



Emergency Department Situation Report

Reporting date: 22-12-2021

Reporting period: 01-01-2019 – 19-12-2021

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: **3,533**

Change compared to last week: **-4.5%**

Change compared to mean in 2019: **+4.9%**

DATA SOURCE

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

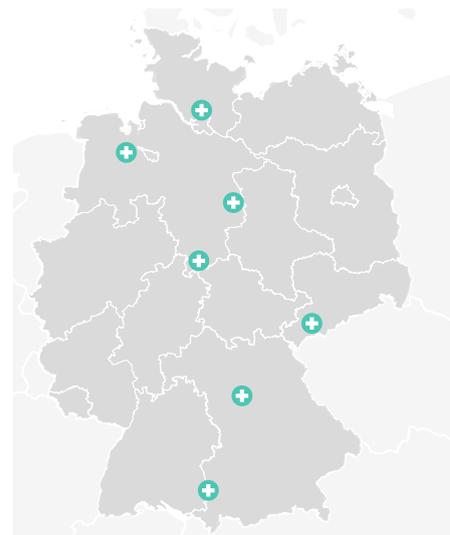
Emergency department attendances: 32 to 145 attendances per day, per emergency department (mean in 2019)

Level of care:

Basic emergency care: 1 departments

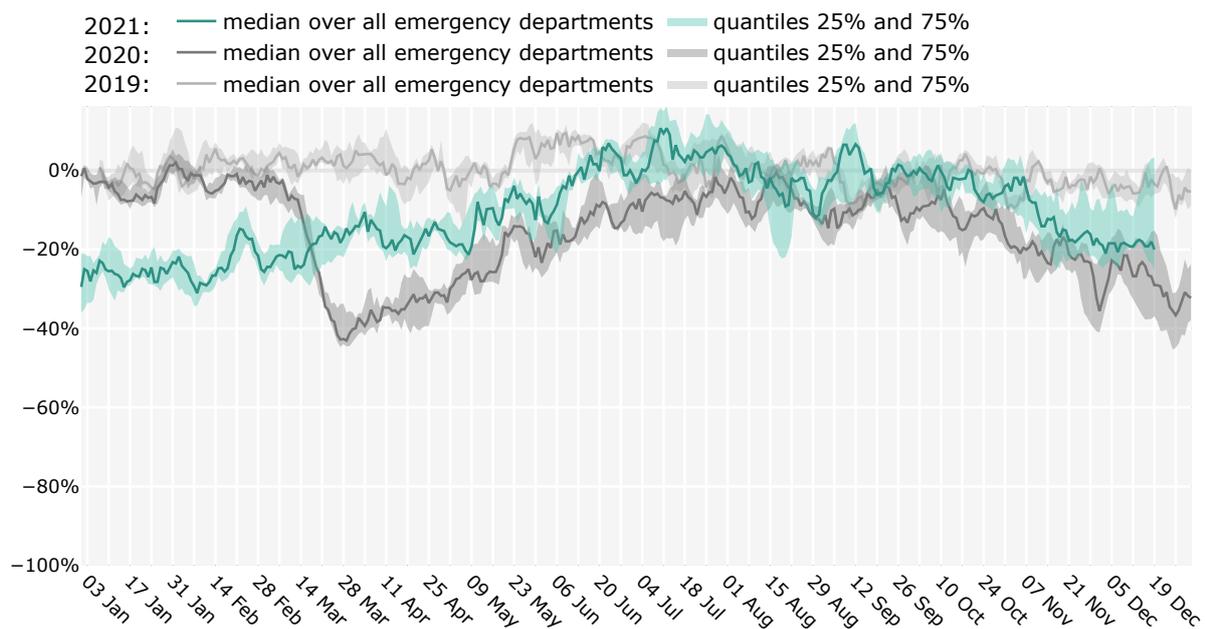
Extended emergency care: 2 departments

Comprehensive emergency care: 4 departments



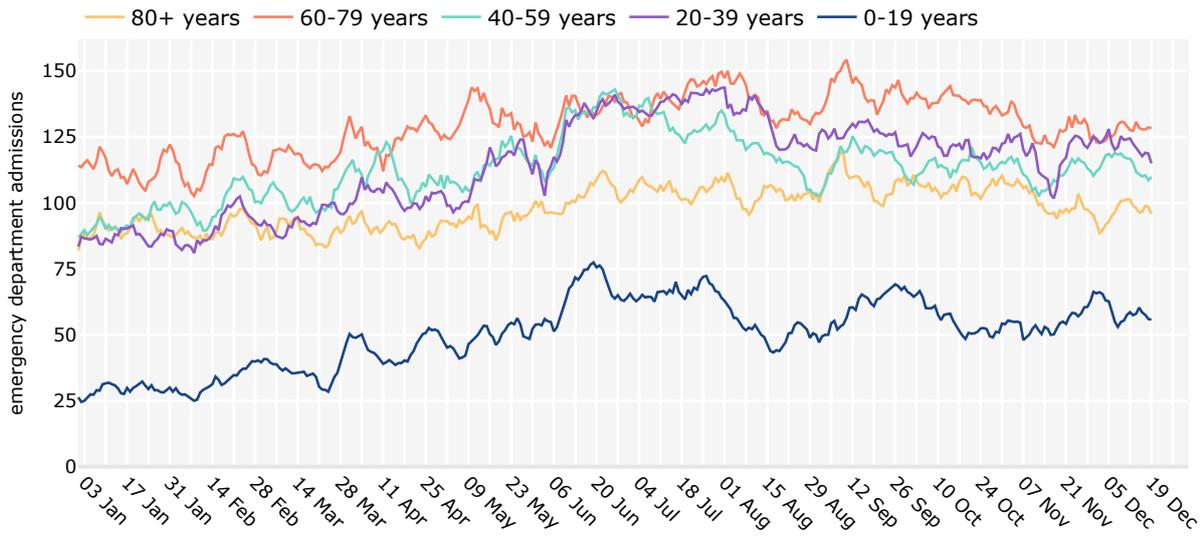
EMERGENCY DEPARTMENT ADMISSIONS

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

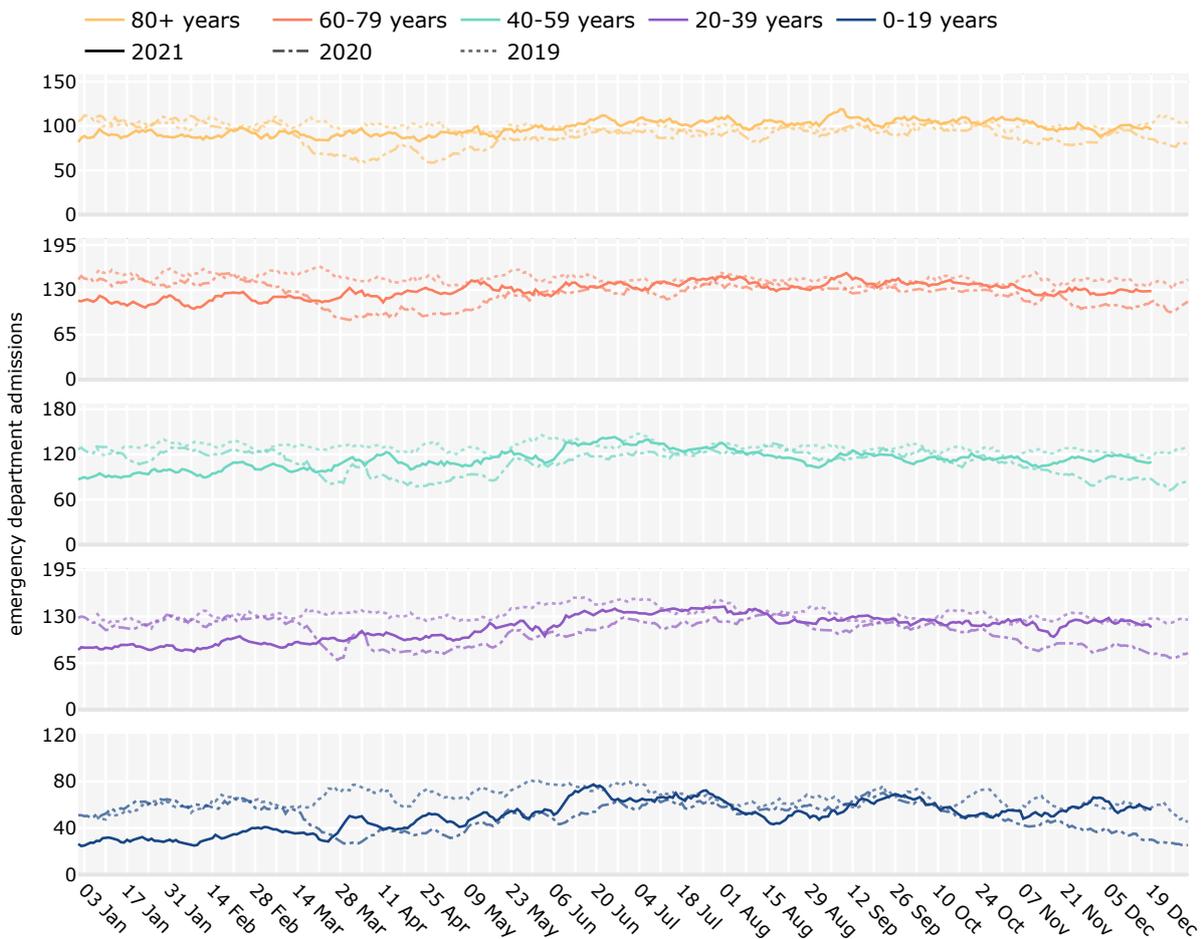


AGE

Overview of all age groups in 2021

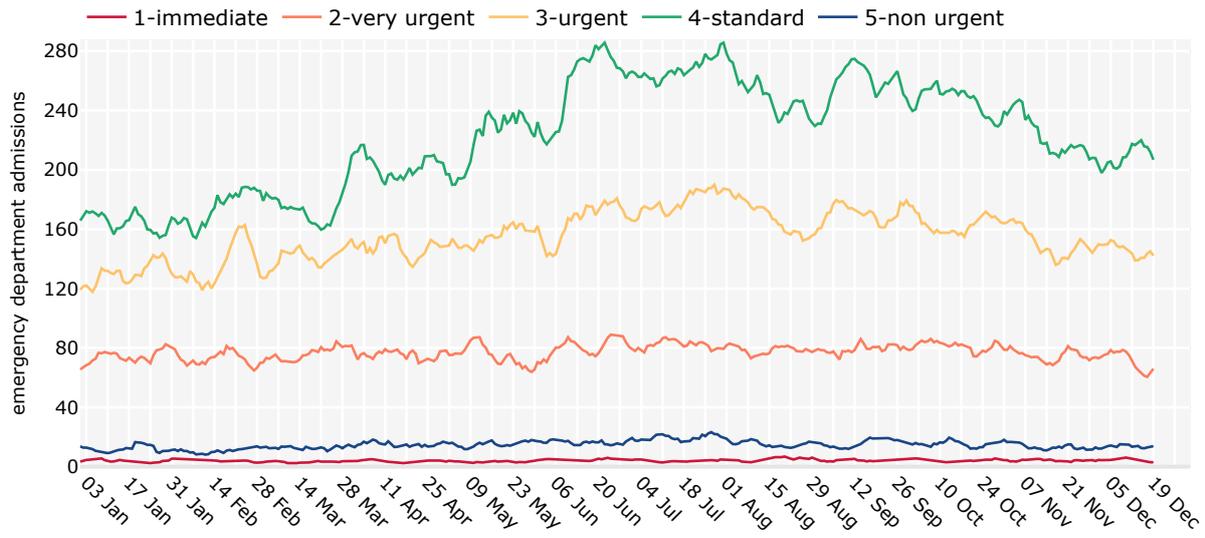


Comparison of all age groups with last years

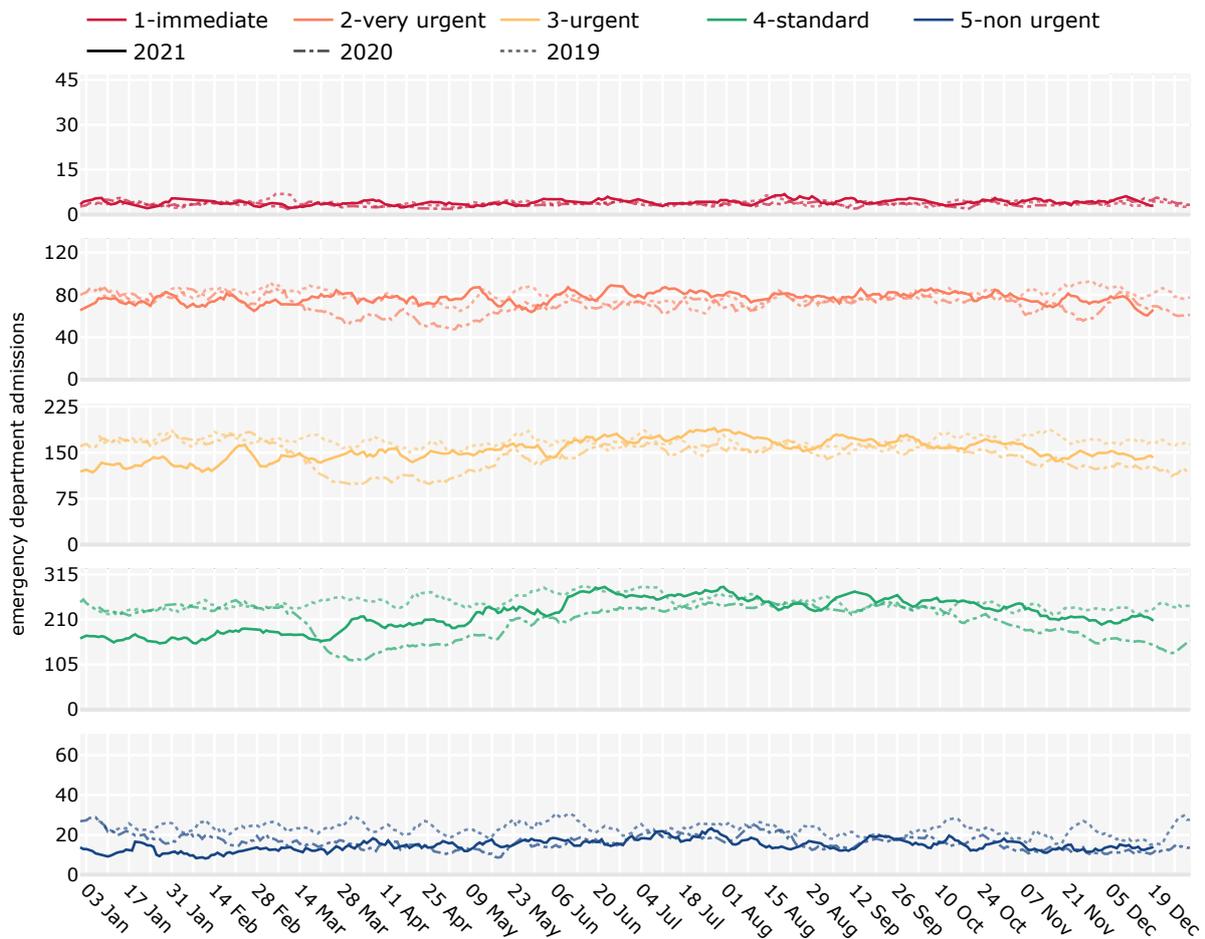


TRIAGE

Overview of all triage levels in 2021

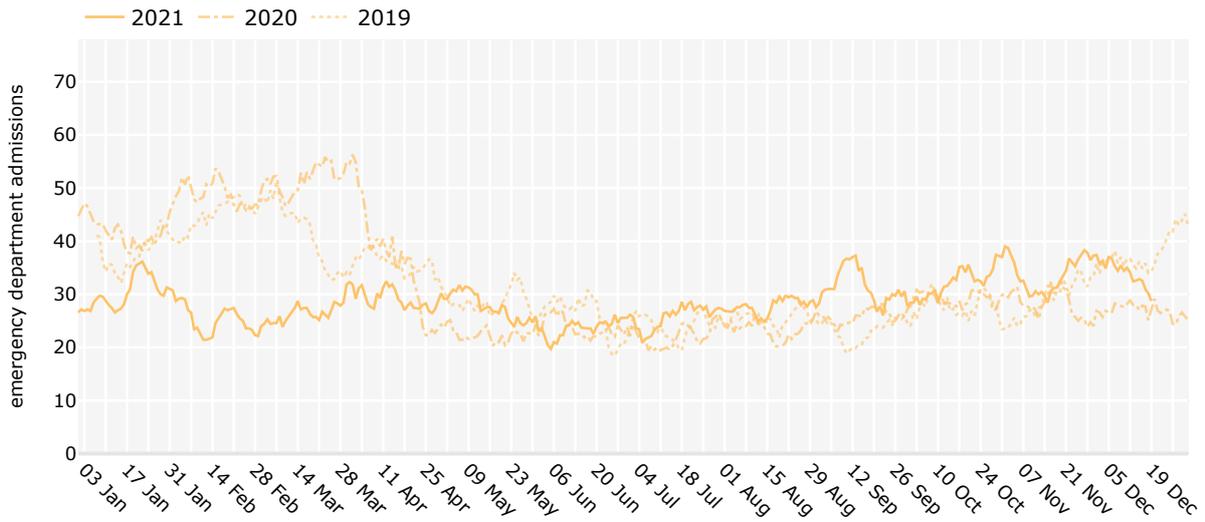


Comparison of all triage levels with last years

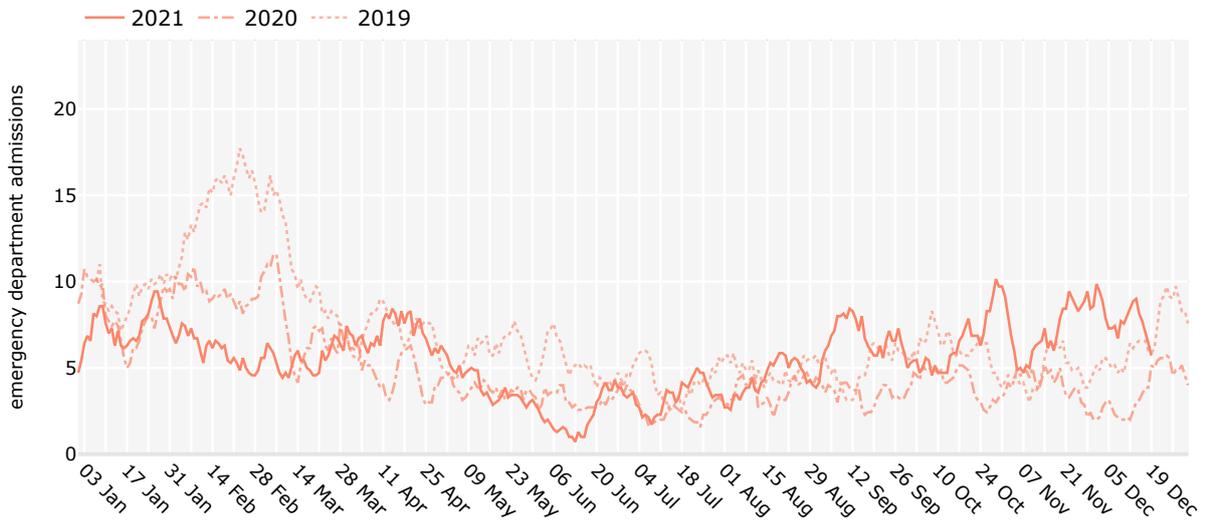


SYNDROMIC SURVEILLANCE

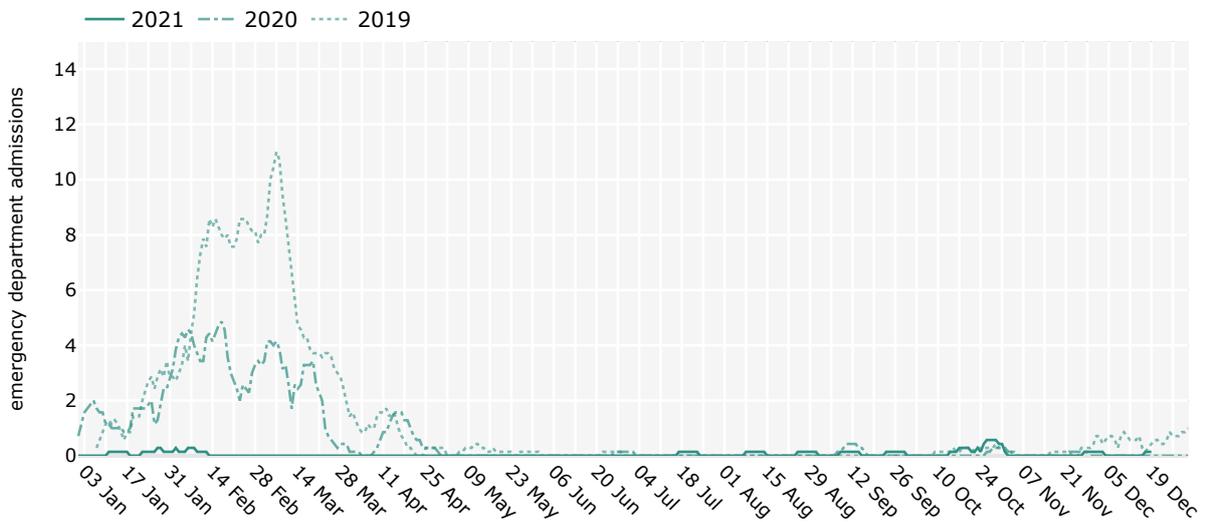
Acute respiratory infection (ARI)



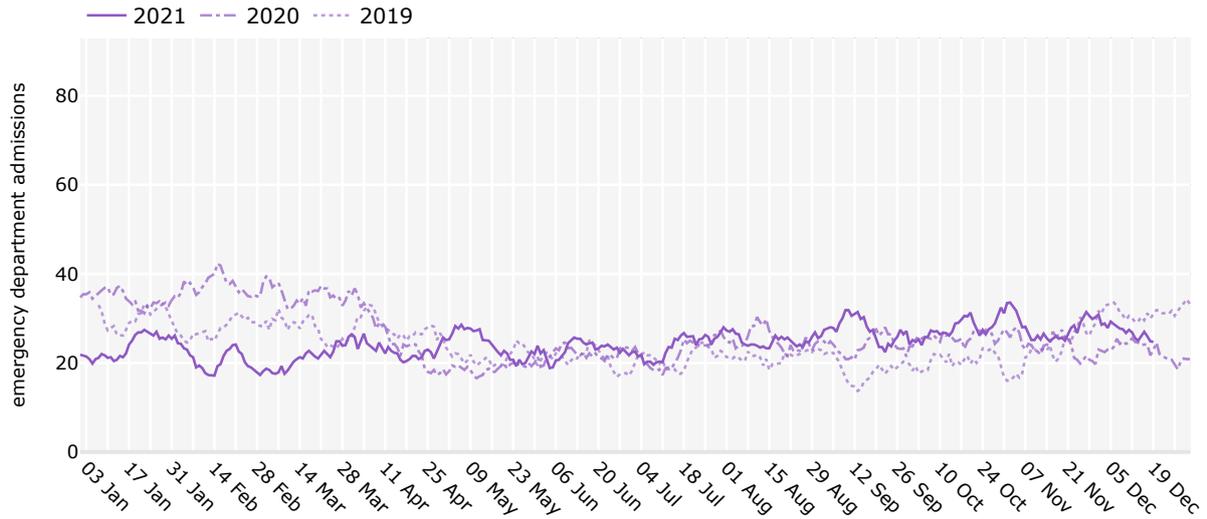
Severe acute respiratory infection (SARI)



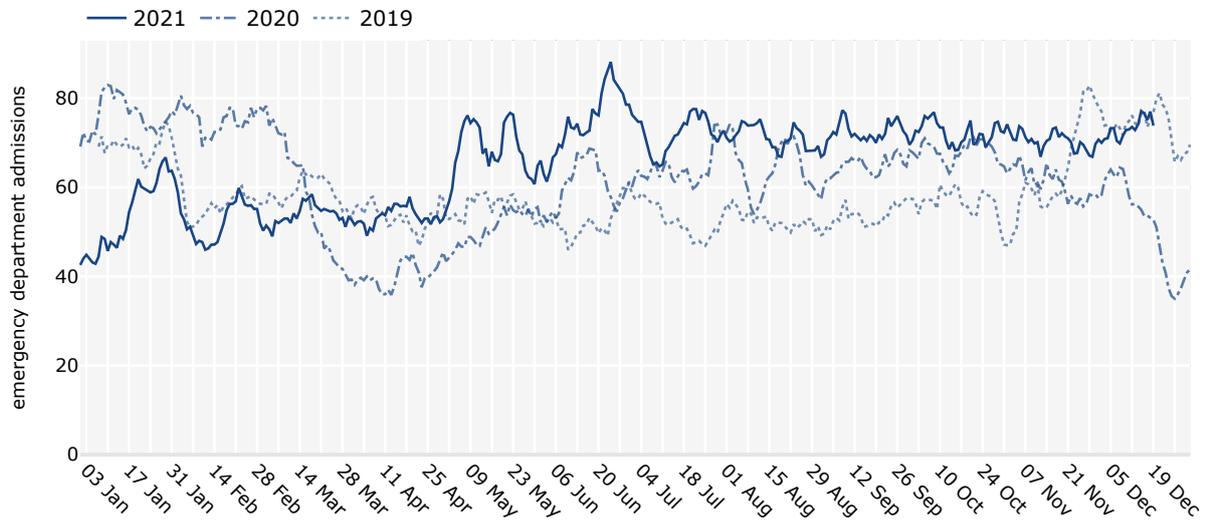
Influenza-like-illness (ILI)



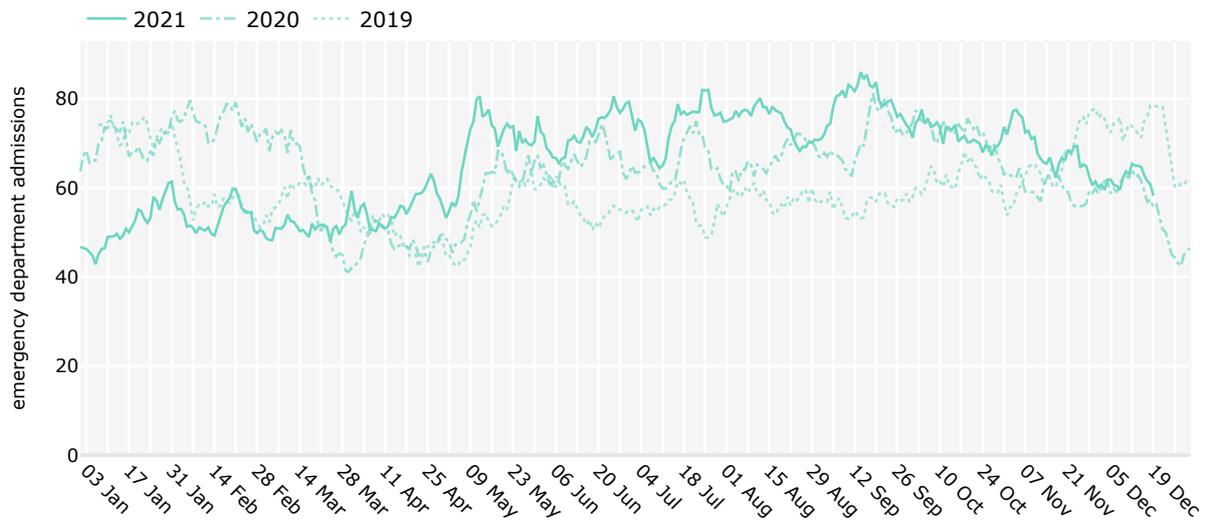
Respiratory complaints



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.

**CONTACT****Robert Koch Institute**

 SUMO@rki.de
 www.rki.de/sumo
 Robert Koch Institute
Nordufer 20
13353 Berlin, Germany

AKTIN German Emergency Department Data Registry

 Office@aktin.org
 www.aktin.org/en
 University Clinic for Traumatology, Medical Faculty
Otto von Guericke University Hospital Magdeburg
Leipziger Straße 44
39106 Magdeburg, Germany

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