

# Beyond the Headache: What Every Woman Should Know About Migraine and Stroke

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THE WARREN ALPERT  
**Medical School**  
BROWN UNIVERSITY



# What We Will Cover

- What is a migraine?
- What is a stroke?
- How do migraine and stroke differ between women and men?
- Does migraine increase your risk of stroke?
- How can strokes be prevented?







What is a Migraine?

# What does a migraine feel like?

- Often on one side of the head
- May have associated nausea or vomiting
- May be worsened by light or sound
- Often more severe than other headache types
- Often come as recurrent attacks of headache
- May be associated with visual aura/ warning signs (flashing lights, lines, patterns)

# Migraine with aura







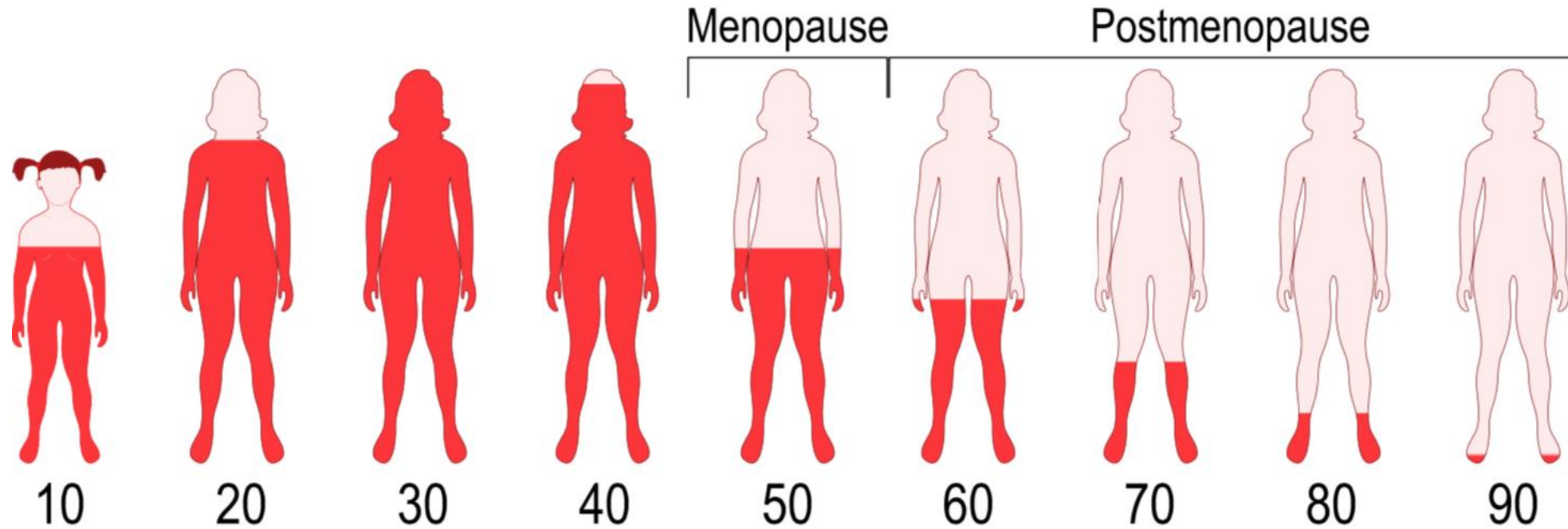
Migraine is 2-3 times more common in women

# Hormones and Migraine



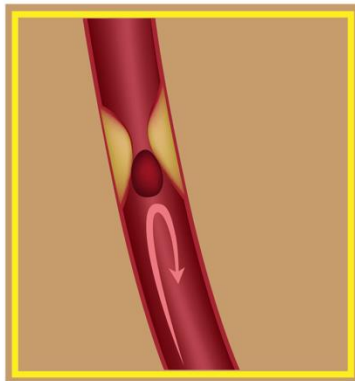
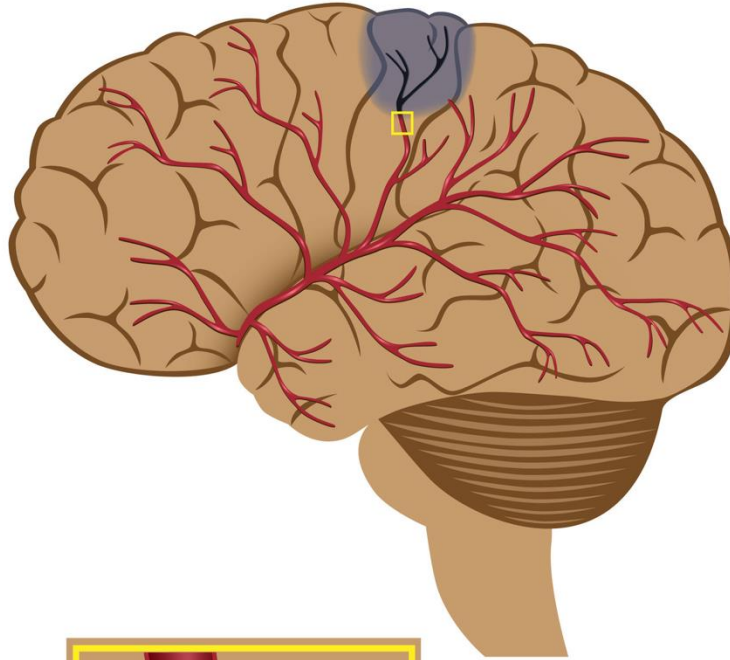


# Hormones over the Lifespan



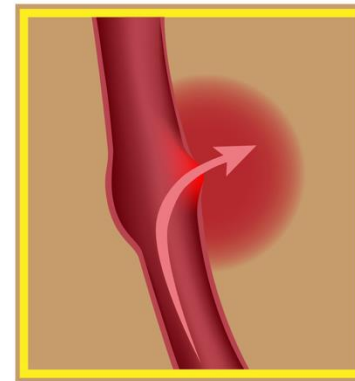
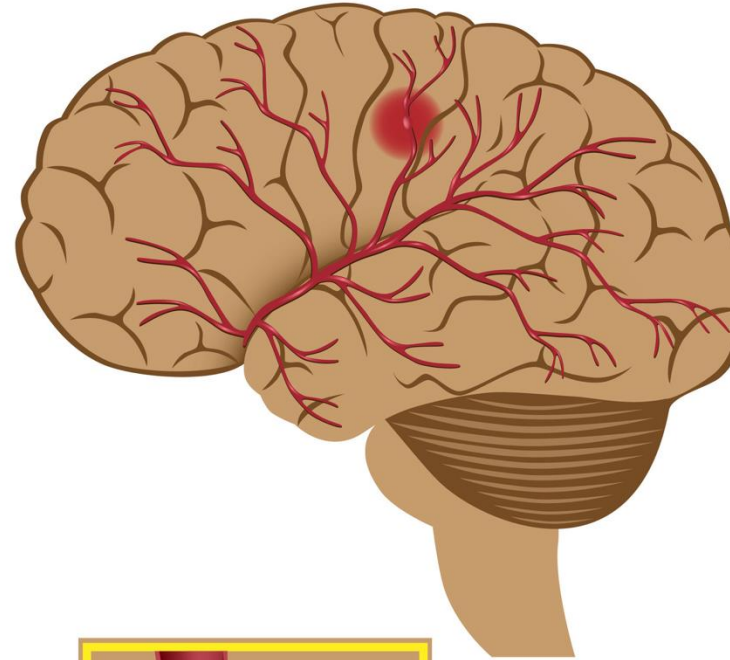
# Brain Stroke

*Ischemic Stroke*



Blockage of blood vessels; lack of blood flow to affected area

*Hemorrhagic Stroke*



Rupture of blood vessels; leakage of blood



**American  
Stroke  
Association.**

*A division of the  
American Heart Association.*

American Heart Association.



# Women face higher risk of stroke

## STROKE IN U.S. WOMEN BY THE NUMBERS



One in 5 women  
will have a stroke.

About 55,000 more  
women than men have  
a stroke each year.



**#3**  
cause  
of death

Stroke is the No. 3  
cause of death in  
women.

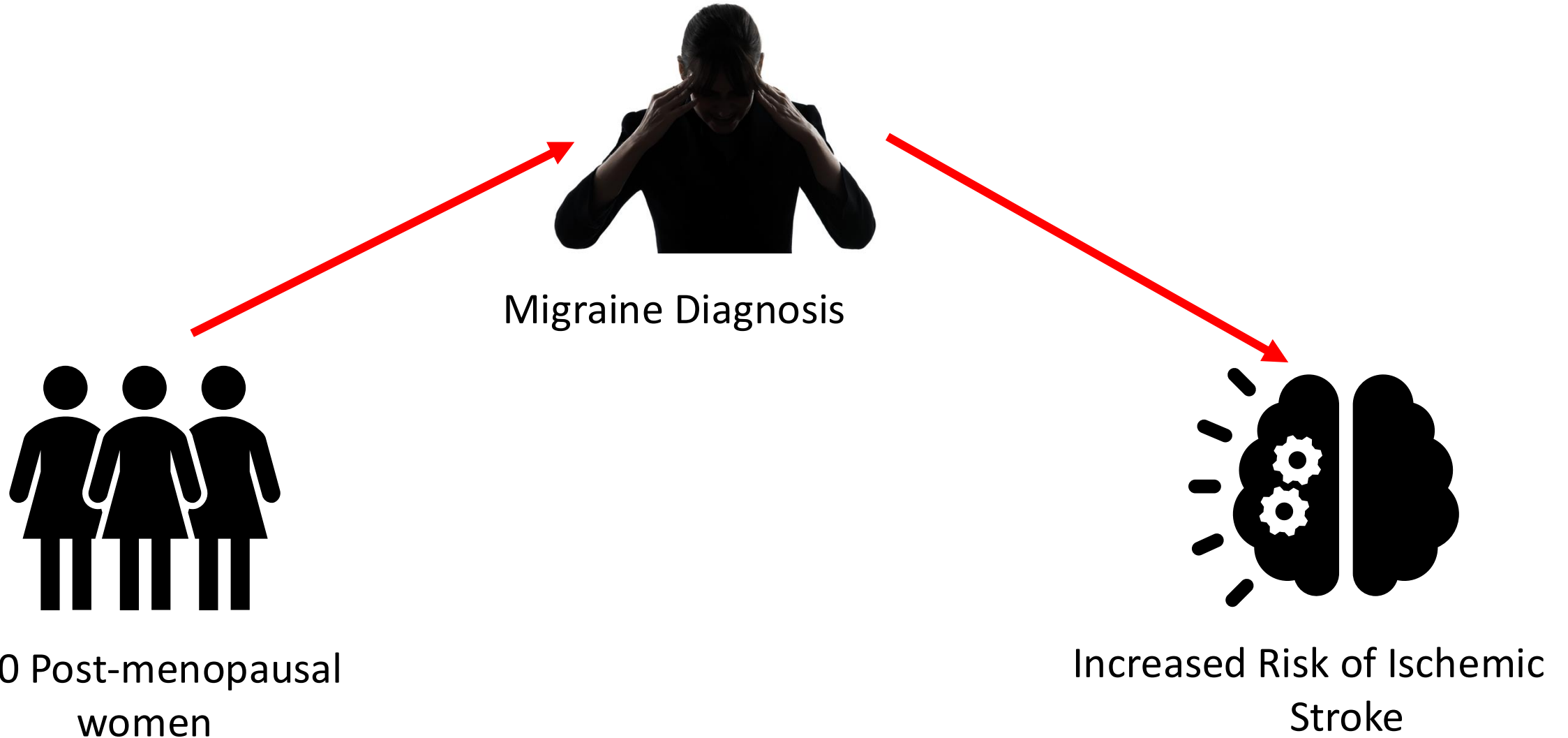
Stroke kills over  
90,000 women a year.



Among women,  
Black women  
have the highest  
prevalence of  
stroke.



# Migraine and Stroke in the Women's Health Initiative



# Examples of Stroke Risk Factors

Migraine



Smoking



High Blood Pressure

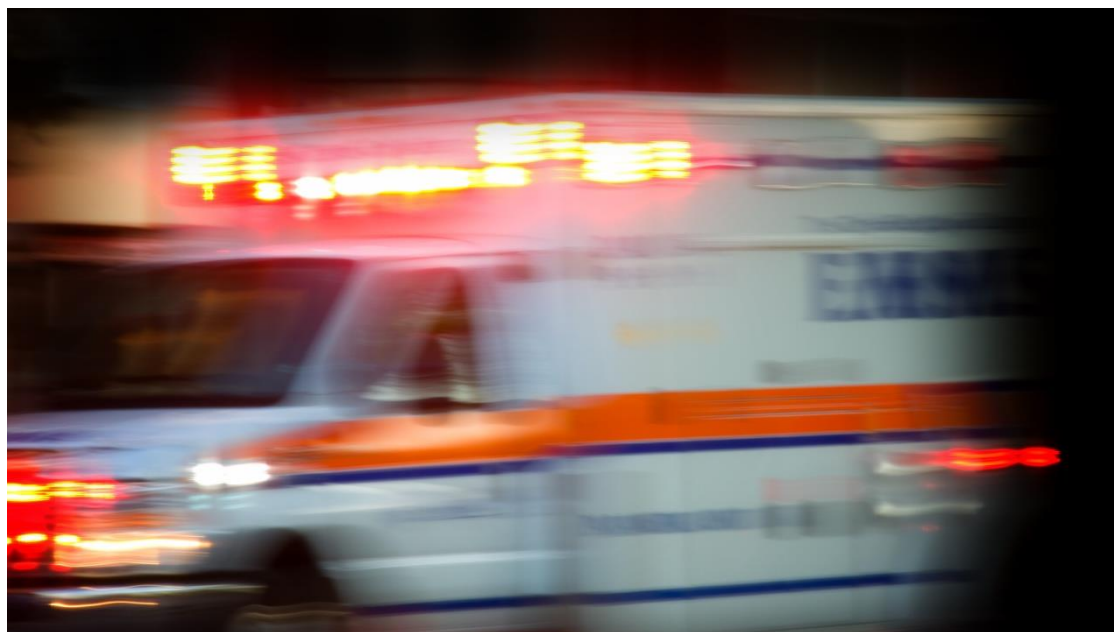


Diabetes



Smaller bump in  
stroke risk

Larger bump in  
stroke risk



**Recognize the Signs of a Stroke:**

**B.E. F.A.S.T.**

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**B** = Balance Loss

**E** = Eye (Vision) Changes

**F** = Face Drooping

**A** = Arm Weakness

**S** = Speech Difficulty

**T** = Time to Call 911

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# Other Stroke Warning Signs

- Change in headaches
- Severe headache with new neurological symptoms
- Confusion



What Else  
Do We Need  
to Know?





# Reducing Stroke Risk

- Talk to your doctor about your stroke risk
- Follow recommendations for a healthy lifestyle
- Ask about your headache symptoms



THANK YOU

A decorative string of eight colorful paper flags hanging from a light brown twine string. Each flag is secured by a small wooden clothespin. The flags are arranged in a row and feature the words 'THANK YOU' in a bold, black, hand-drawn font. The colors of the flags are orange, light orange, blue, red, yellow, pink, light blue, and yellow, respectively. The background is a plain, light gray.



