



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

25/06/2020 - UPDATED STATUS FOR GERMANY

Confirmed cases	Deaths	Deaths (%)	Recovered
192,079 (+ 630*)	8,927 (+ 13*)	4.6%	ca. 176,800**

*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 25/06/2020 12:00 AM)

- The cumulative nationwide incidence over the past 7 days was **4.1** cases per 100,000 inhabitants. A total of **145** districts transmitted zero cases.
- In total, **192,079** laboratory-confirmed COVID-19 cases and **8,927** 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 **192,079 (+630)** 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 **145** districts reported no cases in the past 7 days. Information on laboratory-confirmed cases is 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 laboratory-confirmed COVID-19 cases and deaths for each federal state electronically reported to RKI, Germany (25/06/2020, 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	35,446	37	320	184	1.7	1,827	16.5
Bavaria	48,122	127	368	250	1.9	2,583	19.8
Berlin	8,021	46	214	465	12.4	212	5.7
Brandenburg	3,428	15	136	53	2.1	165	6.6
Bremen *	1,653	0	242	34	5.0	49	7.2
Hamburg *	5,175	0	281	21	1.1	259	14.1
Hesse	10,666	21	170	197	3.1	505	8.1
Mecklenburg-Western Pomerania	796	2	49	4	0.2	20	1.2
Lower Saxony	13,378	51	168	291	3.6	623	7.8
North Rhine-Westphalia	41,992	314	234	1,715	9.6	1,669	9.3
Rhineland-Palatinate	6,940	16	170	56	1.4	235	5.8
Saarland	2,801	0	283	6	0.6	169	17.1
Saxony	5,438	2	133	50	1.2	223	5.5
Saxony-Anhalt	1,858	2	84	50	2.3	58	2.6
Schleswig-Holstein	3,140	3	108	18	0.6	152	5.2
Thuringia	3,225	-6	150	26	1.2	178	8.3
Total	192,079	630	231	3,420	4.1	8,927	10.7

* No data transmission from Bremen and Hamburg yesterday.

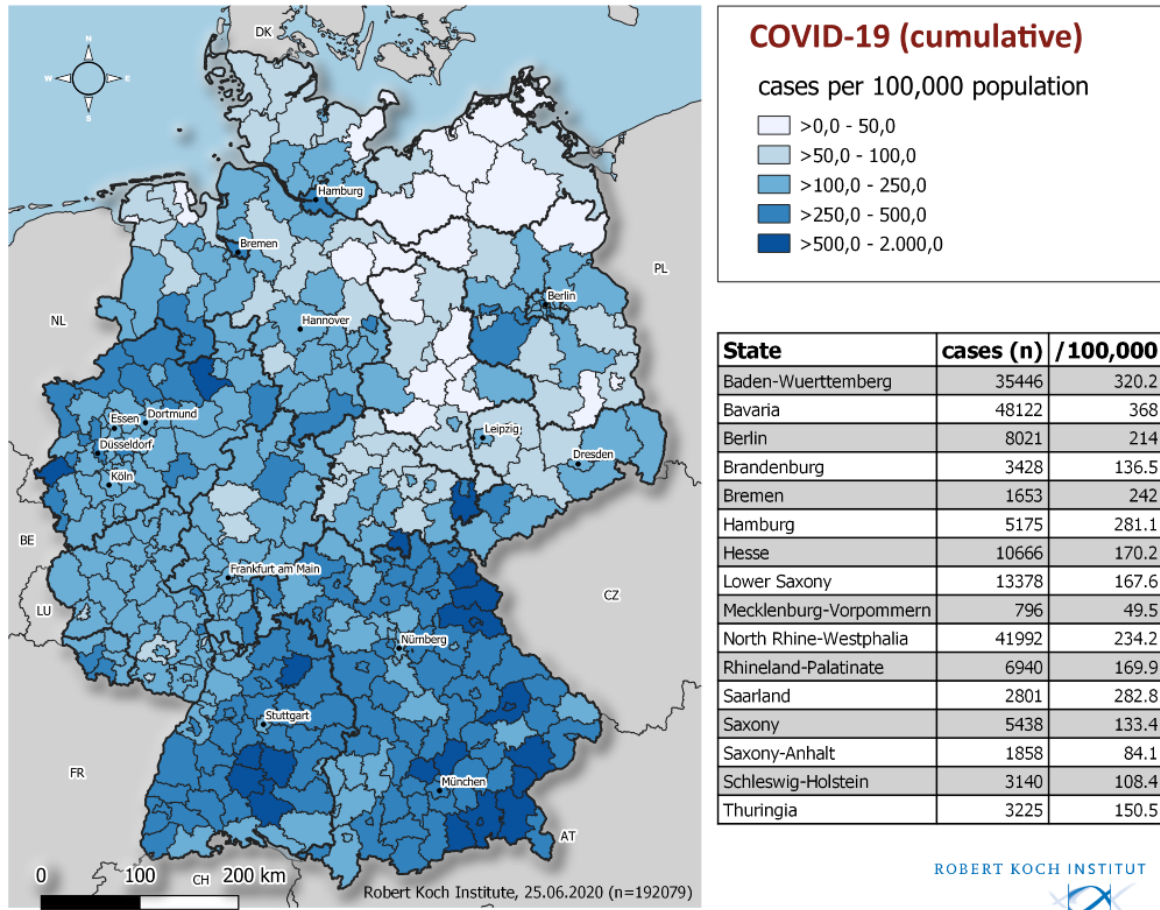


Figure 1: Number and cumulative incidence (per 100,000 population) of the 192,079 electronically reported COVID-19 cases in Germany by county and federal state (25/06/2020, 12:00 AM). Please see the COVID-19 dashboard (<https://corona.rki.de/>) for information on number of COVID-19 cases by county (local health authority).

Distribution of cases over time

The first COVID-19 cases in Germany were notified in January 2020. Figure 2 shows COVID-19 cases transmitted to RKI according to date of illness onset from 01.03.2020 onwards. With regard to all cases reported from 01.03.2020 onwards, the onset of symptoms is unknown in 57,073 cases (30%). When the the onset of symptoms is unknown, the date of reporting is provided in Figure 2.

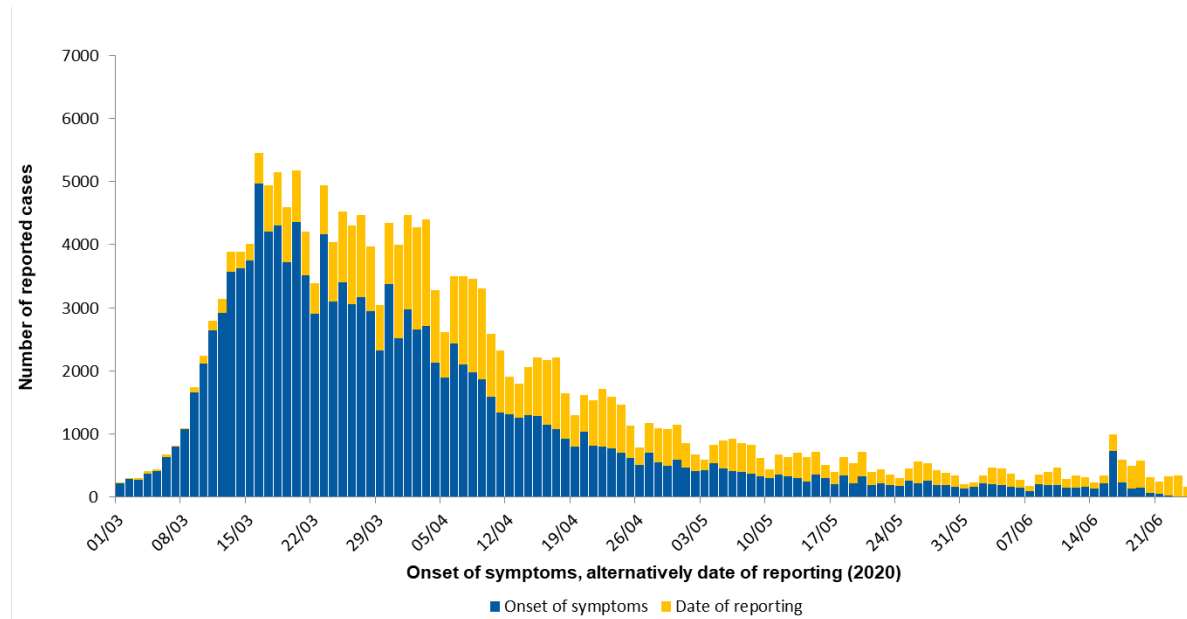


Figure 2: Number of COVID-19 cases in Germany electronically reported to the RKI by date of symptom onset or alternatively by date of reporting from 01/03/2020 (25/06/2020, 12:00 AM).

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

Demographic distribution of cases

Of all reported cases, 52% are female and 48% are male. Among all those notified cases, for which data on gender was reported, 4,604 were children under 10 years of age (2.4%), 9,141 children and teenagers aged 10 to 19 years (4.9%), 83,961 persons aged 20 to 49 years (44%), 58,620 persons aged 50 to 69 years (31%), 30,015 persons aged 70 to 89 years (16%) and 5,329 persons aged 90 years and older (2.8%). The age and/or gender is unknown in 409 notified cases. The mean age of cases is 49 years (median age 49 years). The highest incidences are seen in persons aged 90 years and older (Figure 3).

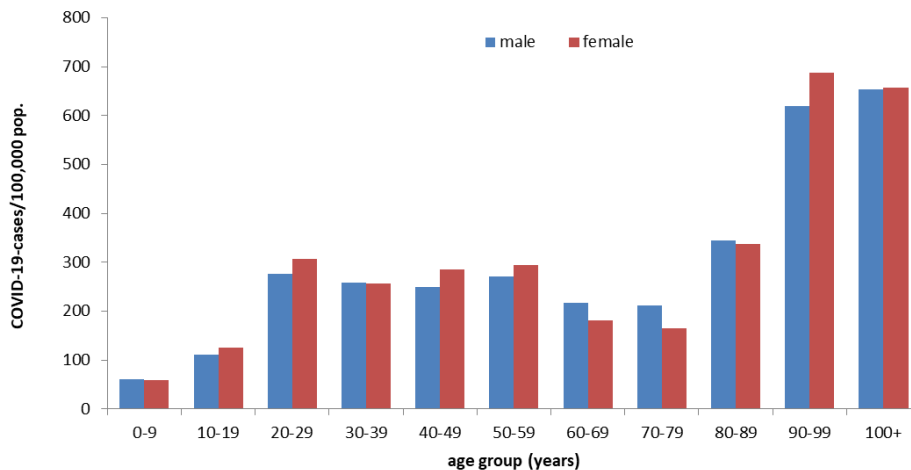


Figure 3: Electronically reported COVID-19 cases/100,000 population in Germany by age group and gender (n=191,670) for cases with information available (25/06/2020,12:00 AM).

Clinical aspects

Information on symptoms is available for 164,293 (86%) of the notified cases. Common symptoms are cough (49%), fever (41%) and rhinorrhoea (21%). Pneumonia was reported in 4,983 cases (3.0%). Since calendar week 17, cases are reported to the RKI as a distinct COVID-19 surveillance category. Since then, ageusia and anosmia can also be entered as symptoms. At least one of these two symptoms was reported in 3,108 of 21,281 cases (15%).

Hospitalisation was reported for 29,008 (17%) of 166,875 COVID-19 cases with information on hospitalisation status.

Approximately 176,800 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 this number.

Table 2: Number of notified COVID-19 deaths by age group and gender electronically reported to RKI (Data available for 8,922 of notified deaths; 25/06/2020, 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	7	17	50	230	627	1,351	2,092	560	6
Female	1		3	6	22	84	223	658	1,873	1,065	45
Total	1	2	10	23	72	314	850	2,009	3,965	1,625	51

In total, 8,927 COVID-19-related deaths have been reported in Germany (4.6% of all confirmed cases). Of these, 4,942 (55%) are men and 3,980 (45%) are women (see Table 2), the gender was unknown in five cases). The median age was 82 years. Of all deaths, 7,653 (86%) were in people aged 70 years or older, but only 18% of all cases were in this age group. 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.

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 25% 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 (191,007* cases, no data available for 48,529 cases; 25/06/2020, 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	3,322	2,373	620	2,600
	Occupation in facility	13,735	634	20	13,600
§ 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*	3,039	65	1	2,700
	Occupation in facility	2,690	137	8	2,600
§ 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	17,703	4,038	3,509	13,800
	Occupation in facility	9,843	419	46	9,700
§ 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	4,125	188	5	2,700
Neither cared for, accommodated in nor working in a facility		88,021	15,677	3,404	82,700

*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

So far, **13,735** cases with a SARS-CoV-2 infection have been notified among staff working in medical facilities as defined by Section 23 IfSG. Among the cases reported as working in medical facilities, 73% were female and 27% male. The median age was 41 years, 20 persons died.

The low number of cases among persons who attend or work in facilities providing child care or education (Section 33 IfSG) reflects the low incidence in children observed thus far. The high number of cases among people cared for or working in various care facilities (Section 36 IfSG) is consistent with numerous reported outbreaks, especially in nursing homes. The increase in the number of cases among persons working in the food sector (§42) is largely due to outbreaks in meat processing plants.

Outbreaks

A high 7-day incidence with more than 25 cases per 100,000 inhabitants was observed in **four** districts, primarily due to localised outbreaks: The districts of Guetersloh and the neighbouring districts of Warendorf and Hamm (**all** North Rhine-Westphalia) **and** the district of Goettingen (Lower Saxony).

The increase in the 7-day incidence in the district Guetersloh is due to an outbreak in a meat processing plant. The 7-day high incidence in Warendorf and Hamm is linked to the outbreak in Guetersloh. Employees of the meat processing company are residents of neighbouring districts. More than 1,500 employees tested positive for SARS-CoV-2. The affected plant was temporarily closed at short notice and all employees are being quarantined as well as their household members. In addition, all schools and day-care centres in the district have been closed since 18th of June until the end of the summer holidays (11th of August 2020s). On June 23, 2020, the state of North Rhine-Westphalia officially activated the second stage of a lockdown for the districts of Guetersloh and Warendorf until June 30, 2020. In the affected region, testing for SARS-CoV-2 is being significantly expanded. Nursing facilities, hospitals, employees in the food retail sector, kiosk staff and residents of central shared accommodation will be tested in Gütersloh and Warendorf. The population can have a test performed free of charge. There have also been and still are outbreaks in meat processing plants in other federal states, some of which have led to production closures.

A large COVID-19 outbreak occurred in the district of Goettingen, in the context of highly crowded housing conditions. All inhabitants of one large apartment complex have been quarantined, control- and support measures are being carried out along with extensive testing. Additionally, an outbreak in a refugee facility is reported, affecting more than 20 people.

Decreasing 7-day incidence is reported from the city of Magdeburg, Saxony (an outbreak that led to closing of several schools), in Neukoelln, a district of Berlin, (an outbreak is linked to members of a religious community with more than one hundred cases; an entire block of flats has been quarantined) and Friedrichshain-Kreuzberg, another district of Berlin (47 cases in a block of flats so far).

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 4 shows the result of this analysis.

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.

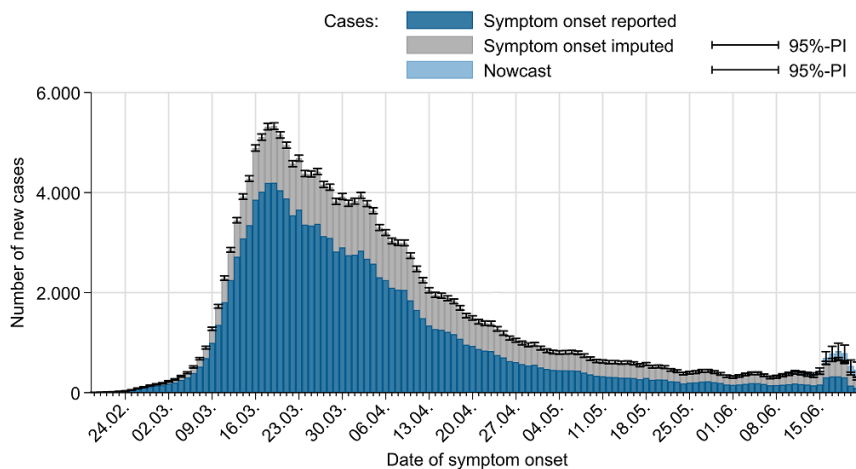


Figure 4: Number of notified COVID-19 cases with known date of illness onset (dark blue), estimated date of illness onset for cases without reported date of onset (grey) and estimated number of not yet notified cases according to illness onset electronically reported to RKI (light blue) (as of 25/06/2020, 12 AM, taking into account cases up to 21/06/2020).

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 **0,59** (95%-prediction interval: **0,48 – 0,73**) and is based on electronically notified cases as of 24/06/2020, 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 **1.11** (95% prediction interval: **1.03 – 1.19**) and is based on electronically notified cases as of 24/06/2020, 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.

The estimated reproduction numbers (R-value and 7-day R-value) have decreased to a value of 1 or below. The strongly increased values in the past few days are related to local accumulations, which are described in the section "Outbreaks", with the outbreak in North Rhine-Westphalia playing a particularly important role. The dynamics of the various outbreak events are also influenced in part by serial tests carried out in the scope of the detected outbreaks, which can promptly lead to the detection of further infected persons. For this reason, the reproduction figures may continue to fluctuate strongly. Since the case numbers in Germany are at a low level overall, these local outbreaks have a relatively strong influence on the value of the reproduction number.

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 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 (<http://www.rki.de/covid-19-faq>).

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

A registry of the German Interdisciplinary Association for Intensive and Emergency Medicine (DIVI), the RKI and the German Hospital Federation (DKG) was established to document intensive care capacity as well as the number of COVID-19 cases treated in participating hospitals (<https://www.intensivregister.de/#/intensivregister>). The DIVI intensive care register documents the number of available intensive care beds in the reporting hospitals on a daily basis. Since 16/04/2020, all hospitals with intensive care beds are required to report.

As of 25/06/2020, a total of **1,276** hospitals or departments reported to the DIVI registry. Overall, **32,507** intensive care beds were registered, of which **21,073** (65%) are occupied, and **11,434** beds (35%) are currently available. The number of COVID-19 cases treated in participating hospitals is shown in Table 4.

Table 4: COVID-19 patients requiring intensive care (ICU) recorded in the DIVI register (24/06/2020 06/2020, 14:15 AM).

	Number of patients	Percentage
Currently in ICU	360	
- of these: mechanically ventilated	196	54%
Discharged from ICU	14,538	
- of these: deaths	3,706	25%

*Due to adjustments to the database, changes to previous days are currently not available.

Information from additional RKI-based surveillance systems for acute respiratory illnesses

GrippeWeb (“FluWeb”) is a web interface at RKI for monitoring the activity of acute respiratory illness (ARI), utilizing information from the population. In week 25, 2020, the rate of ARI (“ARI rate”) remained stable. Since the end of the influenza epidemic in week 12, 2020, the ARI rate has been markedly lower than in previous seasons at this time of the year. Further information can be found under <https://grippeweb.rki.de/>.

The Influenza Working Group (AGI) monitors ARI through a sentinel network of physicians in private practices. In week 25, 2020, the number of patient visits due to acute respiratory infections increased, but remained at a very low level. The increase in patient visits is mainly due to a rise in visits of patients from the age group 0 to 4 years. Within the viral surveillance of the AGI, respiratory viruses were detected in 13 of 40 samples (33%) in week 25, 2020. Rhinovirus was found in 12 samples, parainfluenzavirus was detected in one sample. Since week 15, 2020, no influenza activity has been observed within the viral surveillance of the AGI. No SARS-COV-2 has been detected since week 16, 2020. Further information can be found under <https://influenza.rki.de/>.

A third, ICD-10 code based system, monitors severe acute respiratory illness (SARI) in hospitalized patients (ICD-10 codes J09 to J22: primary diagnoses influenza, pneumonia or other acute infections of the lower respiratory tract). In week 24, 2020, the total number of SARI cases increased markedly, but remains at a very low level. Of all reported SARI cases in week 24, 2020, 3% were diagnosed with COVID-19 (ICD-10 code U07.1!) (Figure 5). Please note that due to data availability only patients with an ICD-10 Code for SARI as the main diagnosis and hospitalisation duration of up to one week were included in this analysis.

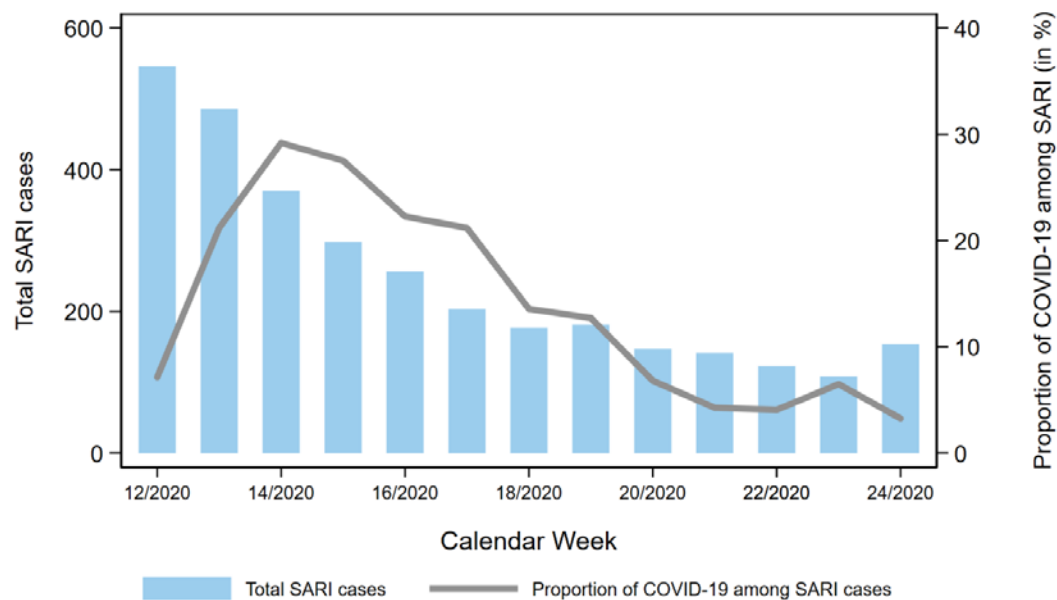


Figure 5: Weekly number of SARI cases (ICD-10 codes J09-J22) and proportion of cases with a diagnosis of COVID-19 (ICD-10 code U07.1!) among SARI cases with duration of hospitalisation of up to one week and with date of admission in weeks 12 to 24, 2020, from 70 sentinel hospitals

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

- Corona-Warn-App

https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/WarnApp/Warn_App.html

- Regulations for persons entering Germany in connection with the novel coronavirus SARS-CoV-2 (15.06.2020) https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/BMG_Merkblatt_Reisende_Tab.html
- 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)
- (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 individuals must be maintained in public spaces:
<https://www.bundesregierung.de/breg-de/themen/coronavirus/besprechung-der-bundekanzlerin-mit-den-regierungschefinnen-und-regierungschefs-der-laender-1733248> (in German)