhine-Westphalia	24,267	623	135	495
Rhineland-Palatinate	4,734	112	116	64
Saarland	2,058	42	208	43
Saxony	3,600	35	88	67
Saxony-Anhalt	1,166	31	53	21
Schleswig-Holstein	2,118	53	73	41
Thuringia	1,464	29	68	25
Total	120,479	2,821	145	2,673

Table 1: Number and cumulative incidence (per 100,000 population) of notified laboratory-confirmed COVID-19 cases and deaths per federal state, Germany (12/04/2020, 12:00 AM).

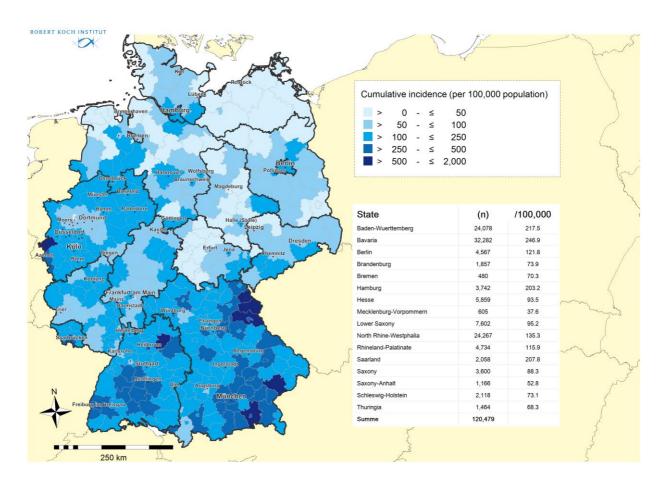


Figure 1: Number and cumulative incidence (per 100,000 population) of the 120,479 electronically reported COVID-19 cases in Germany by county and federal state (12/04/2020, 12:00 AM).

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 45,288 cases, onset of symptoms is unknown and therefore date of reporting is shown (see Figure 2).

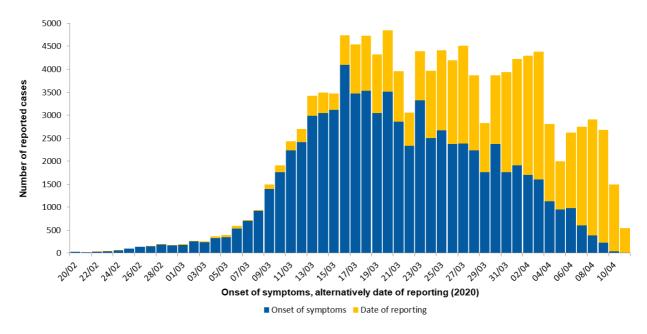


Figure 2: Number of electronically reported COVID-19 cases in Germany by date of symptom onset and alternatively by date of reporting from 20/02/2020 (12/04/2020, 12:00 AM)

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, 947 were children under 5 years of age, 2,362 children aged 5 to 14 years, 82,461 persons aged 15 to 59 years, 23,340 persons aged 60 to 79 years and 11,165 persons aged 80 years and older (see Figure 3). The age of 204 notified cases is unknown. The median age of cases is 50 years.

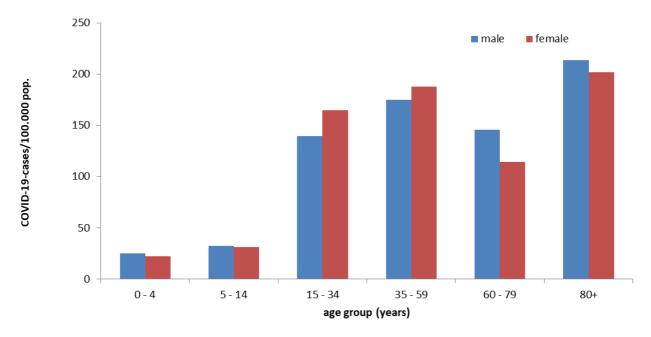


Figure 3: Electronically reported COVID-19 cases/100,000 population in Germany by age group and sex (n=119,889) for cases with information available (12/04/2020, 12:00 AM)

Clinical aspects

Information on symptoms is available for 92,361 of the notified cases. The most common symptoms are cough (51%), fever (42%) and rhinorrhoea (22%). Pneumonia was reported in 2,180 cases (2%). Hospitalisation was reported for 14,129 (15%) of 92,098 COVID-19 cases with information on hospitalisation available.

Approximately 60,300 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 2,673 COVID-19 related deaths reported in Germany concerned 1,592 (60%) men and 1,076 (40%) women (sex was unknown in 5 cases, age was unknown in 2 cases). The median age was 82 years. Of all deaths, 2,304 (86%) were in persons 70 years or older, but only 17% 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.

	Age groups (years)				
Sex	<60	60 - 69	70 - 79	80 - 89	≥90
male	97	176	445	689	185
female	31	62	196	530	257

Table 2: Number of COVID-19 cases notified as having died by age group and sex (available for 2,668 of the 2,673 deaths; 12/04/2020, 12:00 AM)

SARS-CoV-2 infections among staff working in medical facilities

Of notified cases with a SARS-CoV-2 infection, at least 5,500 were reported among staff working in medical facilities 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 5,500 persons 72% were female and 28% male. The median age was 42 years.

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=1.3 (95% confidence interval: 1.0-1.6) and is based on electronically notified cases (10/04/2020 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 register¹

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 12/04/2020, 752 hospitals or departments reported to DIV I (-2 since 10/04/2020) 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 19,701 intensive care beds were registered, of which 11,376 (58%) are occupied and 8,325 beds are currently available (Table 3).

	Number of patients	Percentage	Changes to previous day*
Currently in ICU	2,405		
- of these: mechanically ventilated	1,859	77%	
Discharged from ICU	2,978		
- of these: deaths	864	29%	

Table 3: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (12/04/2020, 8:15 am)

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

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

¹ The situation report as of 11/04/2020 reported on data with state of date 10/04/2020, as there were no new data at 11/04/2020 available from the DIVI intensive care register.

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 many other, not always well-defined regions worldwide.

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

Other measures

- 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.
- 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.
- 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 (in German)
- 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 (in German)