



HEARTS

IN THE AMERICAS



PAHO

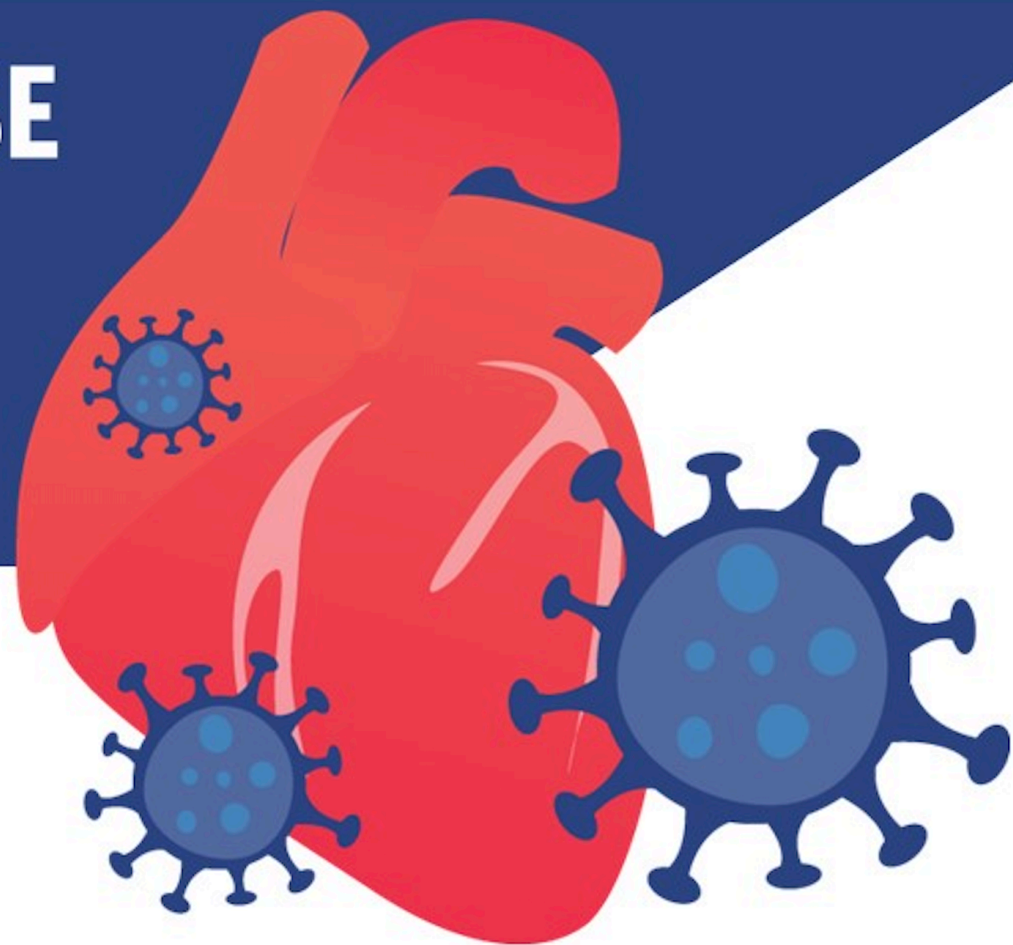


WEBINAR



CARDIOVASCULAR DISEASE AND COVID-19

Inter-relationship and opportunities for
change of two global crises



Monday

16 November 2020

10:30 am - 12:30 pm (EST)

www.paho.org/en/hearts-americas

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

Cardiovascular Disease, Stroke, and Hypertension Outcomes Crisis in the Covid-19 Era

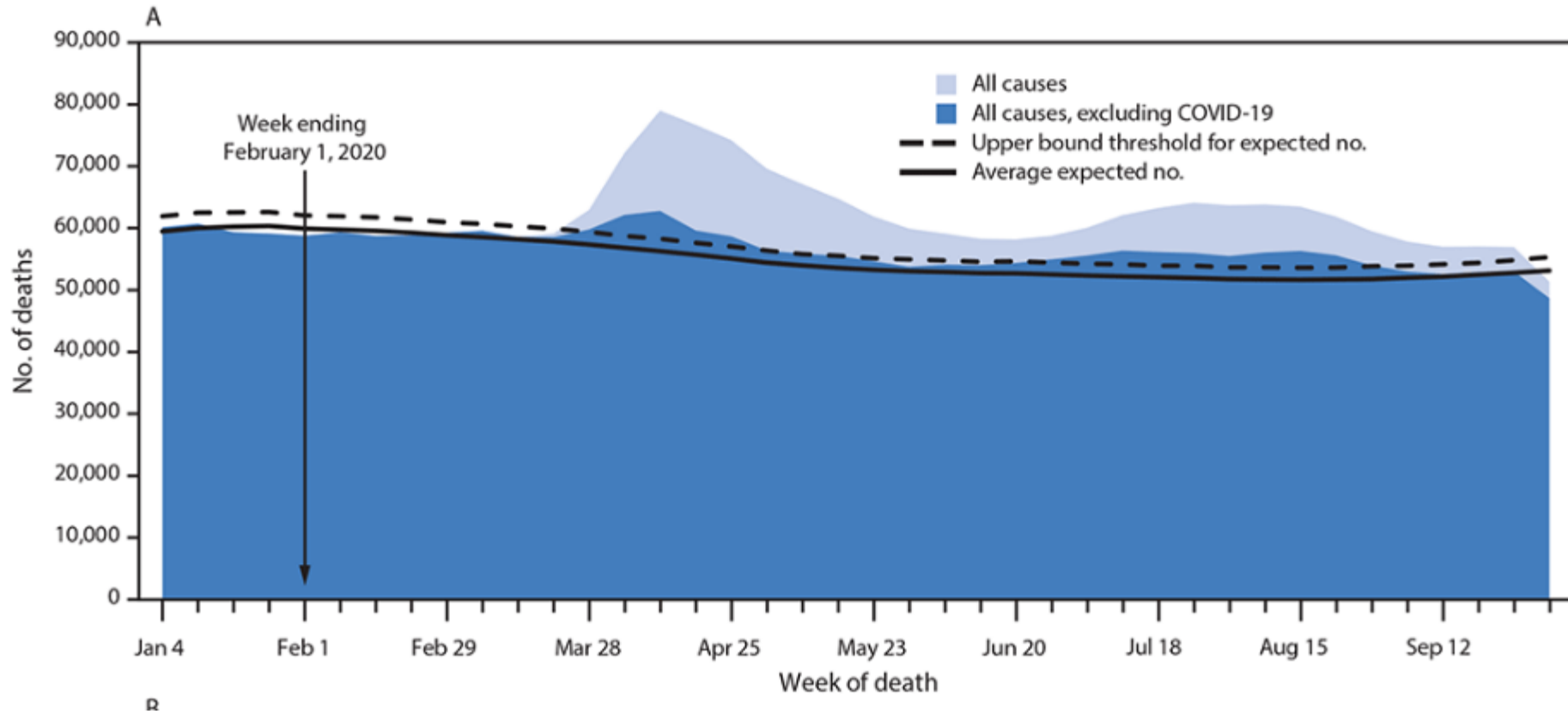
Daniel T. Lackland DrPH, FACE, FAHA

**Division of Translational Neurosciences and Population Studies, Department of
Neurology,**

Medical University of South Carolina,

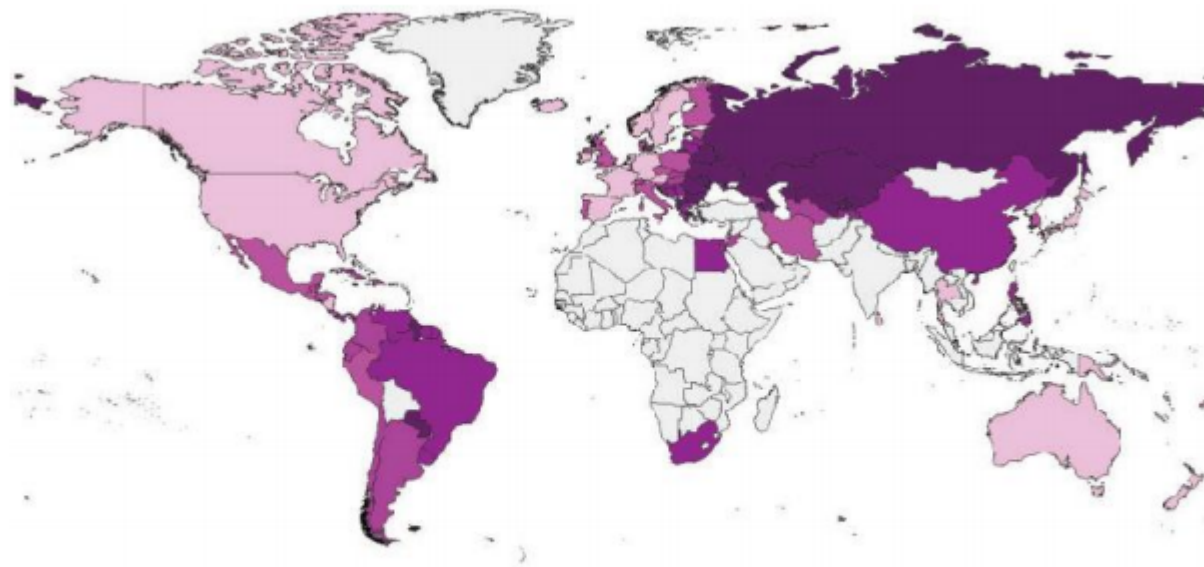
Charleston, South Carolina, United States

Weekly numbers of deaths from all causes and from all causes excluding COVID-19 relative to the average expected number and the upper bound of the 95% prediction interval



MMWR /
October 23,
2020 / Vol. 69 /
No. 42

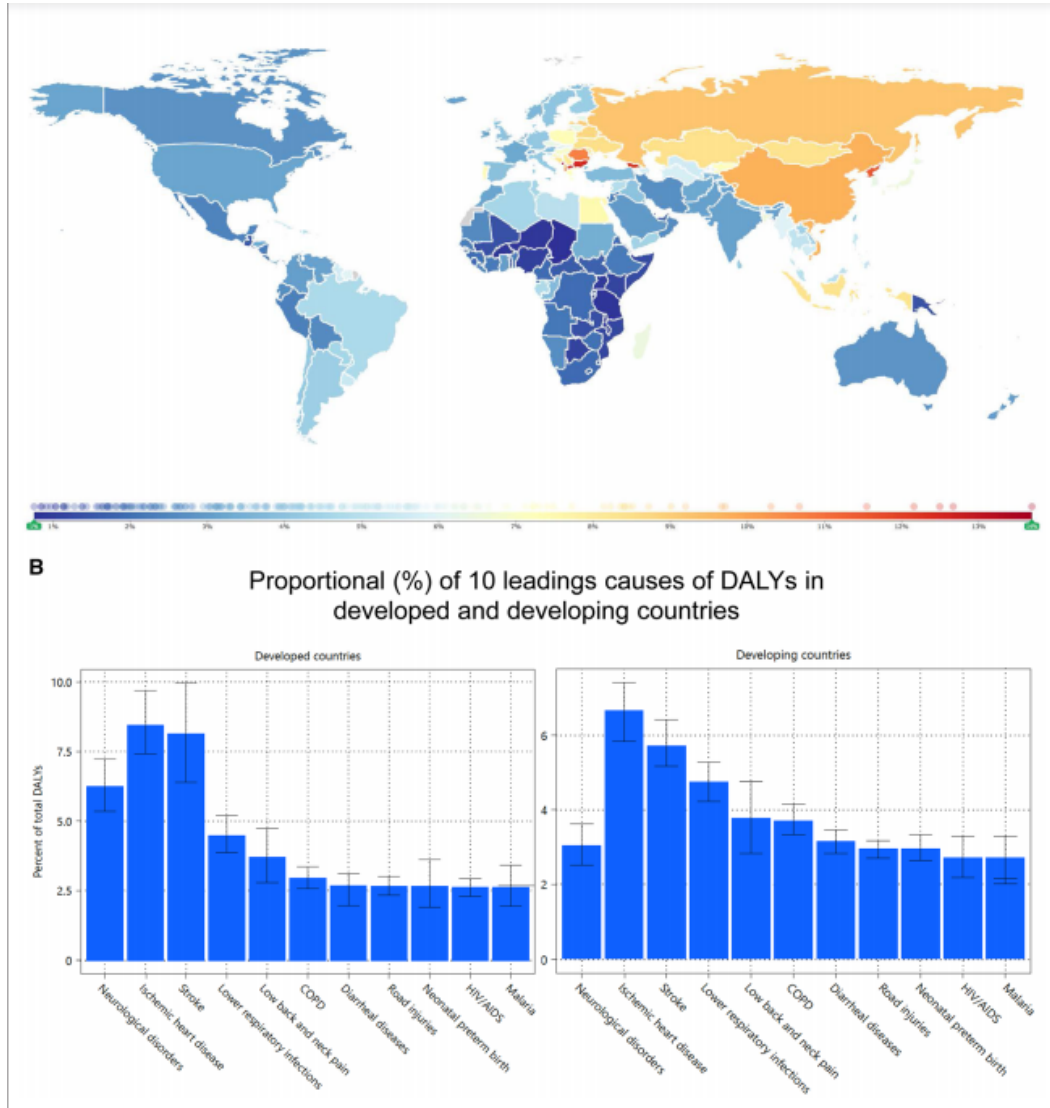
Mortality from stroke adjusted to the WHO world population, by quintiles



Rank for Variable mortality



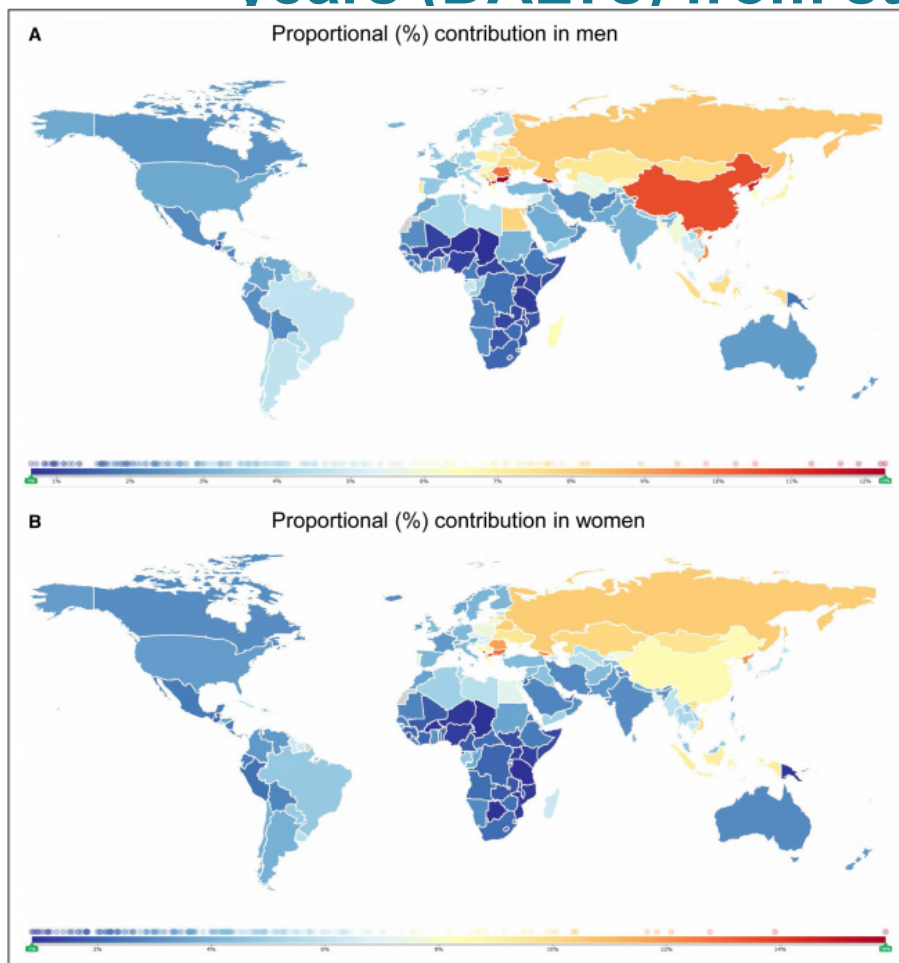
International Journal of Stroke Vol 9,
January 2014, 6–18



Proportional contribution (%) of age-standardized disability-adjusted life-years (DALYs)

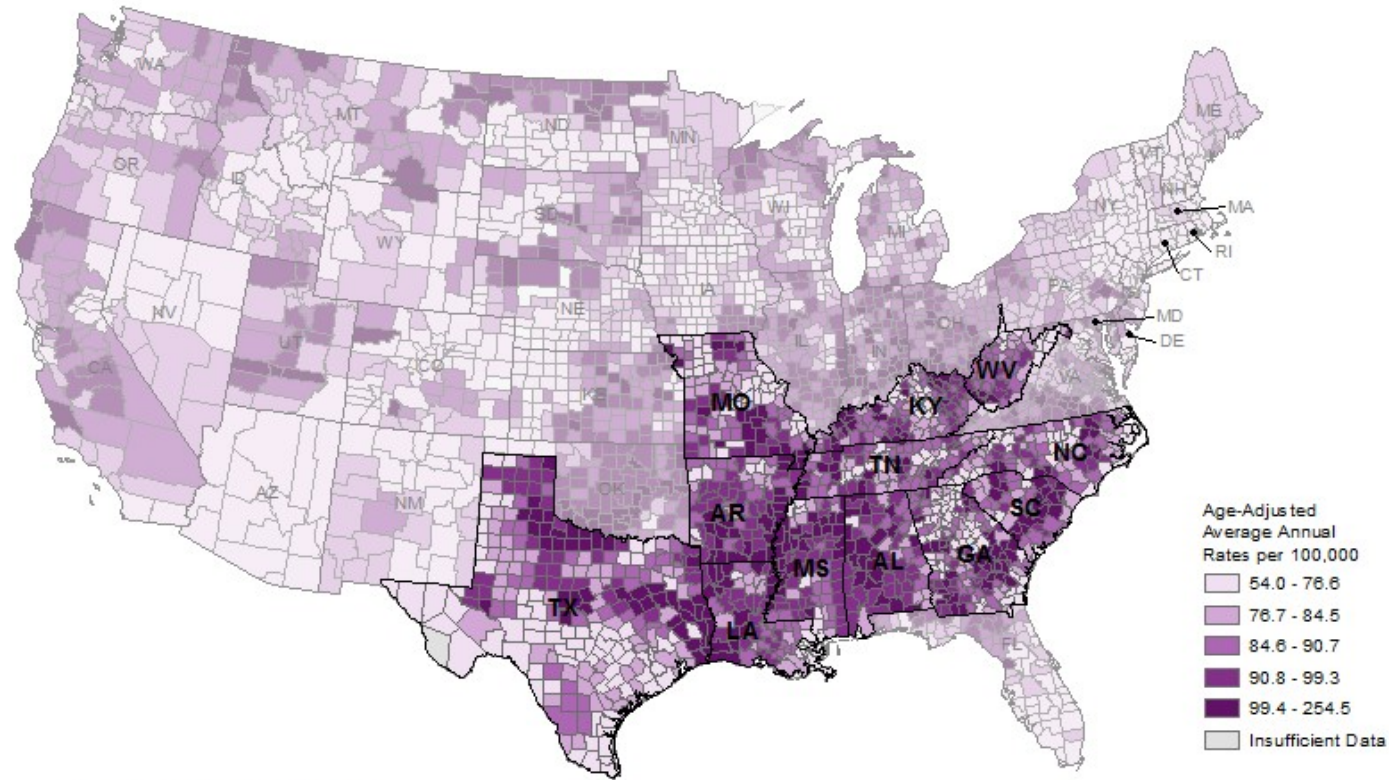
Circ Res. 2017;120:439-448

Proportional contribution (%) of age-standardized disability-adjusted life-years (DALYs) from stroke



Circ Res. 2017;120:439-448

Counties with High Stroke Mortality Rates are Concentrated in the South

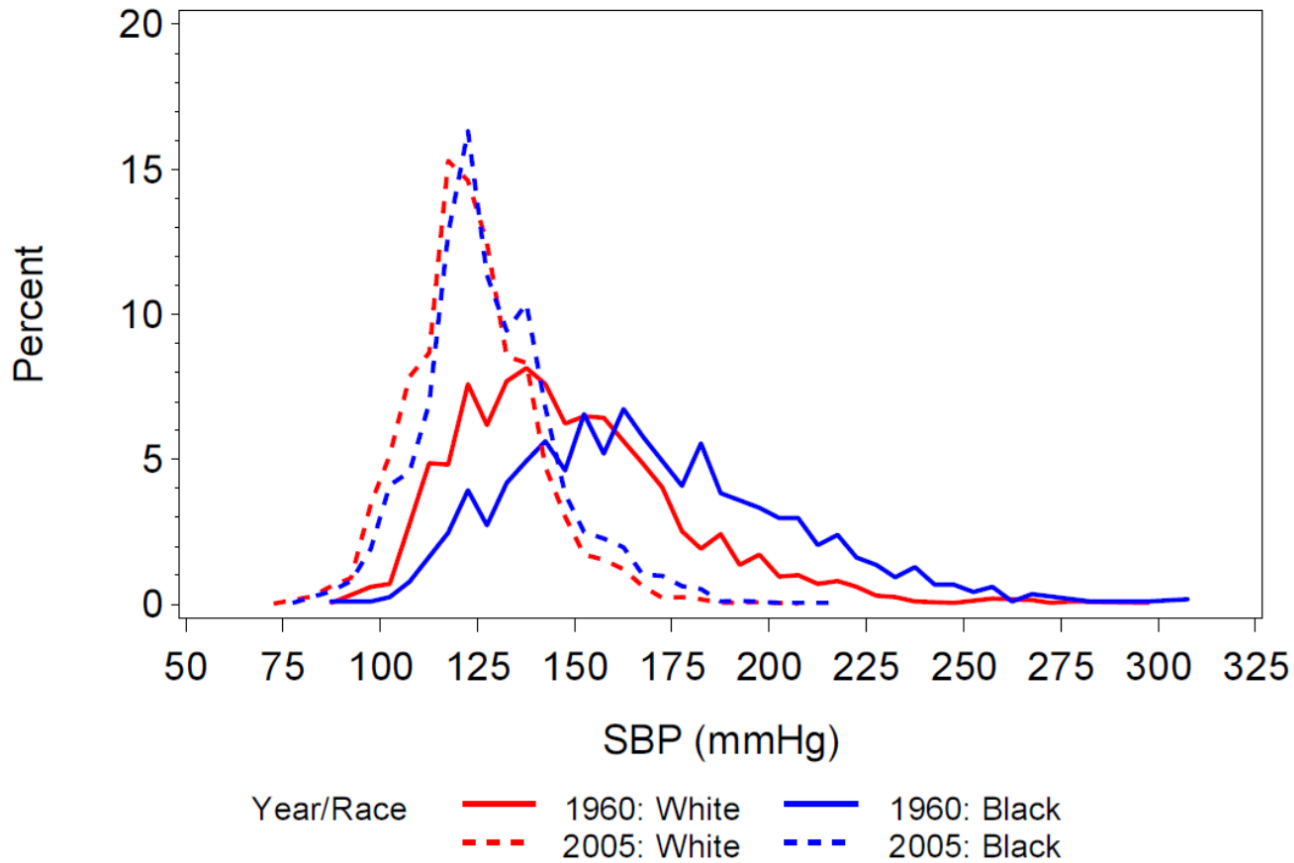


Rates are spatially smoothed to enhance the stability of rates in counties with small populations.

Data Source:
National Vital Statistics System
National Center for Health Statistics

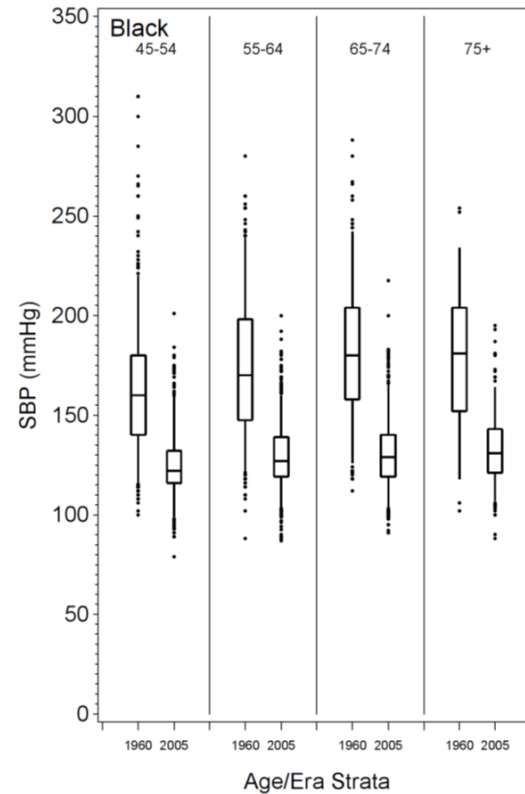
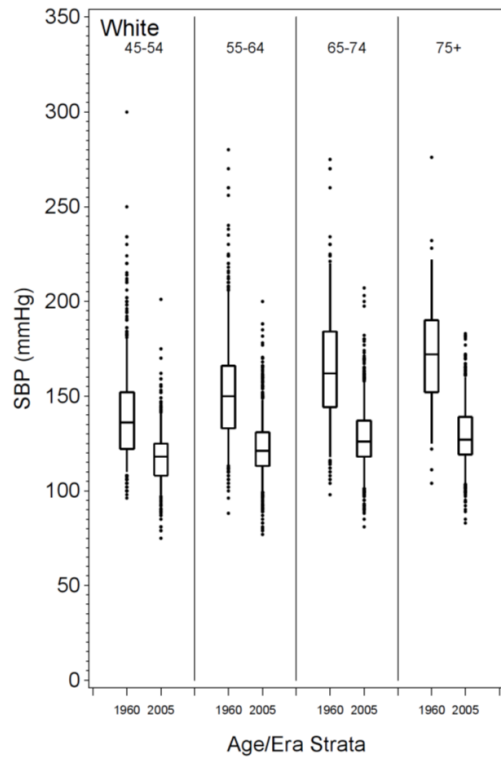


Shift in Systolic Blood Pressure Distribution 1960-2005



Circulation. 2020;142:1524–1531

Changes in Systolic Blood Pressure by Age Strata 1960-2005



Circulation. 2020;142:1524–1531

Summary

The highest mortality rates attributable to CVD in 2017 were in Eastern Europe and Central Asia.

CVD prevalence was high in the United States, Central Europe, North Africa, and the Middle East.

Overall in 2017, age-standardized stroke prevalence rates were highest in Eastern Europe, North

Africa, the Middle East, and Central and East Asia. Countries in Eastern Europe and Central and East Asia had the highest prevalence rates of ischemic stroke. The prevalence of intracerebral hemorrhage was high in East and Central Asia. The prevalence of subarachnoid hemorrhage was highest in Japan.

Summary

- **Between 1990 and 2015, the number of deaths related to SBP ≥ 140 mm Hg did not increase in high-income countries (from 2.197 to 1.956 million deaths) but did increase in high-middle income (from 1.288 to 2.176 million deaths), middle-income (from 1.044 to 2.253 million deaths), low-middle-income (from 0.512 to 1.151 million deaths), and low-income (from 0.146 to 0.293 million deaths) countries.**
- **Based on 2015 data, there were 3.47 billion adults worldwide with systolic blood pressure of 110 to 115 mm Hg or higher. Of this group, 874 million had systolic blood pressure ≥ 140 mm Hg.**

Heart disease and stroke statistics—
2020 update: a report from the
American Heart Association.
Circulation. 2020;141:e1–e458.

Clinical Implications

- **The clinical strategies of high BP detection, treatment, and control implemented in the later part of the last century are effective in all patients**
- **Primordial and primary prevention activities implemented at the clinical setting can have impact on BP levels.**
- **Early detection of hypertension using proper BP measurement and prompt appropriate treatment can be effective in high BP control for all patients regardless of population social determinants.**