

Researchers find that strict COVID lockdowns in France improved cardiovascular health

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A new paper in *European Heart Journal—Digital Health*, published by Oxford University Press, indicates that social-distancing measures like



total lockdown have a measurable impact on vascular health. The study compared the impact on the health of people living in a partial vs. a total lockdown during the beginning of COVID-19.

Nationwide total home confinement, lockdown, was the most striking measure taken to prevent the spread of COVID-19 infection. Previous research has demonstrated that total lockdown resulted in a 54% reduction in physical activity. This, together with anxiety, financial stress, and difficulty securing appointments with doctors, might have hurt cardiovascular health.

Lockdowns do, however, have some beneficial effects on cardiovascular health. The social distancing guidelines imposed on people around the world resulted in a reduction in air pollution and increased home cooking. People reduced their consumption of fast food and ready-made meals. People had less work-related stress and slept better. Lockdown has been applied heterogeneously by different countries, providing a unique opportunity to compare the impact of different social-distancing measures on cardiovascular health in a real-life experiment with a large population sample.

Researchers here compared the cardiovascular health of people in France, which imposed strict limitations on peoples' movements, including the shutdown of all non-essential production and <u>commercial</u> <u>activities</u>, to that of people in Germany, which adopted much less stringent social-distancing measures.

Researchers here selected 53,043 people in France and Germany and tracked their health during the spring of 2020 when France's lockdown began. Some 21.1% of French patients tracked during lockdown showed an overall improvement in <u>cardiovascular health</u>, with a reduction in <u>vascular stiffness</u> and <u>body weight</u> despite a concomitant reduction in physical activity. In France, the improvement in vascular age during



lockdown corresponded to a reduction in vascular age of more than three years.

The phenomenon was only modestly present in Germany, where lockdown was partial. The reduction in vascular stiffness was significantly steeper in French patients than in Germans. Vascular age reduction during lockdown was steeper in French than in German participants. French participants also showed a slight but greater weight reduction during lockdown than German participants.

More information: Rosa Maria Bruno et al, Home monitoring of arterial pulse-wave velocity during COVID-19 total or partial lockdown using connected smart scales, *European Heart Journal—Digital Health* (2022). DOI: 10.1093/ehjdh/ztac027

Provided by Oxford University Press

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