SEPTEMBER 2017

CDC Vitalsigns™

Preventing Stroke Deaths

Progress Stalled

After decades of decline, progress has slowed in preventing stroke deaths. Almost 800,000 people have a stroke each year, more than 140,000 die and many survivors face disability. This is disturbing because about 80% of strokes are preventable. High blood pressure is the single most important treatable risk factor for stroke. Preventing, diagnosing and controlling it through lifestyle changes and medicine is critical to reducing strokes. Health systems (hospitals, doctors, rehabilitation specialists, emergency medical technicians [EMTs], pharmacists) can help address stroke risk factors and improve patient outcomes if a stroke occurs. When stroke happens, minutes count. Call 911 right away. Health systems can treat strokes fast if patients get to the hospital in time. Reducing stroke risk factors and improving the quality of stroke care are needed to continue the decline in stroke deaths.

40 seconds

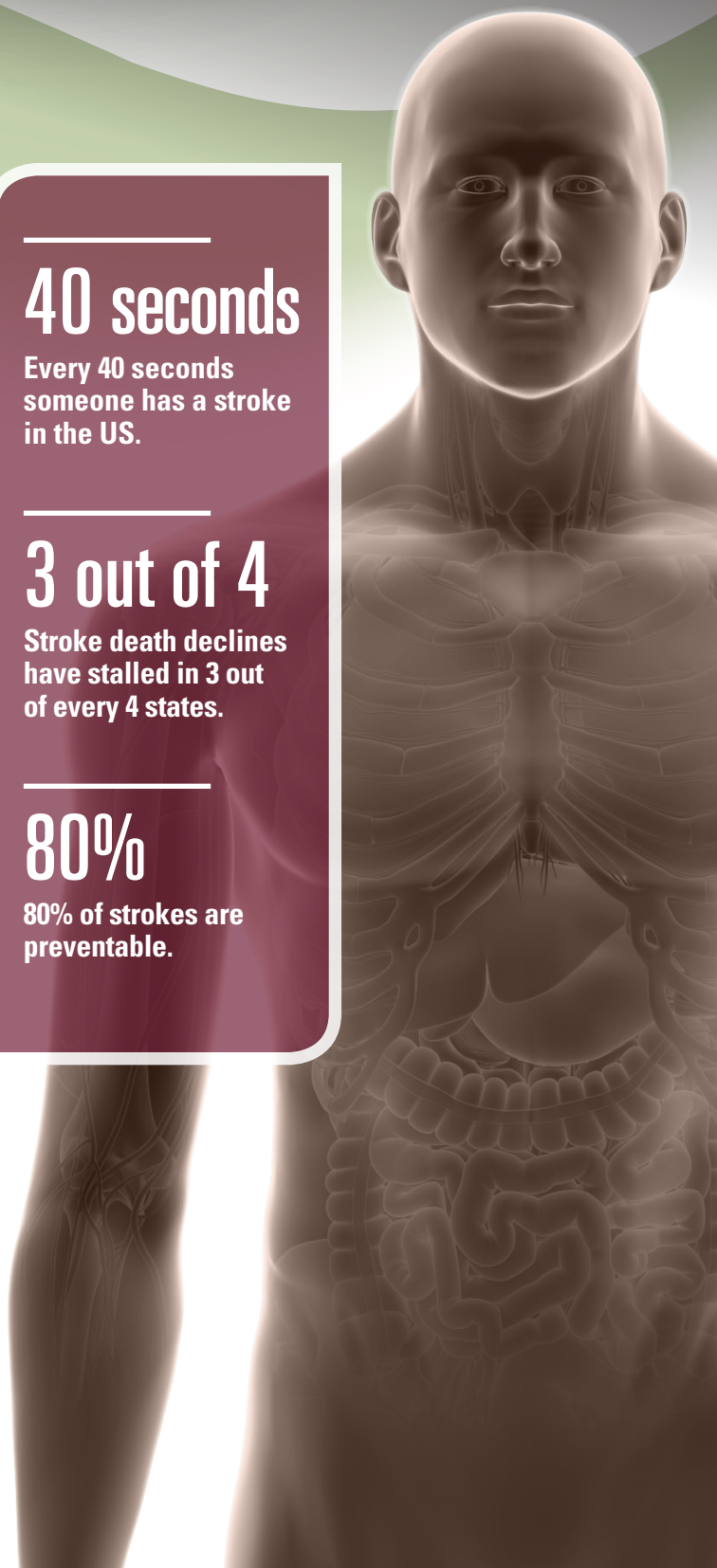
Every 40 seconds someone has a stroke in the US.

3 out of 4

Stroke death declines have stalled in 3 out of every 4 states.

80%

80% of strokes are preventable.



Health systems can:

- Use system-wide approaches to find patients with undiagnosed or unmanaged stroke risk factors.
- Work with community members and emergency medical technicians (EMTs) to quickly identify strokes and get patients to the hospital fast.
- Implement a coordinated system of care that effectively treats patients from the first symptom of a stroke through recovery.

Want to learn more? www.cdc.gov/vitalsigns/stroke

Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion

Problem:

Stroke deaths have stopped declining.

Strokes are common and preventable.

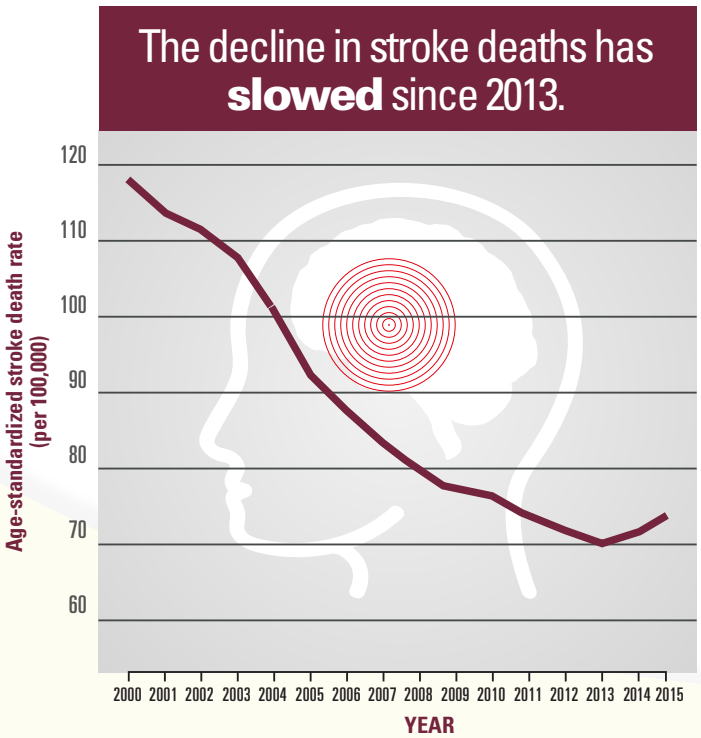
- Stroke is the 5th leading cause of death and a leading cause of serious, long-term disability, with an estimated cost of $34 billion annually.
- 1 in 20 adult deaths are due to stroke. Many of these deaths are preventable.
- When stroke happens, parts of the brain become damaged and can start to die within minutes.

Strokes happen more in some populations and geographic areas.

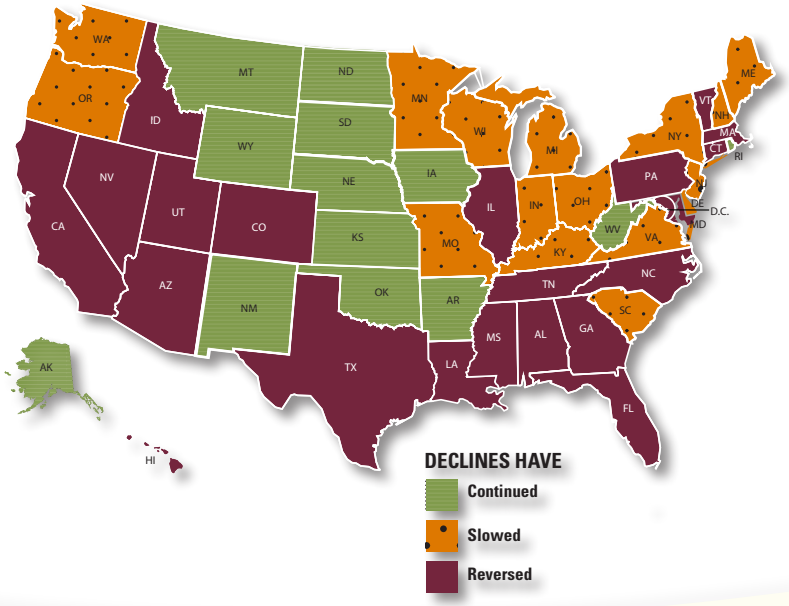
- Stroke death declines have stalled in 3 out of every 4 states.
- Blacks have the highest stroke death rates among all races/ethnicities.
- Stroke death rates among Hispanics have increased by 6% each year from 2013 to 2015.
- Stroke deaths increased in southern states.

Strokes are happening at younger ages.

- Risk factors like high blood pressure, high cholesterol, obesity, and diabetes are happening at younger ages.
- Risk factors may not be recognized and treated in middle-aged adults (35-64 years old).
- Recent studies also suggest that over the last 15 years younger adults (ages 18-54) have had increases in stroke hospitalizations, along with increases in stroke risk factors among those hospitalized with stroke.



Stroke death declines have **STALLED** in **3** out of every **4** states.



CONTINUED = death rates continued to decrease steadily from 2000-2015 in adults 35 years and older

SLOWED = the decrease in death rates slowed down over time

REVERSED = the death rates reversed from decreasing to increasing

SOURCE: US Vital Statistics, 2015

What's needed to decrease stroke deaths?

RISK FACTORS FOR STROKE

Knowing and managing your risks for stroke are key.

HIGH BLOOD PRESSURE
a leading cause of STROKE

TOBACCO USE

DIABETES

HIGH CHOLESTEROL

OBESITY & PHYSICAL INACTIVITY

Recognize the signs of stroke F.A.S.T.

FACE

Ask the person to **smile**. Does one side droop?

ARMS

Ask the person to **raise both arms**. Does one arm drift downwards?

SPEECH

Ask the person to **repeat a simple sentence**. Are the words slurred?

TIME

If the person shows any of these symptoms, call **911** immediately.

Learning the signs of a stroke can HELP SAVE LIVES

SOURCE: Adapted from the Cincinnati Pre-hospital Stroke Scale, University of Cincinnati, 1997.

Stroke Systems of Care

Community

Detection

Everyone knows the signs of stroke and the need to call **911** immediately.

Pre-Hospital

Delivery

Fast emergency medical services (EMS) transport to the hospital with pre-hospital notification that they are on the way.

Hospital

Decision

Identify stroke, quickly decide on and provide appropriate treatment.

Post-Hospital

Discharge Coordination

Patient rehabilitates, recovers, and returns home.

SOURCES: Paul Coverdell National Acute Stroke Program, CDC;
Guidelines for the Early Management of Adults with Ischemic Stroke, Circulation, May 22, 2007.

The STROKE SYSTEMS OF CARE depends on coordinated partnerships among health systems and professionals, smooth transitions from one care setting to the next, data-driven quality improvement programs that provide the best care to every patient every time, consistent hospital discharge processes with all of the patient's healthcare professionals, and continued actions that improve patient care and save lives.

What Can Be Done?

The Federal government is

- Managing the Paul Coverdell National Acute Stroke Program (Coverdell Program) that partners with state health departments, emergency medical services (EMS), and hospitals to implement data driven quality improvement programs for stroke care. https://go.usa.gov/xRNM5
- Leading the Million Hearts® initiative to prevent 1 million heart attacks and strokes by 2022. Millionhearts.hhs.gov
- Providing resources to all 50 states to address chronic disease prevention, including heart disease and stroke.
- Funding stroke research in treatment, recovery, and prevention, and supporting the Mind Your Risks public education campaign. Mindyourrisks.nih.gov

Health systems can

- Use system-wide approaches to find patients with undiagnosed or unmanaged stroke risk factors.
- Work with community members and emergency medical technicians (EMTs) to quickly identify strokes and get patients to the hospital fast.
- Implement a coordinated system of care that effectively treats patients from the first symptom of a stroke through recovery.

Doctors, nurses, and healthcare professionals can

- Identify and treat high blood pressure, obesity, diabetes, high cholesterol, smoking, and other risk factors for stroke.
- Help patients control their blood pressure, cholesterol, and diabetes by taking medicines as directed and making lifestyle changes that can help prevent stroke.
- Refer patients to community resources such as smoking quit lines and obesity and diabetes prevention programs that will support their lifestyle behavior changes.
- Educate patients on the signs and symptoms of stroke and the importance of calling 911 if someone is having a stroke.

State health departments can

- Prioritize coordinated stroke systems of care and adopt successful strategies of the Coverdell Program.
- Use data to identify and improve gaps in stroke care to drive quality improvements.
- Train community members and emergency medical technicians (EMTs) to identify the signs of stroke and understand the importance of getting patients to the hospital quickly.
- Increase awareness of risk factors for stroke and lifestyle changes needed among high-risk populations.
- Conduct public education campaigns on the importance of calling 911.

Everyone can

- Recognize the signs and symptoms of stroke and call 911 if someone is having a stroke.
- Control blood pressure and cholesterol by taking medicines as prescribed.
- Manage other medical conditions, such as obesity and diabetes.
- Avoid smoking and secondhand smoke, which increase your risk for stroke.
- Eat a healthy diet low in salt and sugar with lots of fresh fruits and vegetables, increase physical activity, and maintain a healthy weight.

1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348
Accessible version – www.cdc.gov/vitalsigns/stroke

Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30329

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