# Incidence trends of diagnosed cardiac diseases in Germany from 2013 to 2021

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### **Abstract**

## **Background**

The temporal trends in risk of cardiac diseases in Germany are largely unknown. The aim of the present study was to describe trends in the incidence of diagnosed cardiac diseases in Germany between the years 2013 and 2021.

#### Methods

The data basis was formed by nationwide ambulatory claims data according to § 295 SGB V. The frequency of new onset of 10 cardiac disease groups and the cardiovascular risk factor hypertension was assessed per year in the period from 2013 to 2021 in cohorts of insurants observable for a minimum period of four consecutive years. New disease onset was assumed when the respective disease group was coded for the first time after a diagnosis-free pre-observation period of three years. Annual cumulative incidence was calculated for each disease group per 1.000 persons at risk.

#### **Results**

Cumulative incidence in 2021 varied between 0.13 (acute rheumatic fever) und 30.6 (hypertension) per 1,000 persons. Over the course of the study age- and sex-standardised incidence of the majority of cardiac disease groups showed a gradual downward trend. The strongest relative reduction in annual incidence by 35% was observed for acute rheumatic fever (incidence in 2013: 0.20 new cases per 1,000 persons, 2021: 0.13/1,000), followed by coronary heart disease (-25%; 2013: 12.71/1,000, 2021: 9.52/1,000) and heart failure (-23%, 2013: 10.49/1,000, 2021: 8.09/1,000). Only pericarditis showed a higher incidence in 2021 (0.44/1,000) in contrast to 2013 (0.41/1,000).

#### **Conclusion**

This study is first to describe recent trends in the incidence of a broad spectrum of cardiac disease groups in Germany over a period of nine years. For a majority of cardiac disease groups a gradual reduction in disease risk was observed. Relatively strong decreases in disease incidence were observed for coronary heart disease and heart failure.

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# Keywords

Cardiac disease, claims data, coronary heart disease, diagnosis incidence, Germany, hypertension, heart failure

# Citation

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