

# Aspirin Use in Primary Care



**A**spirin when appropriate



**B**lood pressure control



**C**holesterol management



**S**moking cessation

## Healthy Hearts for Oklahoma (H2O)

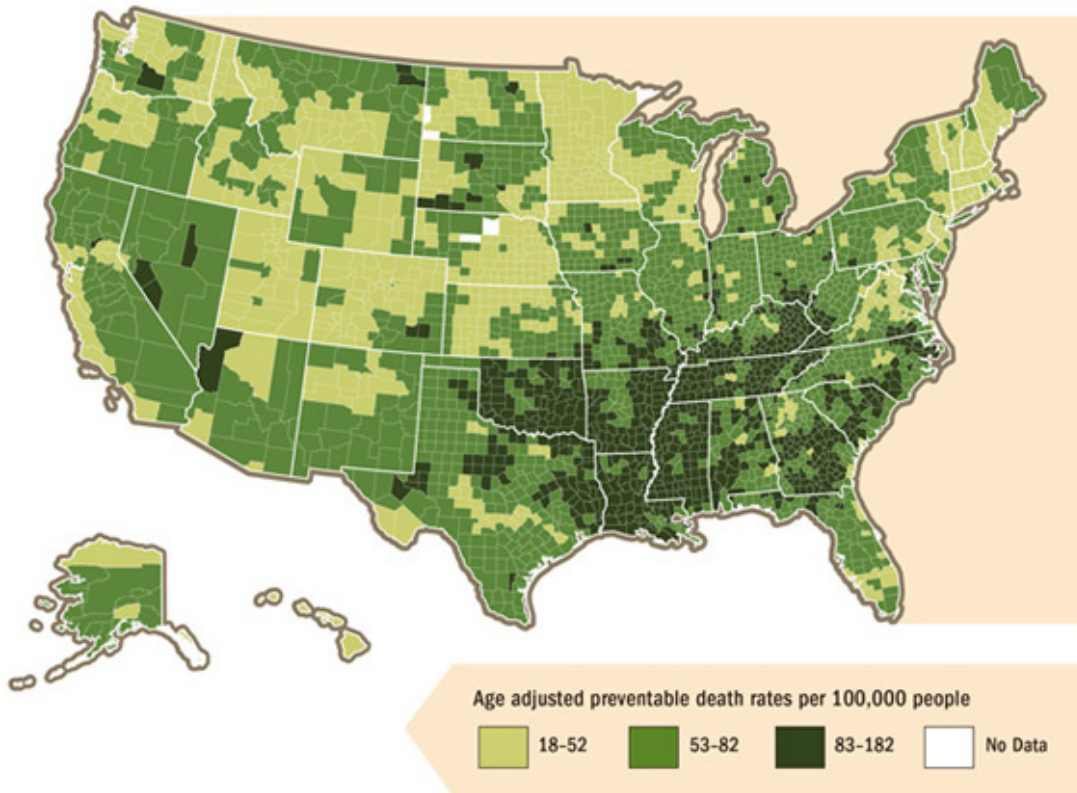
The Oklahoma Cooperative for AHRQ's

EvidenceNOW



# Opportunities for prevention

Counties in Oklahoma have high rates of preventable CV deaths<sup>1</sup>

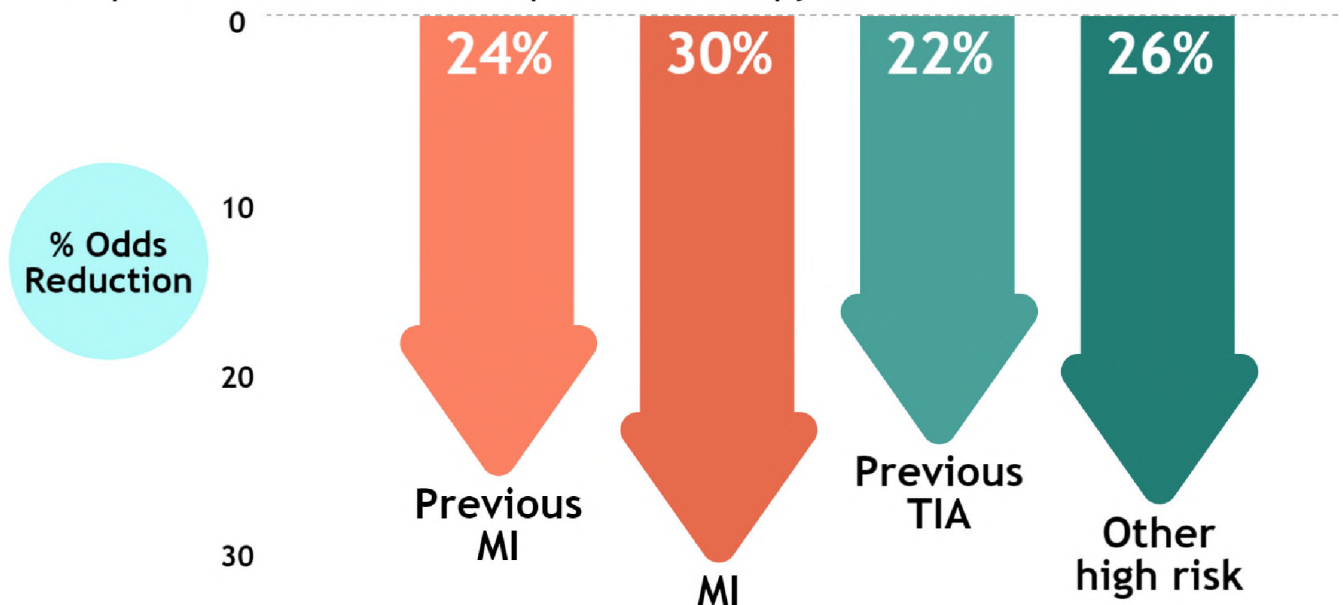


## Aspirin for secondary prevention: the clear choice

Treat all patients with established cardiovascular disease with aspirin.

### Meta-analysis results for aspirin as secondary prevention<sup>2</sup>

Proportional effects of antiplatelet therapy on serious vascular events



The benefit of aspirin is not dose-dependent; use low-dose aspirin (81 mg) when indicated.



## Aspirin for primary prevention: balancing risk & benefit

- Aspirin as primary prevention reduces total cardiovascular events but not all-cause mortality or cardiovascular mortality<sup>3,4,5</sup>
- Aspirin increases risk of bleeding, especially GI bleeding<sup>4,5</sup>

## Which patients should take aspirin for primary prevention?

2016 USPSTF guidelines recommend using the ACC/AHA ASCVD risk calculator to identify patients likely to benefit from aspirin for primary prevention<sup>5</sup>.

### Risk level and aspirin benefits, by age

Age	ASCVD risk threshold	Size of benefit
50-59	10%	Moderate
60-69	10%	Small
<50 or ≥70	-----	Insufficient evidence

- Consider patient risk of bleeding when deciding whether to recommend aspirin. Risk factors include: **older age, male sex, GI ulcers, anticoagulation, uncontrolled hypertension**
- Aspirin use for at least 5-10 years can also reduce the incidence of colorectal cancer

# Calculating cardiovascular risk for primary prevention

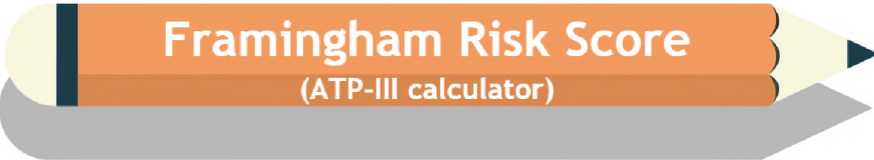
The 2013 ACC/AHA ASCVD risk calculator is the most recent tool for assessing patients' risk of CV endpoints. The calculator incorporates race into the risk assessment and focuses on evidence from randomized control trials.<sup>6</sup>

For interactive calculators, up-to-date statistics, and more information on this initiative, visit our website:  
<http://ophic.ouhsc.edu/rpr>



**ASCVD Calculator**

Several other validated tools can be used to identify patients most likely to benefit from ASA.<sup>7,8,9</sup>



**Framingham Risk Score**  
(ATP-III calculator)

Uses risk factors of age, sex, lipids, hypertension, and smoking.



**Framingham Risk Score**  
(Global CVD)

+ Diabetes mellitus



**Reynolds Risk Score**

+ C-reactive protein (CRP)  
+ Family history

## References

1. Centers for Disease Control and Prevention. Preventable Deaths from heart disease and stroke. <http://www.cdc.gov/vitalsigns/HeartDisease-Stroke/index.html>. September 2013.
2. Antithrombotic Trialists C. Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. *Bmj*. Jan 12 2002;324(7329):71-86.
3. Bartolucci AA, Tendra M, Howard G. Meta-analysis of multiple primary prevention trials of cardiovascular events using aspirin. *Am J Cardiol*. 2011;107(12):1796-1801.
4. Seshasai SR, Wijesuriya S, Sivakumaran R, et al. Effect of aspirin on vascular and nonvascular outcomes: meta-analysis of randomized controlled trials. *Arch Intern Med*. 2012;172(3):209-216.
5. Bibbins-Domingo K, on behalf of the U.S. Preventive Services Task Force. Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med*. [Epub ahead of print 12 April 2016] doi:10.7326/M16-0577
6. Stone NJ, Robinson JG, Lichtenstein AH, et al. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*. Jun 24 2014;129(25 Suppl 2):S1-45.
7. Ridker PM, Paynter NP, Rifai N, Gaziano JM, Cook NR. C-reactive protein and parental history improve global cardiovascular risk prediction: the Reynolds Risk Score for men. *Circulation*. Nov 25 2008;118(22):2243-2251, 2244p following 2251.
8. National Cholesterol Education Program Expert Panel on Detection E, Treatment of High Blood Cholesterol in A. Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) final report. *Circulation*. Dec 17 2002;106(25):3143-3421.
9. D'Agostino RB, Sr., Vasan RS, Pencina MJ, et al. General cardiovascular risk profile for use in primary care: the Framingham Heart Study. *Circulation*. Feb 12 2008;117(6):743-753.