

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

14/06/2020 - UPDATED STATUS FOR GERMANY

<b>Confirmed cases</b>	Deaths	Deaths (%)	Recovered
186,269	8,787	4.7%	ca. 172,200**
(+247*)	(+6*)		

\*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 Law (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 record 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 14/06/2020 12:00 AM)

- The number of newly transmitted COVID-19 cases to RKI continues to decrease in comparison to previous weeks. The cumulative nationwide incidence over the past 7 days was 2.5 cases per 100,000 inhabitants. A total of 155 districts transmitted zero cases.
- In total, 186,269 laboratory-confirmed COVID-19 cases and 8,787 deaths due to COVID-19 have been electronically reported to the RKI in Germany.
- COVID-19 outbreaks continue to be reported in nursing homes and hospitals.
- Outbreaks of COVID-19 have been reported in several federal states (including in institutions for asylum seekers and refugees, in meat processing plants and logistics companies, among seasonal harvest workers and in connection with religious events and family gatherings).

# **Epidemiological Situation in Germany**

## 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 186,269 (+247) laboratory-confirmed cases of coronavirus disease 2019 (COVID-19) have been electronically reported to and validated by the RKI (see Table 1). A total of 155 districts reported no cases in the past 7 days. Information on laboratory-confirmed cases is also available on the RKI website at <a href="https://www.rki.de/DE/Content/InfAZ/N/Neuartiges">https://www.rki.de/DE/Content/InfAZ/N/Neuartiges</a> Coronavirus/Fallzahlen.html and <a href="https://corona.rki.de">https://corona.rki.de</a>.

**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 (14/06/2020, 12:00 AM).

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	35,090	0	317	123	1.1	1,805	16.3
Bavaria	47,626	14	364	270	2.1	2,541	19.4
Berlin	7,282	30	194	269	7.2	208	5.5
Brandenburg	3,326	0	132	28	1.1	163	6.5
Bremen	1,589	8	233	71	10.4	46	6.7
Hamburg	5,139	0	279	21	1.1	255	13.8
Hesse	10,324	3	165	115	1.8	491	7.8
Mecklenburg-Western Pomerania	782	1	49	8	0.5	20	1.2
Lower Saxony	12,874	52	161	332	4.2	614	7.7
North Rhine- Westphalia	39,233	96	219	600	3.3	1,645	9.2
Rhineland-Palatinate	6,840	2	167	50	1.2	231	5.7
Saarland	2,772	2	280	24	2.4	168	17.0
Saxony	5,346	1	131	17	0.4	218	5.3
Saxony-Anhalt	1,756	22	80	37	1.7	57	2.6
Schleswig-Holstein	3,121	1	108	10	0.3	151	5.2
Thuringia	3,169	15	148	78	3.6	174	8.1
Total	186,269	247	224	2,053	2.5	8,787	10.6

#### Distribution of cases over time

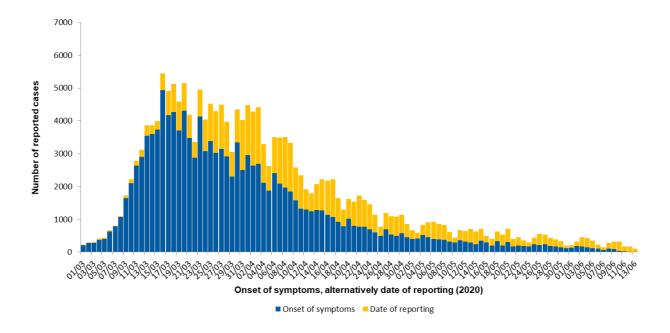


Figure 1: Number of COVID-19 cases in Germany electronically reported to the RKI by date of symptom onset or alternatively by date of reporting from 01/03/2020 (14/06/2020, 12:00 AM).

### **Clinical aspects**

Approximately 172,200 people have recovered from their COVID-19 infection. Since the exact date of recovery is unknown in most cases, an algorithm was developed to estimate the number of recovered cases.

In total, 8,787 COVID-19-related deaths have been reported in Germany (4.7% of all confirmed cases). So far, three deaths among COVID-19 cases under 20 years of age have been reported to the RKI. Pre-existing medical conditions were reported for all three.

Table 2: Number of notified COVID-19 deaths by age group and gender electronically reported to RKI (Data available for 8,782 of notified deaths; 14/06/2020, 12:00 AM)

Gender	Age group (in years)										
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+
Male		2	6	17	49	225	614	1,327	2,065	555	5
Female	1		3	6	20	81	217	651	1,853	1,040	45
Total	1	2	9	23	69	306	831	1,978	3,918	1,595	50

## Occupation, accommodation or care in facilities

In accordance with the Protection Against Infection Law, 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 proportion 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 3:** Notified COVID-19-cases according to possible occupation, accommodation or care in facilities relevant for transmission of infectious diseases electronically reported to RKI (185,277\* cases, no data available for 48,943 cases; 14/06/2020, 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	3,160	2,254	594	2,400
	Occupation in facility	13,452	619	20	13,300
§ 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*	2,591	62	1	2,400
	Occupation in facility	2,592	131	7	2,500
§ 36 IfSG (e.g. facilities for the care of older, disabled, or other persons in need of care, homeless shelters, community facilities for asylum-	Cared for / accommodated in facility	17,278	3,933	3,435	13,200
seekers, repatriates and refugees as well as other mass accommodation and prisons)	Occupation in facility	9,654	410	48	9,500
§ 42 IfSG (e.g. kitchens in the catering trade, in inns, restaurants, canteens, cafés, or other establishments with or for communal catering)	Occupation in facility	2,579	159	4	2,400
Neither cared for, accommodated in nor working in a facility		85,028	15,278	3,348	79,900

<sup>\*</sup>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. IfSG: Protection Against Infection Law

#### **Outbreaks**

A high 7-day incidence rate was observed in four districts, primarily due to localised outbreaks: The districts of Aichach-Friedberg and Coburg (both Bavaria) and the districts of Greiz and Sonneberg (both Thuringia).

In Aichach-Friedberg an outbreak was reported among seasonal harvest workers. Tracing and testing of contacts as well as implementation of hygiene and quarantine measures were rapidly implemented. Harvest activities were temporarily halted.

In the districts of Greiz and Sonneberg as well as in the district Coburg outbreaks in nursing homes for the elderly were observed, where residents and partly also employees were infected with SARS-CoV-2.

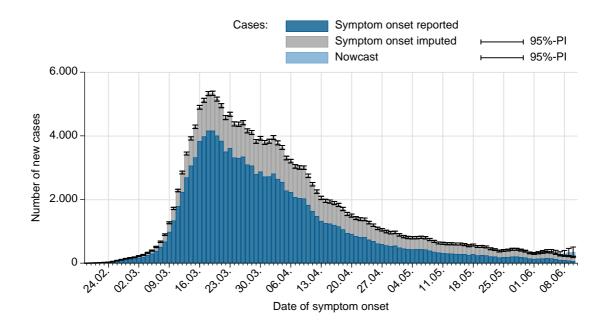
Declining numbers can be observed in other cities/ districts with previously high 7-day incidences. In the city of Bremerhaven an outbreak extending to other districts, including Cuxhaven, occurred within a religious community. Another outbreak occurred following a large family gathering.

A large COVID-19 outbreak occurred in the district of Göttingen related to family gatherings, for which a large number of contact persons has been identified. Due to a high number of affected children, numerous schools and day care institutions were temporarily closed.

Outbreaks continue to occur in meat-processing plants in several federal states, some of which have led to the closures of plants. From Berlin, Hesse and Mecklenburg-Western Pomerania, outbreaks were reported among members of religious communities. In addition, several large outbreaks occurred among workers at logistics companies, for instance in North Rhine-Westphalia and Lower Saxony.

#### Estimation of the reproduction number (R)

The presented case numbers do not fully reflect the temporal progression of incident COVID-19-cases, since the time intervals between actual onset of illness and diagnosis, reporting, as well as data transmission to the RKI vary greatly. Therefore, a nowcasting approach is applied to model the true temporal progression of COVID-19 cases according to illness onset. Figure 2 shows the result of this analysis.



**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 14/06/2020, 12 AM, taking into account cases up to 10/06/2020).

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 and not directly extracted from the notification system.

The sensitive R-value reported can be estimated by using a 4-day moving average of the number of new cases estimated by nowcasting. This 4-day value reflects the infection situation about one to two weeks ago. This value reacts sensitively to short-term changes in case numbers, such as those caused by individual outbreaks. This can lead to relatively large fluctuations, especially if the total number of new cases is small. The current estimate of the 4-day-R-value is 1.05 (95%-prediction interval: 0.85 - 1.29) and is based on electronically notified cases as of 14/06/2020, 12:00 AM.

Similarly, the 7-day R-value is estimated by using a moving 7-day average of the nowcasting curve. This compensates for fluctuations more effectively, as this value represents a slightly later course of infection of about one to a little over two weeks ago. The 7-day R-value is estimated at 1.00 (95% predictation interval: 0.88–1.13) and is based on electronically notified cases as of 14/06/2020, 12:00 AM. In light of the still low daily case numbers, both R-values should be interpreted with caution and in their course over several days.

Sample calculations as well as an excel sheet presenting both R-values with daily updates can be found under <a href="https://www.rki.de/covid-19-nowcasting">www.rki.de/covid-19-nowcasting</a>. A detailed methodological explanation of the more stable 7day R-value is also available there. More general information and sample calculations for both R-values can also be found in our FAQs (<a href="https://www.rki.de/covid-19-faq">https://www.rki.de/covid-19-faq</a>).

A detailed description of the methodology is available at <a href="https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/17/Art\_02.html">https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/17/Art\_02.html</a> (Epid. Bull. 17 | 2020 from 23/04/2020)

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

# **Risk Assessment by the RKI**

#### **General assessment**

At the global and the national level, the situation is very dynamic and must be taken seriously. The number of newly reported cases is currently decreasing. The RKI currently assesses the risk to the health of the German population overall as **high** and as **very high** for risk groups. This assessment may change at short notice based on new insights.

#### Infection risk

The risk of infection depends heavily on the regional spread, living conditions and also on individual behaviour.

#### **Disease severity**

In most cases, the disease is mild. The probability of progression towards serious disease increases with increasing age and underlying illnesses.

### Burden on health system

The burden on the health care system depends on the geographical distribution of cases, health care capacity and initiation of containment measures (isolation, quarantine, physical distancing etc.). The burden is currently low in many regions, but may be high in some locations.

# Measures taken by Germany

- From 15 June, borders will open within Europe, making travel possible again provided the COVID-19 activity in destination countries permits this (12/06/2020) <a href="https://www.auswaertiges-amt.de/de/ReiseUndSicherheit/covid-19/2296762">https://www.auswaertiges-amt.de/de/ReiseUndSicherheit/covid-19/2296762</a>
- 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: <a href="https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-bundeslaender-1745198">https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-bundeslaender-1745198</a> (in German)
- (Non-medical) face masks must be worn on public transport and in shops in all federal states.
- Data on current disease activity can be found in the daily situation reports and on the RKI dashboard:
  - https://corona.rki.de/
- A distance of 1.5 metres to other indivduals must be maintained in public spaces:

  <a href="https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248">https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundeskanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248</a> (in German)