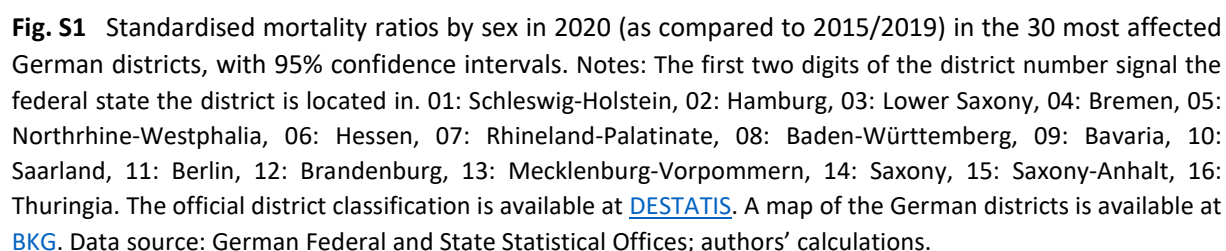


Supplementary File 1



Mühlichen M, Sauerberg M, Grigoriev P. Evaluating Spatial, Cause-Specific and Seasonal Effects of Excess Mortality Associated with the COVID-19 Pandemic: The Case of Germany, 2020.

<https://doi.org/10.1007/s44197-023-00141-0>

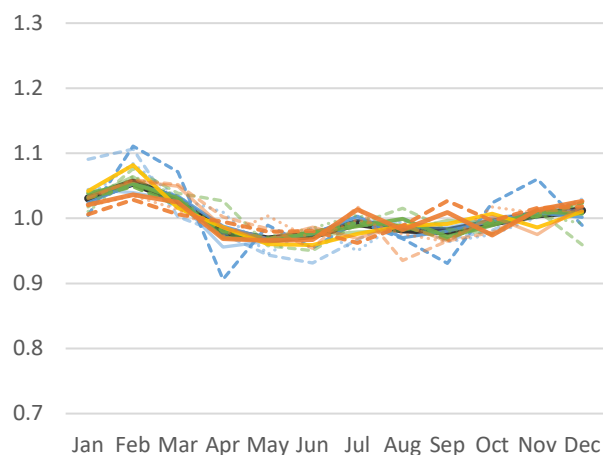
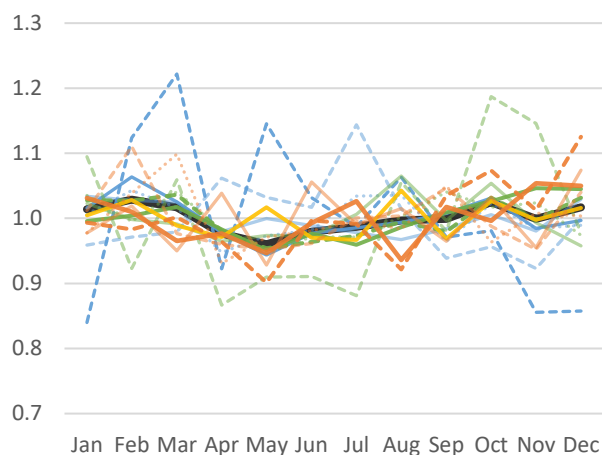
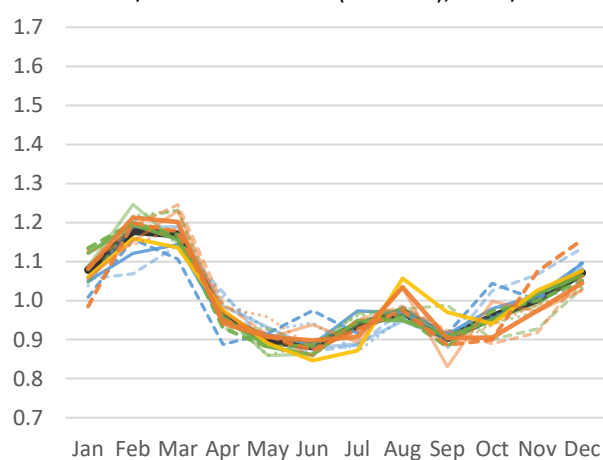
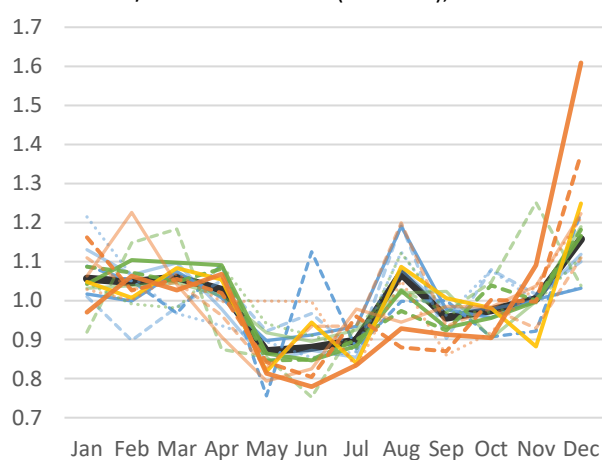
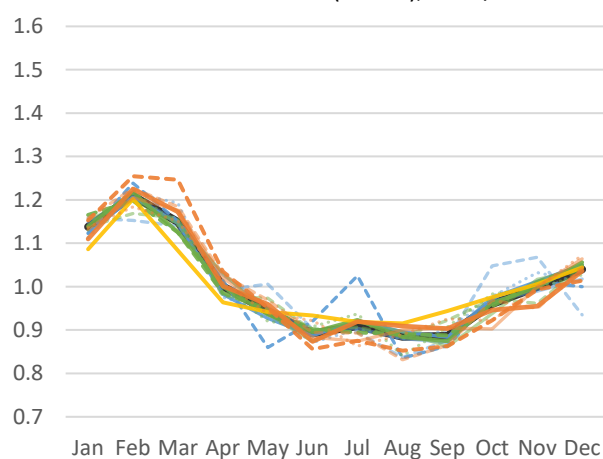
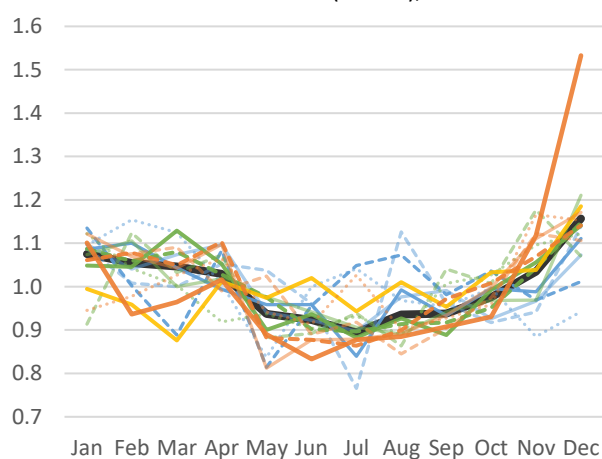
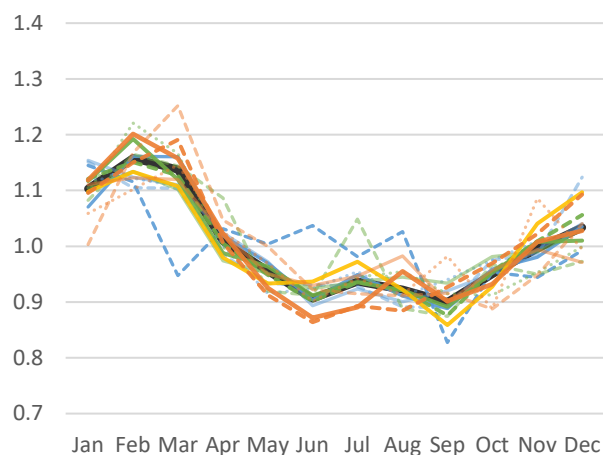
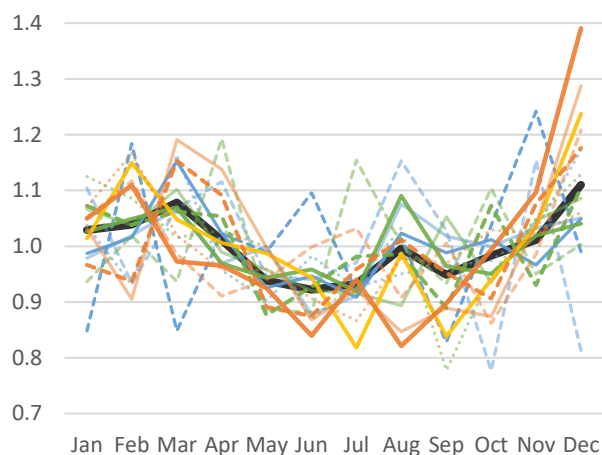
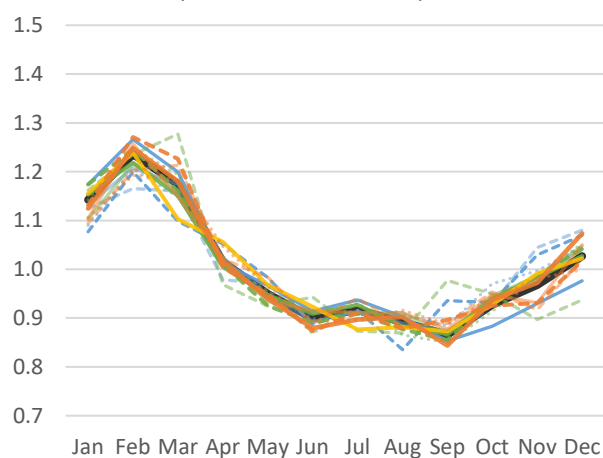
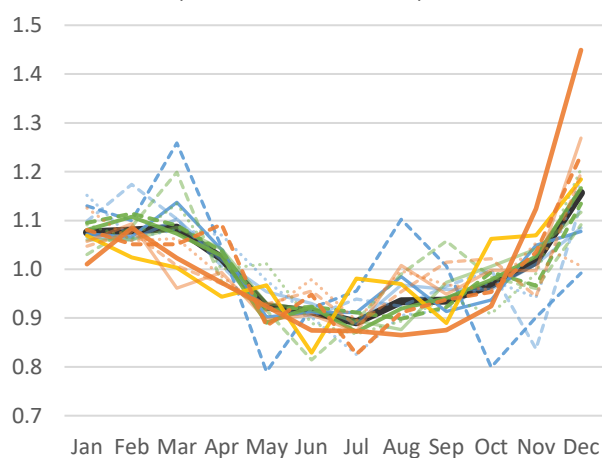
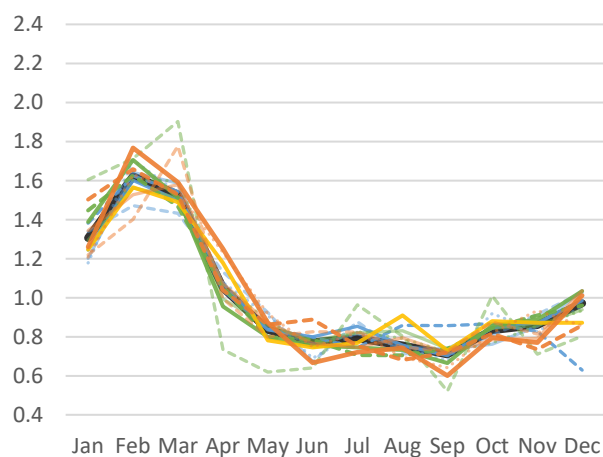
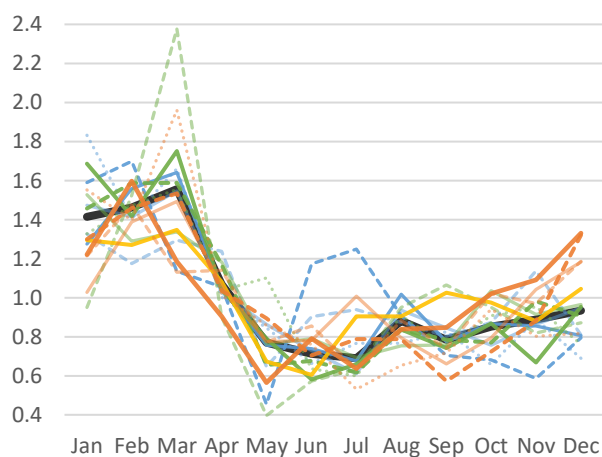
A1 Neoplasms (C00-D48), 2015/2019**A2** Neoplasms (C00-D48), 2020**B1** Mental/nervous diseases (F00-G99), 2015/2019**B2** Mental/nervous diseases (F00-G99), 2020**C1** Ischaemic heart diseases (I20-25), 2015/2019**C2** Ischaemic heart diseases (I20-25), 2020

Fig. S2 Seasonality index of mortality by month and cause of death in the German federal states, 2015/2019 (left) and 2020 (right). Abbreviations: SH: Schleswig-Holstein, HH: Hamburg, NI: Lower Saxony, HB: Bremen, NW: Northrhine-Westphalia, HE: Hessen, RP: Rhineland-Palatinate, BW: Baden-Württemberg, BY: Bavaria, SL: Saarland, BE: Berlin, BB: Brandenburg, MV: Mecklenburg-Vorpommern, SN: Saxony, ST: Saxony-Anhalt, TH: Thuringia. Data source: German Federal and State Statistical Offices; authors' calculations. (Part 1/4)

D1 Cerebrovascular diseases (I60-69), 2015/2019**D2** Cerebrovascular diseases (I60-69), 2020**E1** Other CVD (I00-19, I26-59, I70-99), 2015/2019**E2** Other CVD (I00-19, I26-59, I70-99), 2020**F1** Pneumonia (J12-18), 2015/2019**F2** Pneumonia (J12-18), 2020

— Total SH - - - HH — NI - - - HB — NW
 — HE RP — BW - - - BY - - - SL — SN
 — BE — BB MV — ST — TH

Fig. S2 Seasonality index of mortality by month and cause of death in the German federal states, 2015/2019 (left) and 2020 (right). Abbreviations: SH: Schleswig-Holstein, HH: Hamburg, NI: Lower Saxony, HB: Bremen, NW: Northrhine-Westphalia, HE: Hessen, RP: Rhineland-Palatinate, BW: Baden-Württemberg, BY: Bavaria, SL: Saarland, BE: Berlin, BB: Brandenburg, MV: Mecklenburg-Vorpommern, SN: Saxony, ST: Saxony-Anhalt, TH: Thuringia. Data source: German Federal and State Statistical Offices; authors' calculations. (Part 2/4)

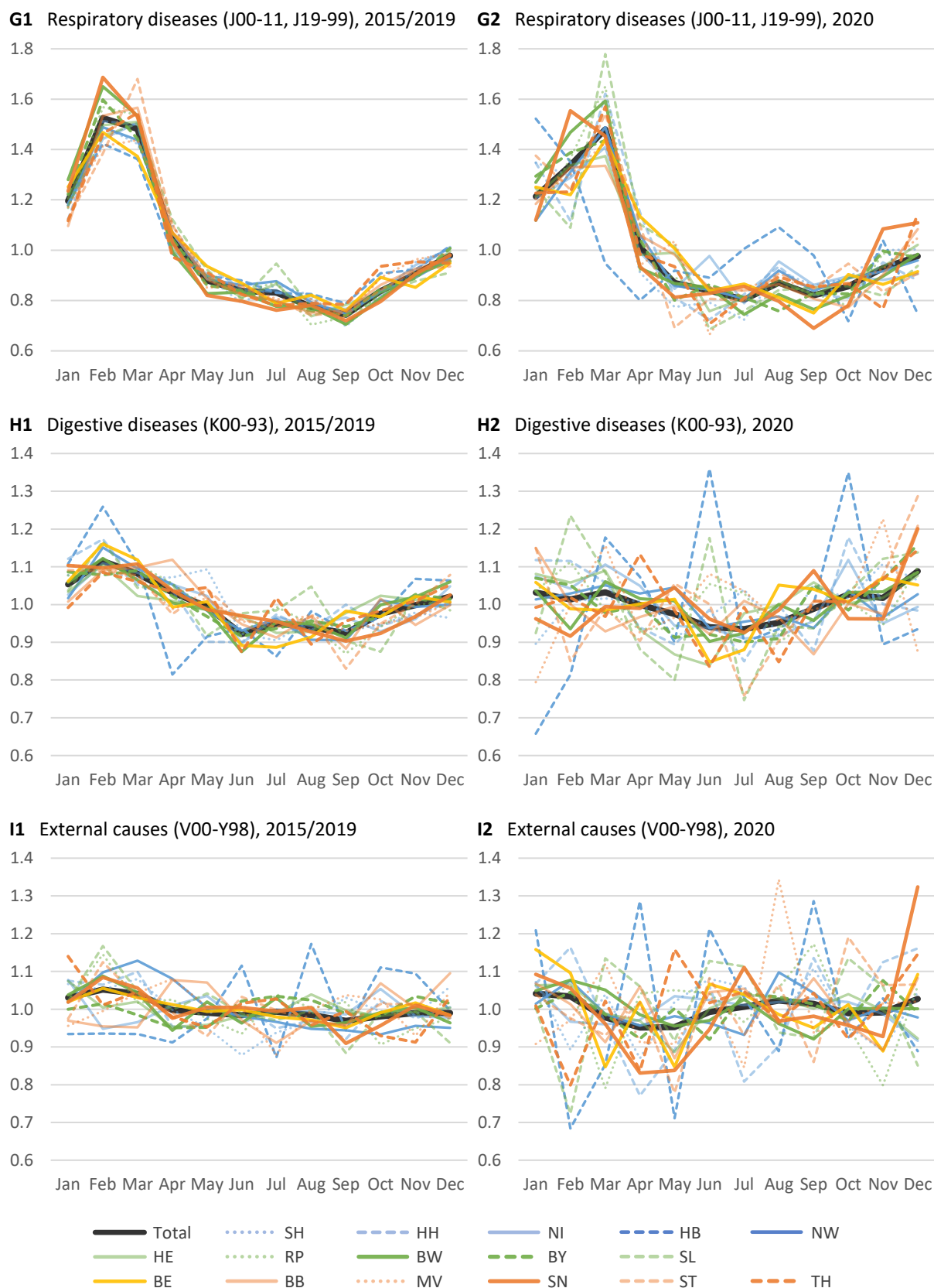


Fig. S2 Seasonality index of mortality by month and cause of death in the German federal states, 2015/2019 (left) and 2020 (right). Abbreviations: SH: Schleswig-Holstein, HH: Hamburg, NI: Lower Saxony, HB: Bremen, NW: Northrhine-Westphalia, HE: Hessen, RP: Rhineland-Palatinate, BW: Baden-Württemberg, BY: Bavaria, SL: Saarland, BE: Berlin, BB: Brandenburg, MV: Mecklenburg-Vorpommern, SN: Saxony, ST: Saxony-Anhalt, TH: Thuringia. Data source: German Federal and State Statistical Offices; authors' calculations. (Part 3/4)

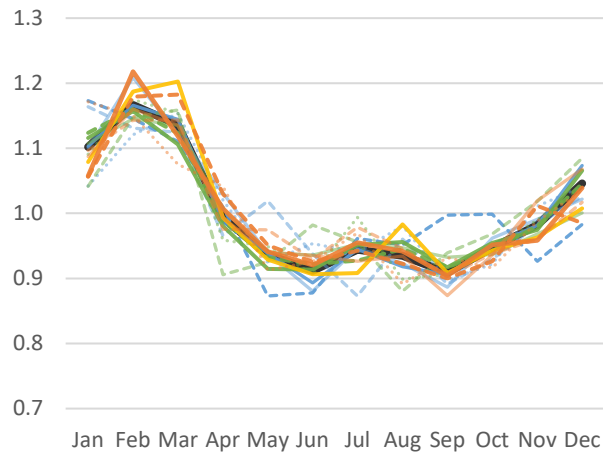
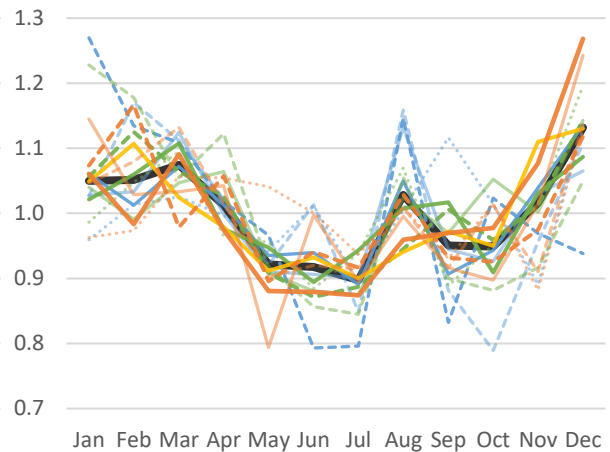
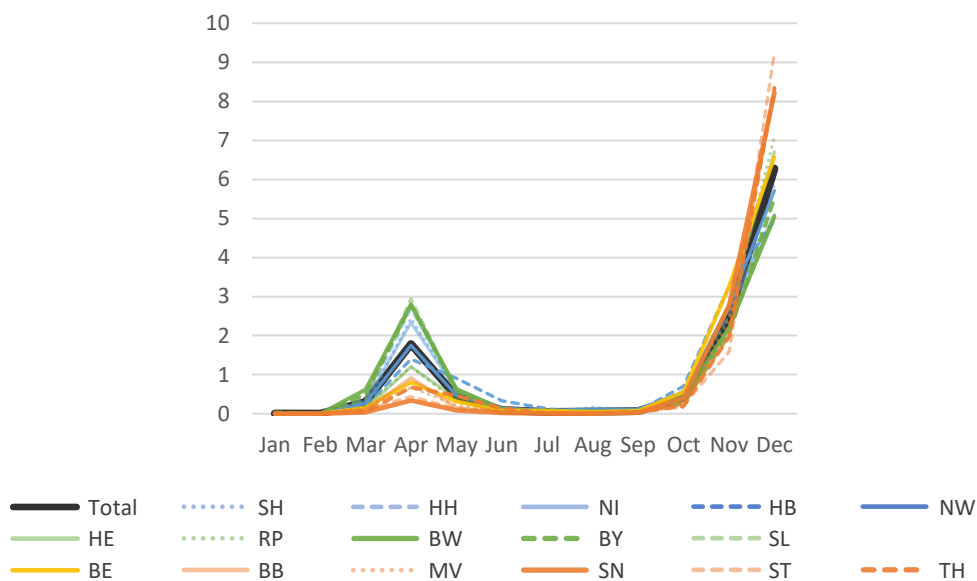
J1 Other causes, 2015/2019**J2** Other causes (without COVID-19), 2020**K2** COVID-19 (U07.1, U07.2), 2020

Fig. S2 Seasonality index of mortality by month and cause of death in the German federal states, 2015/2019 (left) and 2020 (right). Abbreviations: SH: Schleswig-Holstein, HH: Hamburg, NI: Lower Saxony, HB: Bremen, NW: Northrhine-Westphalia, HE: Hessen, RP: Rhineland-Palatinate, BW: Baden-Württemberg, BY: Bavaria, SL: Saarland, BE: Berlin, BB: Brandenburg, MV: Mecklenburg-Vorpommern, SN: Saxony, ST: Saxony-Anhalt, TH: Thuringia. Data source: German Federal and State Statistical Offices; authors' calculations. (Part 4/4)