



## Emergency Department Situation Report

**Reporting date:** 29-12-2021  
**Reporting period:** 01-01-2019 – 26-12-2021

SUMO is a system that has been developed and implemented at the Robert Koch Institute. It processes and provides health data for surveillance and public health research. The Emergency Department Situation Report presents data from the routine documentation of selected emergency departments in Germany, and shows the current emergency department utilisation.

### WEEKLY OVERVIEW

Number of admissions in this week: **3,451**  
 Change compared to last week: **-3.2%**  
 Change compared to mean in 2019: **-1.6%**

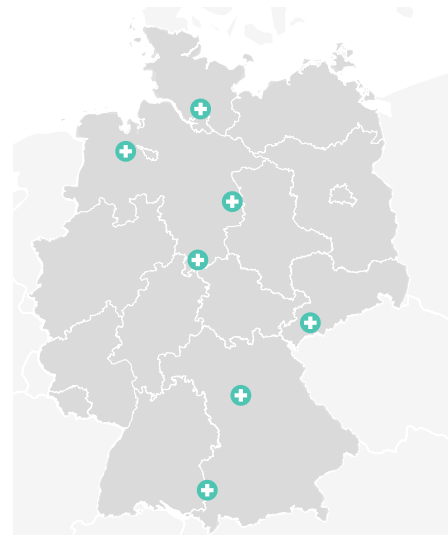
### DATA SOURCE

**Emergency departments:** in total 7 emergency departments in Germany, located in the federal states Bavaria, Lower Saxony, Saxony, and Schleswig-Holstein

**Emergency department attendances:** 32 to 145 attendances per day, per emergency department (mean in 2019)

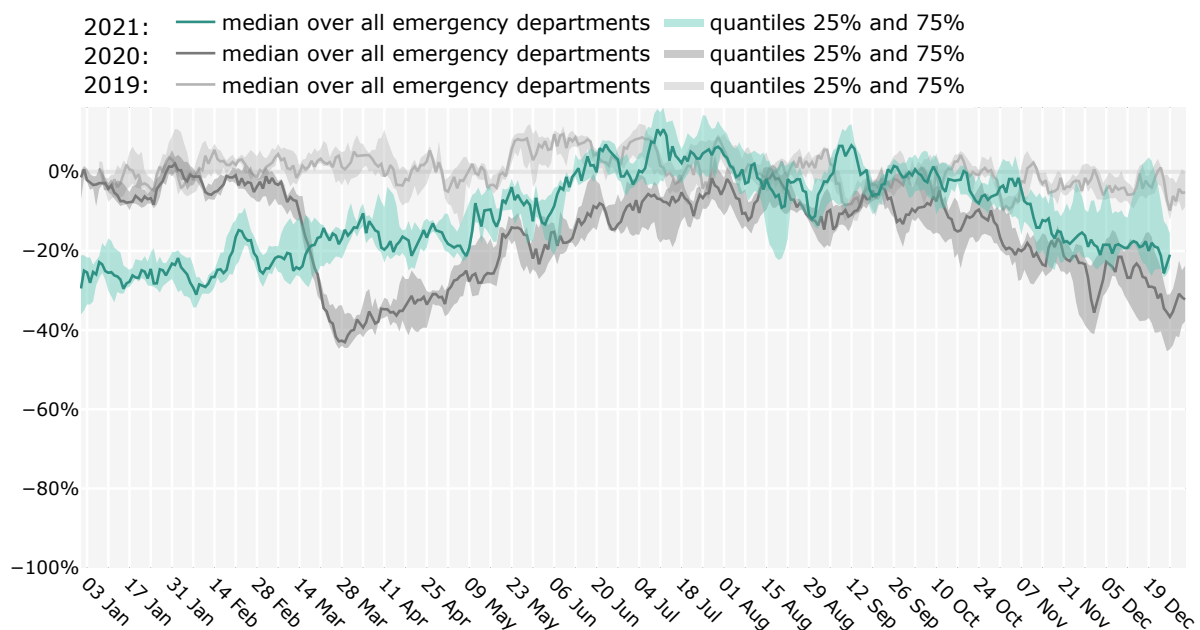
### Level of care:

Basic emergency care: 1 departments  
 Extended emergency care: 2 departments  
 Comprehensive emergency care: 4 departments



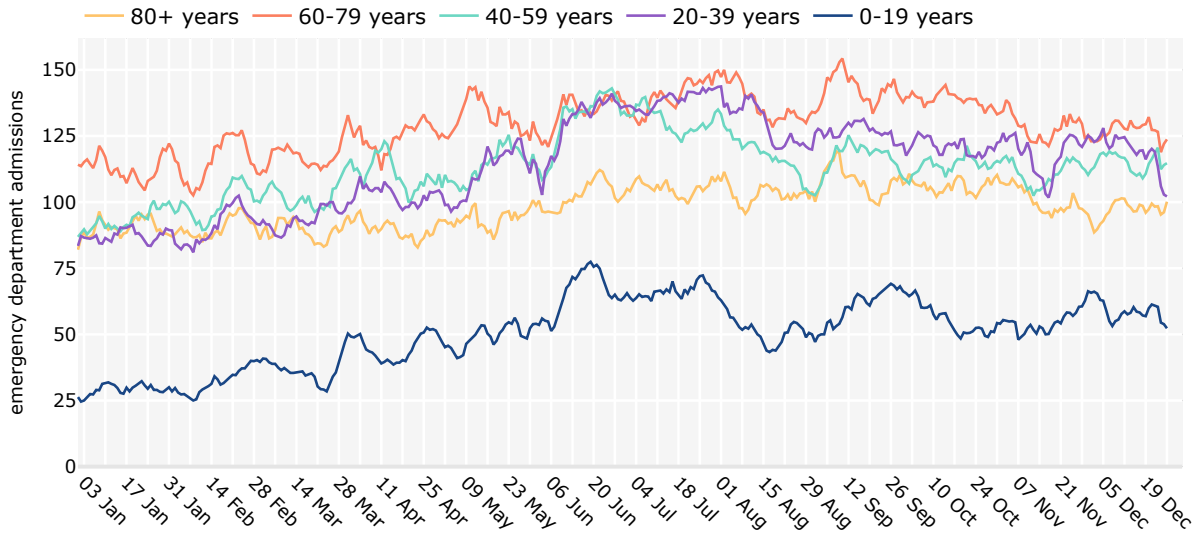
### EMERGENCY DEPARTMENT ADMISSIONS

Relative deviation of the number of admissions, compared to the mean in the pre-pandemic year 2019 per emergency department

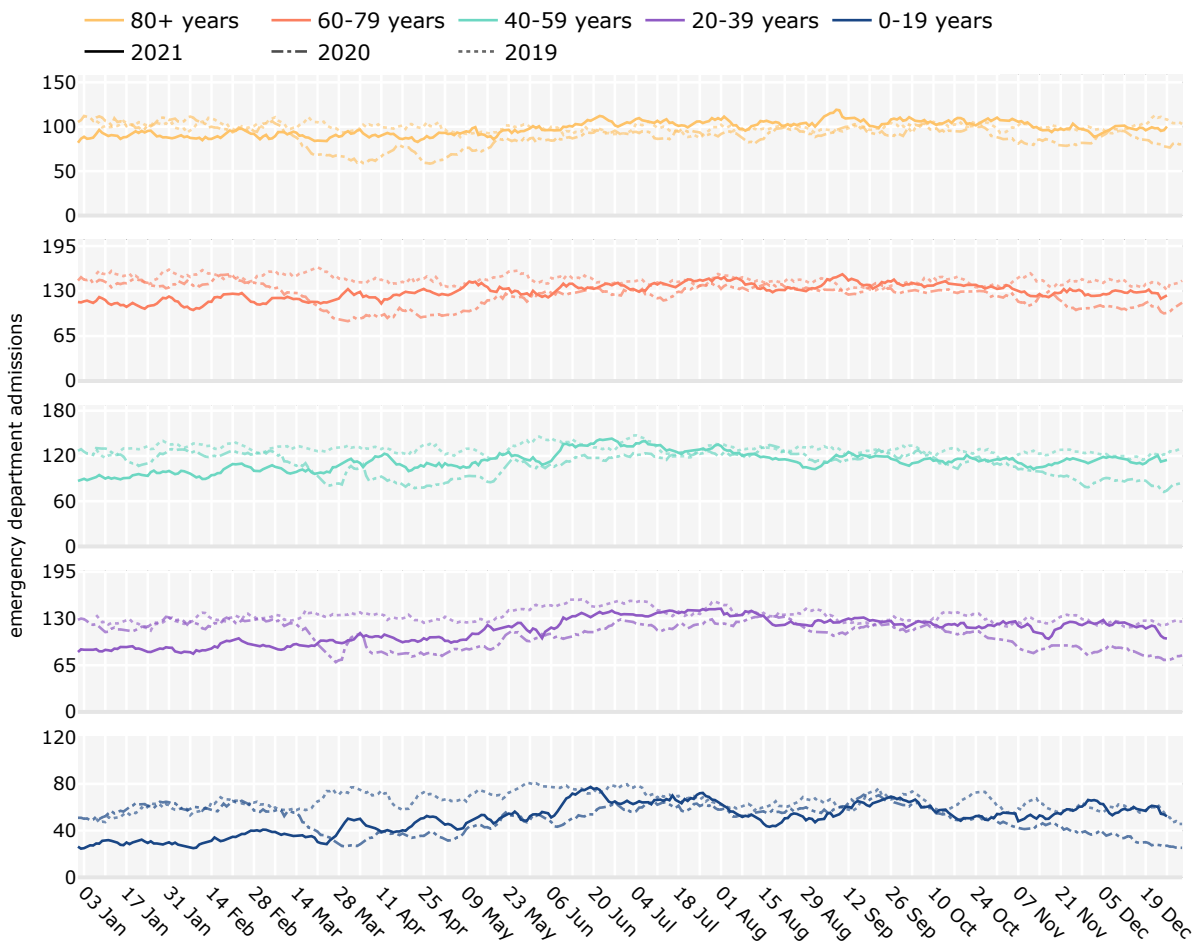


**AGE**

**Overview of all age groups in 2021**

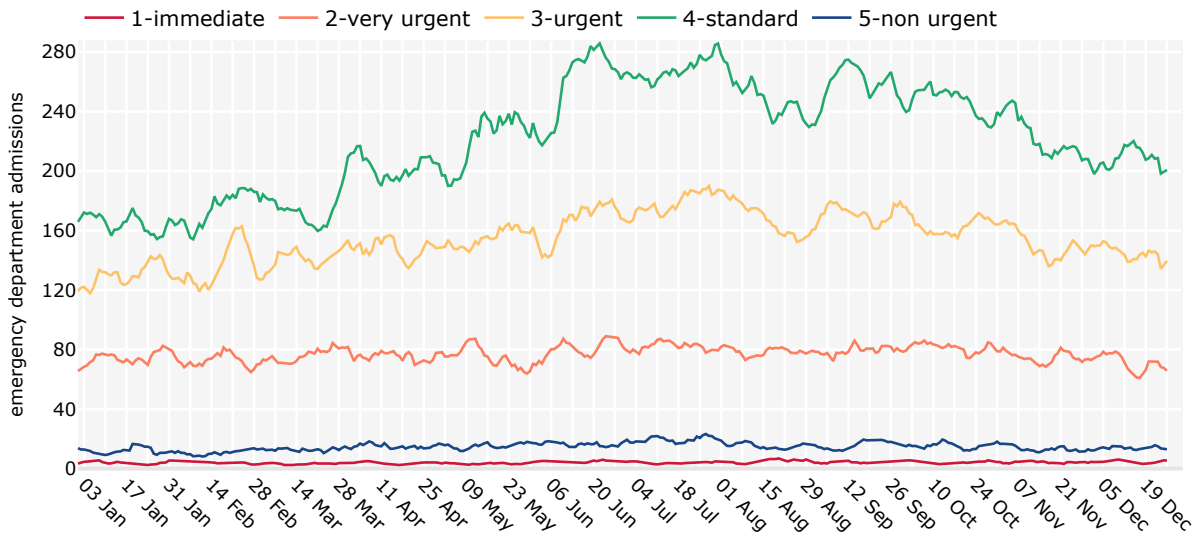


**Comparison of all age groups with last years**

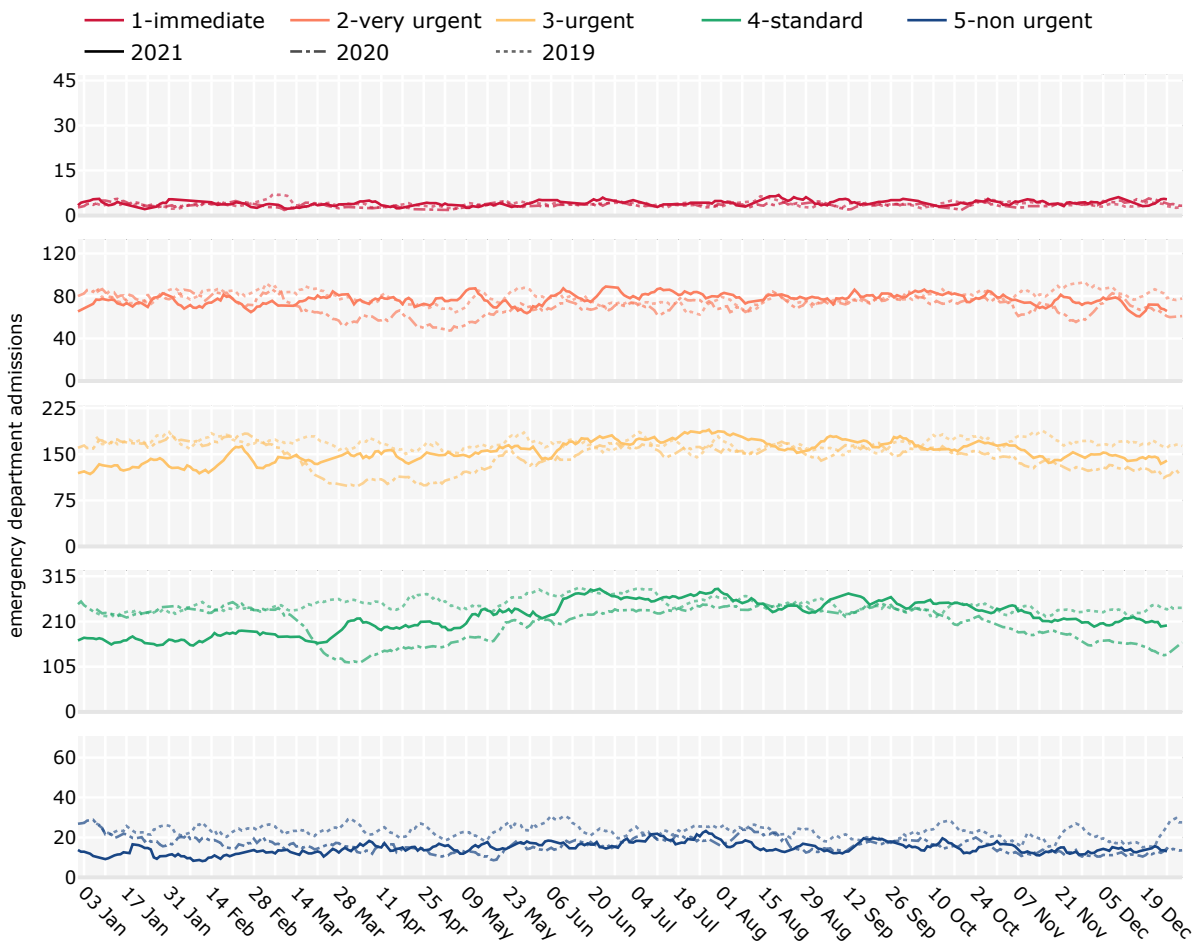


**TRIAGE**

**Overview of all triage levels in 2021**

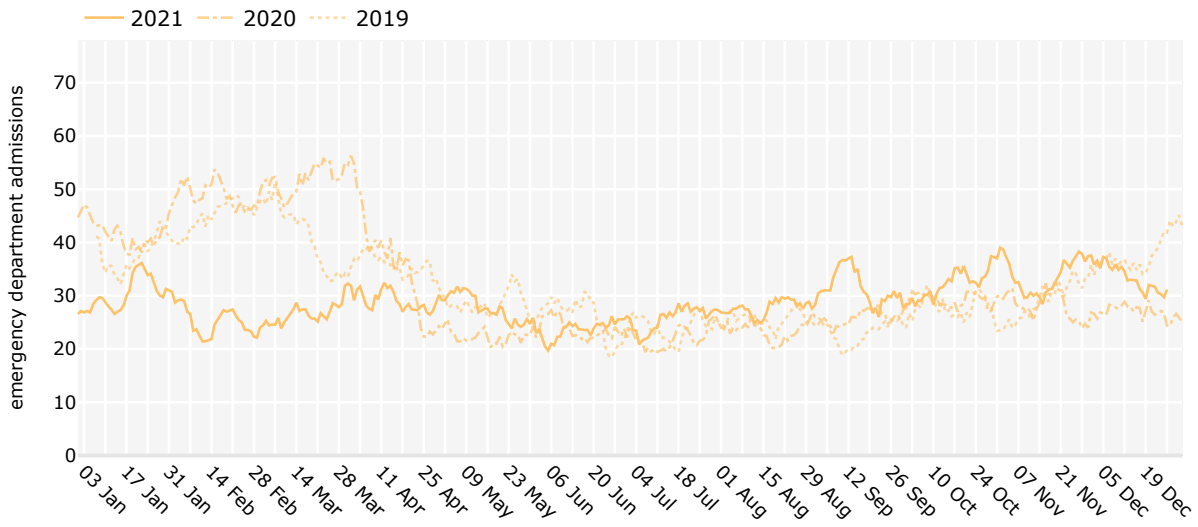


**Comparison of all triage levels with last years**

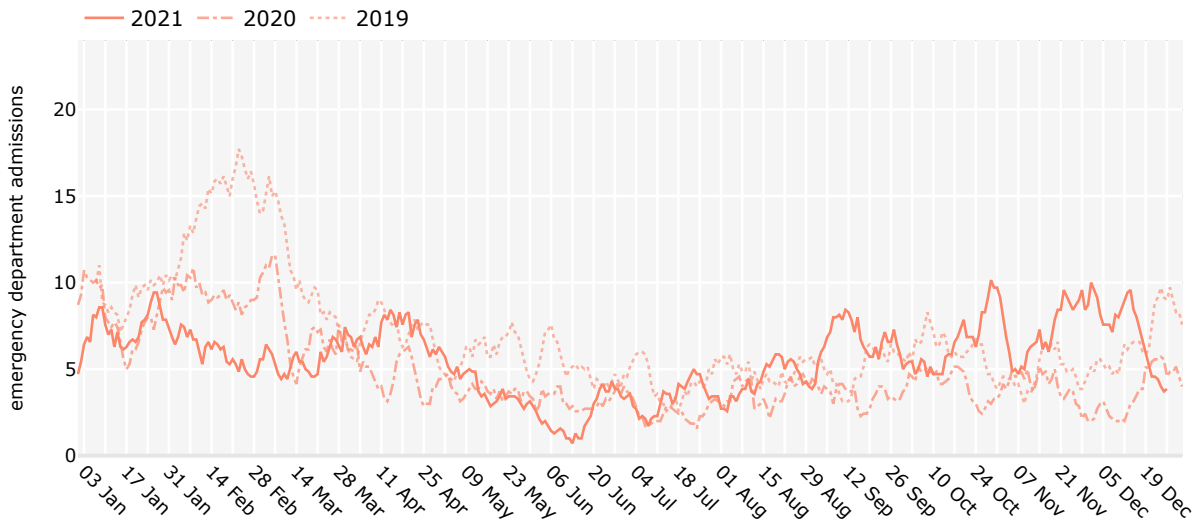


**SYNDROMIC SURVEILLANCE**

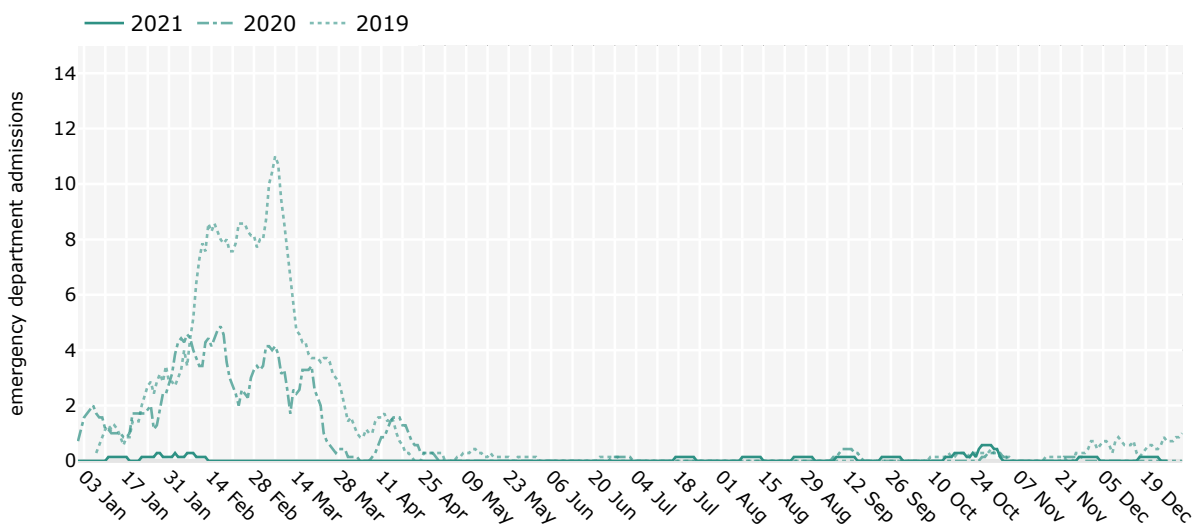
**Acute respiratory infection (ARI)**



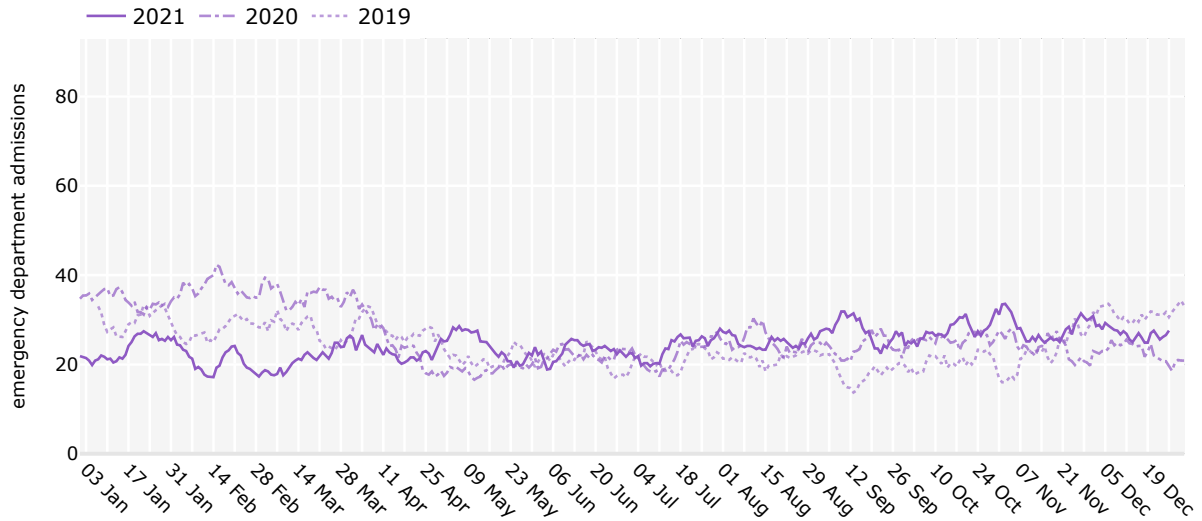
**Severe acute respiratory infection (SARI)**



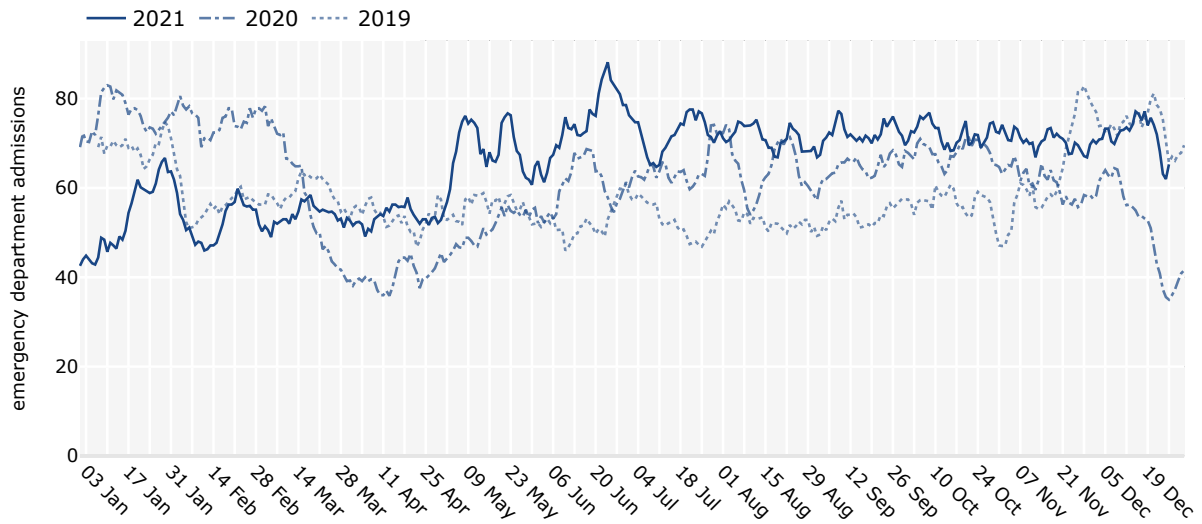
**Influenza-like-illness (ILI)**



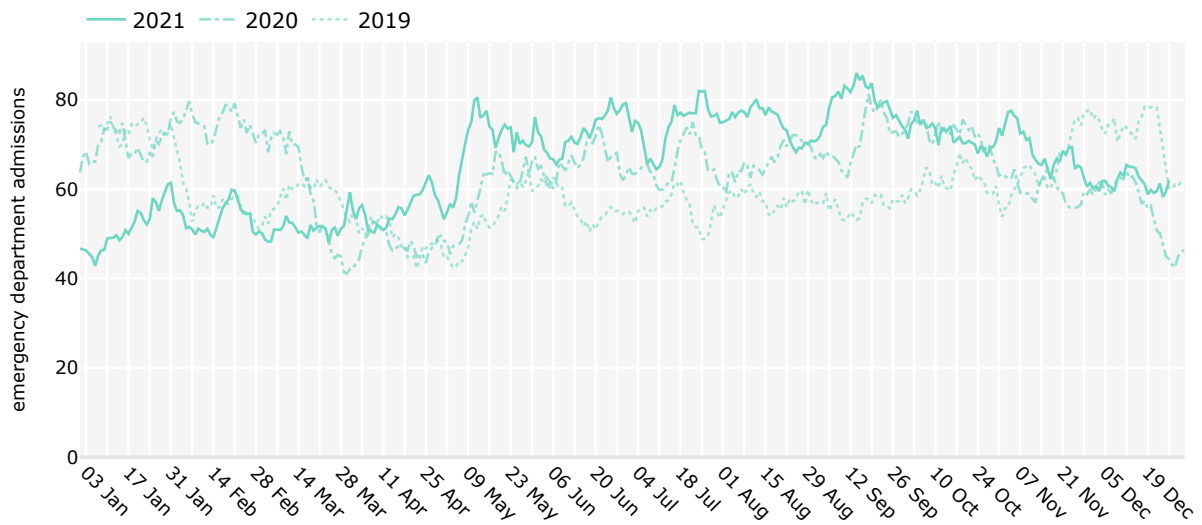
**Respiratory complaints**



**Cardiovascular complaints**



**Neurological complaints**



**NOTES****Data source & emergency department admissions**

The inclusion of emergency departments is based on voluntary participation and is therefore not a representative sample of Germany. All emergency departments with continuous data transfer within the reporting period (at least one admission per day) are included in this report. Reported figures can therefore vary between reports.

We report triage based on the *Emergency Severity Index* (ESI) or the *Manchester Triage System* (MTS). The reported chief complaints were coded according to the *Canadian Emergency Department Information System – Presenting Complaint List* (CEDIS-PCL) or MTS. Diagnoses were coded according to International Classification of Diseases - Version 10 (ICD-10).

All timeseries show a 7-day moving average (mean of all values on one day and the previous six days) in the current and the last years. In the weekly overview and the figure "Emergency department admissions", the comparison to the last year represents the average over the changes in each emergency department compared to its mean in 2019. Because the number of emergency department admissions in 2020 is heavily influenced by the COVID-19 pandemic and associated measures, data from 2021 are compared to the pre-pandemic year of 2019. Changes over time can be caused both by real changes of the emergency department utilisation, as well as several other reasons (e.g. changed documentation practices or care processes because of infection prevention and control measures during the COVID-19 pandemic). Therefore, the data should not be interpreted without prior direct communication with the emergency departments.

**Case definitions for syndromic surveillance**

Case definitions for acute respiratory illness (ARI) and severe ARI (SARI) were based on a combination of diagnosis (ICD-10), chief complaint (MTS or CEDIS-PCL) as well as hospitalisation and age, as described in Boender et al. 2021 (DOI 10.1101/2021.08.19.21262303). The case definition for influenza-like illness (ILI) was based on ICD-10 diagnoses: J09, J10.-, J11.-. Case definitions for respiratory, cardiovascular and neurological complaints were based on CEDIS-PCL codes: RC – respiratory (651-661), CV – cardiovascular (001-012) and NC – neurological (401-411).

**PARTNERSHIP**

The report has been established in close cooperation with the AKTIN Emergency Department Data Registry and with the ESEG project partners. We want to especially thank the participating emergency departments for sharing their data.

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