



# Coronavirus Disease 2019 (COVID-19)

## Daily Situation Report by the Robert Koch Institute

### 28/10/2022- CURRENT STATUS FOR GERMANY

Confirmed cases		7-day incidence (7-di)		DIVI-Intensive care registry as of 27/10/2022 12:15 AM	Vaccination monitoring as of 28/10/2022
Total <sup>1</sup>	active cases <sup>2</sup>	Total population	No. of districts with 7-di > 50/100,000 pop.	Change to previous day for no. of cases currently in ICU	No. of vaccinations reported in last 24h
+61,492 (35,523,412)	-18,200 [ca. 1,597,300]	464.1 cases/100,000 pop.	-3 [407/411]	-40 [1,683]	1st vaccination: +811 2nd vaccination: +1,043 Booster vaccination: +7,741
Hospitalised <sup>1</sup>	Recovered <sup>3</sup>	Hospitalised (all age groups)	No. of districts with 7-di > 500/100,000 pop.	% of COVID-19 occupancy in total number of operable beds <sup>4</sup>	Total no. of people fully vaccinated against COVID-19 <sup>5, 6, 7</sup>
+2,500 (732,003)	+79,500 (ca. 33,772,800)	10.3 cases/100,000 pop.	-44 [154/411]	8.1 %	N1: 64,801,021 N2: 63,486,685 N3: 51,875,018
Deaths <sup>1</sup>	Hospitalised aged 60 years +	No. of districts with 7-di > 1000/100,000 pop	No. of new cases in ICU compared to the previous day	Share of population fully vaccinated against COVID-19	
+184 (153,377)	27.7 cases/100,000 pop.	±0 [1/411]	+214	N1: 77.9 % <sup>5</sup> N2: 76.3 % <sup>6</sup> N3: 62.3 % <sup>7</sup>	

Numbers in ( ) brackets show cumulative values, numbers in [ ] brackets show current values. Footnotes can be found in the Annex.

COVID-19 cases are notified to the local public health authorities 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 28/10/2022, 10:00 AM)

- Yesterday, **61,492** new laboratory-confirmed COVID-19 cases as well as **184** new deaths associated with COVID-19 were transmitted to the RKI in Germany. The national 7-day incidence is **464.1** cases per 100,000 population. The 7-day incidence in federal states lies between **683.7** cases per 100,000 population in **Saarland** and **285.8** per 100,000 population in **Hamburg**.
- Overall, **+2,500** new hospitalisations with COVID-19 were reported, the 7-day incidence of hospitalised cases is **10.3** per 100,000 population.
- On **27/10/2022** (12:15 AM), **1,683** COVID-19 patients were in intensive care units (ICU), **-40** cases compared to the day before. The COVID-19 adult occupancy as a percentage of all operational adult intensive care beds is **8.1 %**.<sup>4</sup>
- Since 26/12/2020, **187,709,751** vaccine doses have been administered in Germany. Overall, **77.9 %** of the population in Germany have been vaccinated at least once.<sup>5</sup> **76.3 %** have received a complete course of vaccination against COVID-19.<sup>6</sup> **62.3 %** have received a booster vaccination.<sup>7</sup>

## Epidemiological Situation in Germany (as of 28/10/2022, 0:00 AM)

Since January 2020, a total of 35,523,412 (+61,492) laboratory-confirmed cases of COVID-19 have been reported to and validated by the RKI (Table 1). The geographical distribution of cases of the last 7 days is shown in Figure 1. Please see the COVID-19 dashboard (<https://corona.rki.de/>) for information on the number of COVID-19 cases by county (local health authority).

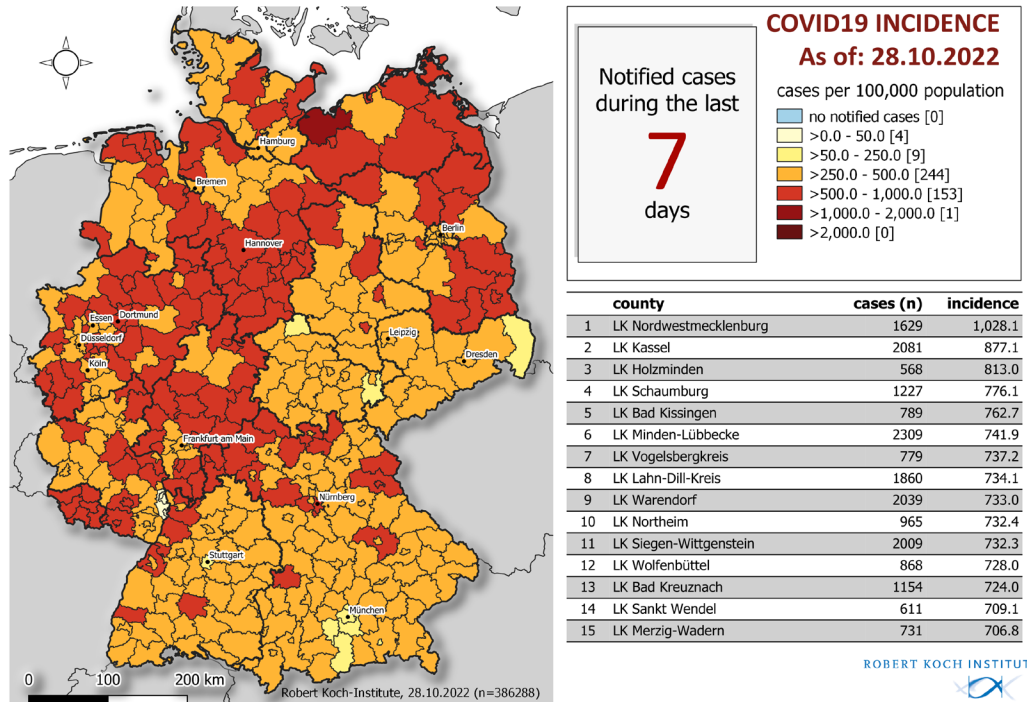


Figure 1: Number and cumulative incidence (per 100,000 population) of reported COVID-19 cases in Germany by county and federal state (n=386,288, 28/10/2022, 12:00 AM). Cases are usually reported according to the district from which they were transmitted. This usually corresponds to the place of residence. Place of residence and probable place of infection do not have to coincide.

Figure 2 shows the course of the COVID-19 cases per 100,000 population transmitted to the RKI on the last 7 days in each of the federal states and in all of Germany. The values for the 7-day incidence in the federal states range from 683.7 per 100,000 population in Saarland to 285.8 per 100,000 population in Hamburg.

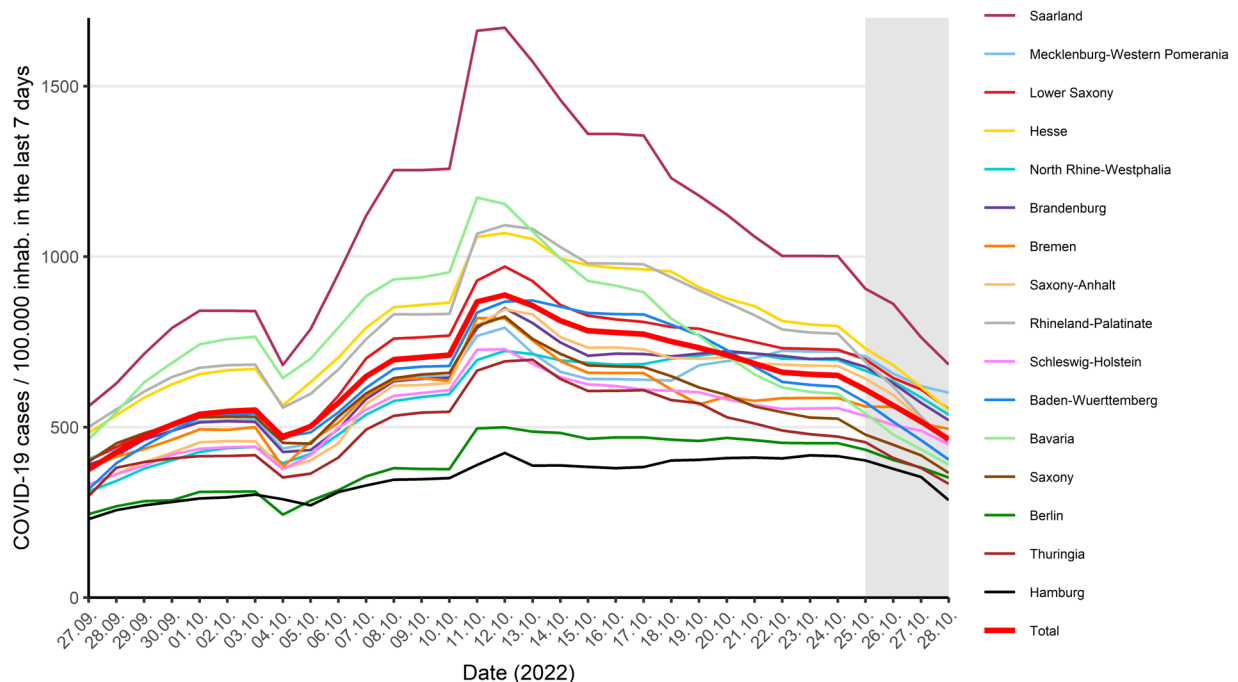


Figure 2: COVID-19 cases/100,000 inhabitants during 7 days in Germany by federal state and reporting date in the health offices (28/10/2022, 0:00 AM). The grey area delineates a range of dates with yet incomplete data, where changes in incidence are likely to occur.

**Table 1: Number and cumulative incidence (per 100,000 population) of laboratory-confirmed COVID-19 cases, hospitalizations and deaths for each federal state electronically reported to RKI, Germany (28/10/2022, 12:00 AM). The number of new cases includes cases newly notified to the local public health authority, but also on prior days.**

Federal State	Cumulative cases			Last 7 days			Cumulative deaths	
	Number of cases	Number of new cases	Cases/100,000 pop.	Cases	Cases/100,000 pop.	Hospitalisations/100,000 pop.	Number of deaths	Deaths/100,000 pop.
Baden-Wuerttemberg	4,802,473	6,727	43,170	45,016	404.7	7.65	17,687	159
Bavaria	6,443,251	7,278	48,898	51,372	389.9	12.01	26,443	201
Berlin	1,327,644	2,672	36,102	12,938	351.8	7.67	4,922	134
Brandenburg	1,024,378	1,942	40,364	13,198	520.0	15.68	6,034	238
Bremen	276,098	416	40,815	3,350	495.2	3.40	861	127
Hamburg	756,100	519	40,784	5,298	285.8	5.99	3,129	169
Hesse	2,721,090	4,405	43,226	34,590	549.5	9.15	11,370	181
Mecklenburg-Western Pomerania	649,968	1,559	40,342	9,678	600.7	17.94	2,521	156
Lower Saxony	3,455,852	7,217	43,053	44,332	552.3	5.41	11,199	140
North Rhine-Westphalia	7,270,270	18,315	40,560	96,193	536.7	11.07	28,102	157
Rhineland-Palatinate*	1,644,443	2,750	40,045	18,534	451.3	9.13	6,358	155
Saarland	458,708	732	46,695	6,716	683.7	22.50	1,917	195
Saxony	1,861,978	2,276	46,054	14,779	365.5	10.29	16,197	401
Saxony-Anhalt	900,835	1,529	41,527	10,141	467.5	15.63	5,839	269
Schleswig-Holstein	1,083,154	2,163	37,069	13,119	449.0	12.35	3,008	103
Thuringia	847,170	992	40,172	7,034	333.5	17.40	7,790	369
<b>Total</b>	<b>35,523,412</b>	<b>61,492</b>	<b>42,677</b>	<b>386,288</b>	<b>464.1</b>	<b>10.34</b>	<b>153,377</b>	<b>184</b>

Quality checks and data cleaning by the local health departments and federal state health authorities can lead to corrections to cases previously transmitted (e. g. detection of duplicate reports). This can occasionally lead to negative values for the number of new cases.

The precision of the daily reporting of new infections is limited during the weekend and early in the week, because of a reduced level of testing, as well as of reporting and transmission of cases to the RKI (non-mandatory on weekends). Because there are no immediate consequences on the state and federal level, fewer health departments are transmitting data on weekends. Daily fluctuations in case numbers, especially on and just after weekends, should be interpreted with care. In terms of trends, the data are more reliable when comparing week to week. The RKI issues a more detailed weekly report each Thursday [in German].

\*) Since 24.10.2022, due to a cyberattack, no data can be transmitted from the district administration of the Rhein-Pfalz-Kreis to the responsible state authority and therefore also not to the RKI. This concerns LK Rhein-Pfalz-Kreis, SK Ludwigshafen, SK Speyer and SK Frankenthal.

## Estimation of the reproduction number (R), taking into account the reporting delay (Nowcasting)

Figure 3 shows the course of estimated 7-day R-value.

7-day R-value
0.85 (95%-prediction interval: 0.79 – 0.90)

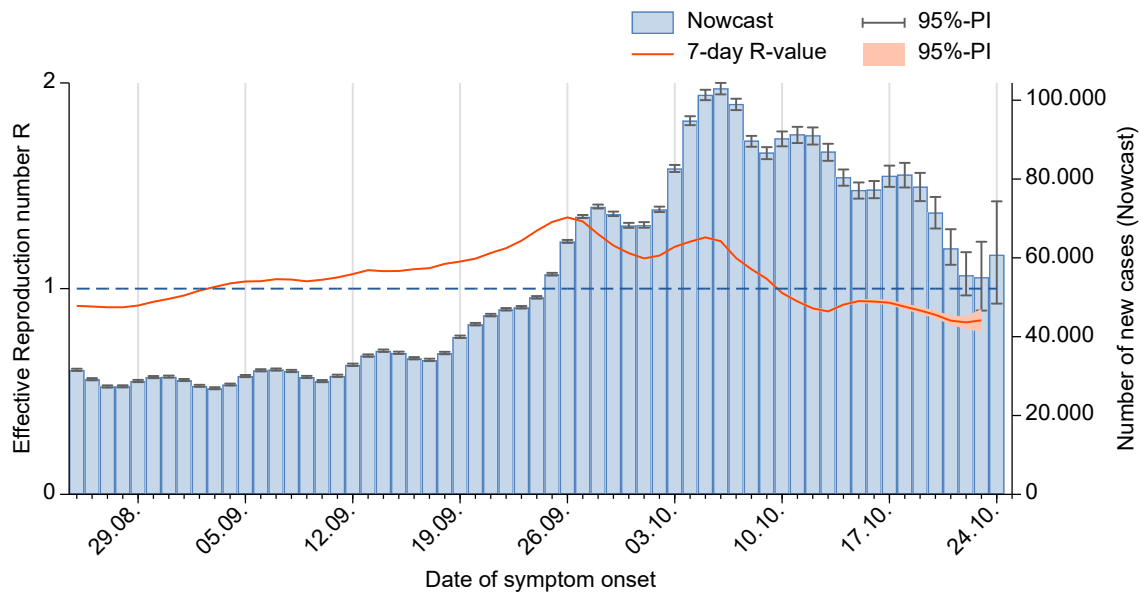


Figure 3: Estimated 7-day R-value (in orange) over the last 60 days, against the background of estimated number of COVID-19 cases according to illness onset (as of 28/10/2022, 12 AM, taking into account cases up to 24/10/2022).

Sample calculations as well as an excel sheet presenting the daily updated R-value can be retrieved under [www.rki.de/covid-19-nowcasting](http://www.rki.de/covid-19-nowcasting). A detailed description of the methodology is available at [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) (Epid. Bull. 17 | 2020 from 23/04/2020).

## Annex:

### Notes on data collection and evaluation

The data presented in this situation report represent a temporal snapshot. Information on individual cases can be obtained and added by the health authorities in the course of the disease. It is not possible to obtain complete data for all variables.

If necessary, the local public health authorities collect additional information, evaluate reported cases and initiate the necessary infection control measures. In accordance with the Infection Protection Act, the data are transmitted electronically by the local public health authorities to the federal state health authority and from there to the RKI on the next working day at the latest. The data is updated at the RKI daily at 0:00 AM.

Data entry and data transmission can lead to a time lag from the time the case is reported to the local public health authorities until publication by the RKI, so case numbers may deviate from those from other sources.

For the calculation of the incidences, the data of the population statistics of the Federal Statistical Office from 31.12.2021 are used. The calculation of the 7-day incidence is based on the reporting date, i.e. the date on which the local public health authorities became aware of the case and recorded it electronically. For the 7-day incidence, the cases reported on the last 7 days are counted.

On the other hand, the number of cases since the previous day, as shown in the situation report and dashboard, is tied to the date when the case is first published in the RKI's reporting. Thus, due to transmission delays, it may occur that cases with a reporting date more than 7 days ago are still included in the situation report. At the same time, the number of cases since the previous day also may contain cases that were subsequently deleted in data quality checks. Thus, the 7-day incidence cannot be readily calculated from these single-day incidences.

## Notes

- 1 The number of cases since the previous day refers to the date of receipt at the RKI; due to the delay in transmission, cases from previous days may be included.
- 2 The number of active cases results from the number of transmitted cases minus the deaths and the estimated number of recovered cases.
- 3 The algorithm for estimating the number of people who have recovered assumes an average duration of illness from onset or hospitalization date on. The true length of symptomatic illness and/or sequelae are usually not available in the reporting system.
- 4 Proportion of COVID-19 occupancy by adults out of all available adult intensive care beds.
- 5 The total number of persons vaccinated at least once results from the number of reports coded as first vaccination in the transmitted vaccination data.
- 6 According to specifications for vaccination data transmission, every second vaccination or first vaccination after recovery is to be transmitted with the code as a complete vaccination. A vaccination with the Janssen vaccine is coded and transmitted as a first vaccination, but is also counted as completed vaccination series.
- 7 The total number of persons with booster vaccination results from the number of reports coded as booster vaccination in the transmitted vaccination data.