

# Could Arthritis Be a Barrier to Physical Activity Among Persons with Diabetes or Cardiovascular Disease?

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CDC Arthritis Program



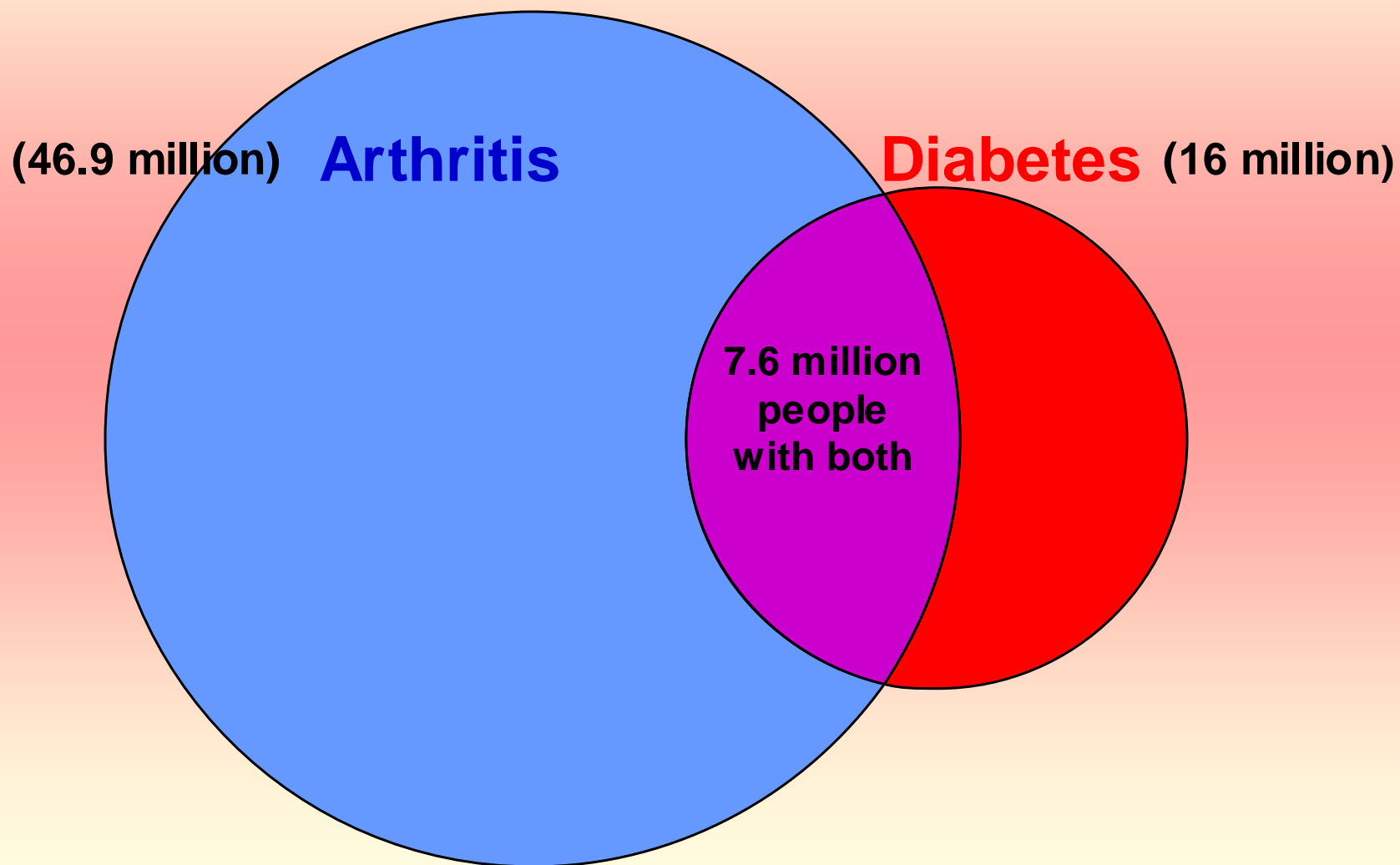
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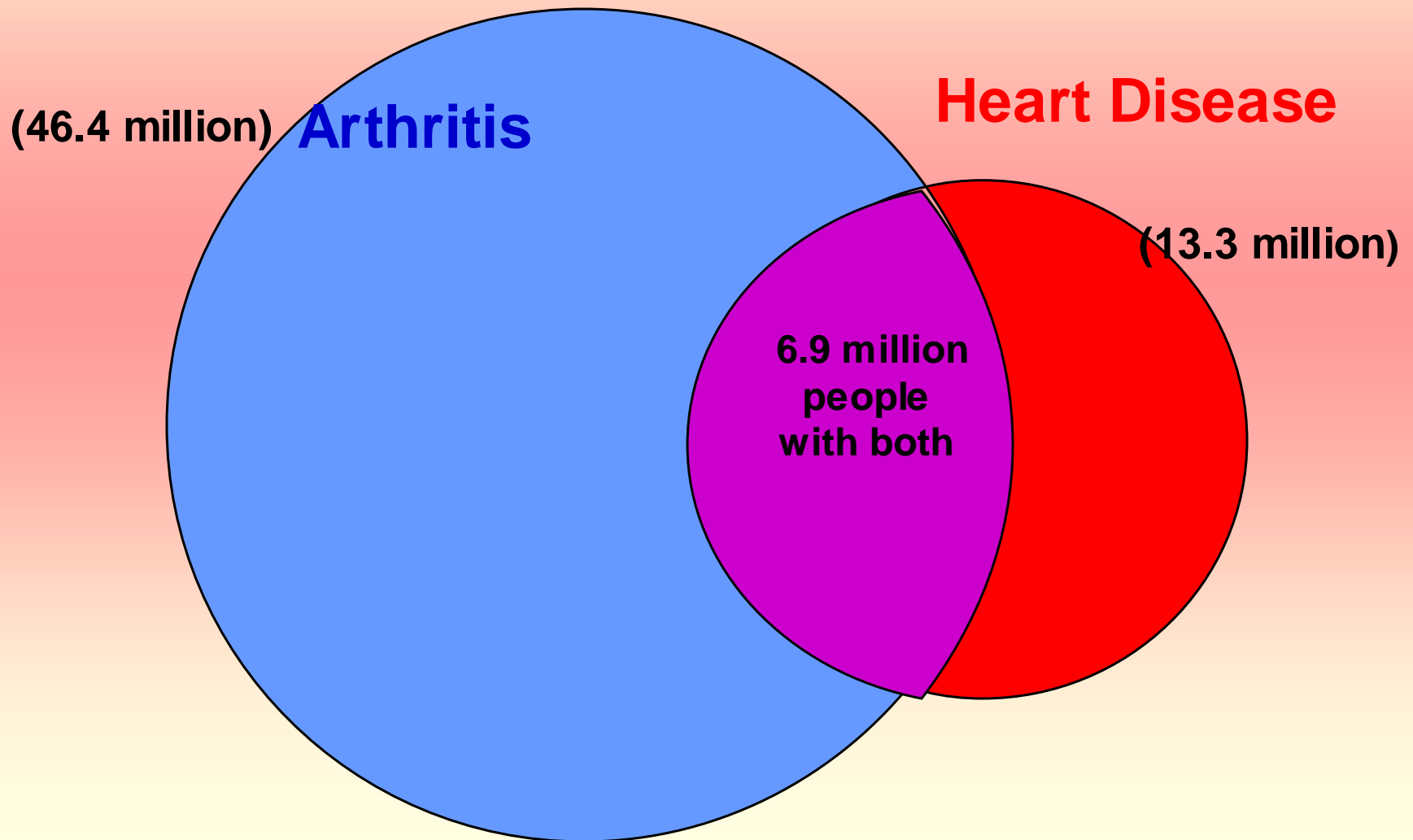
# Purpose

- Explain why arthritis is important to diabetes and cardiovascular health programs.
- Describe how arthritis could impact physical activity levels among people with diabetes, cardiovascular disease, and their risk factors.
- Use state level data to:
  - Examine state variation in prevalence of arthritis among people with diabetes, as an example.
  - Examine age and sex distributions for people with diabetes who also have arthritis
  - Examine state variation in physical inactivity among people with arthritis & diabetes.

# Almost Half of Adults with Diabetes also have Arthritis (NHIS, 2003-2005)



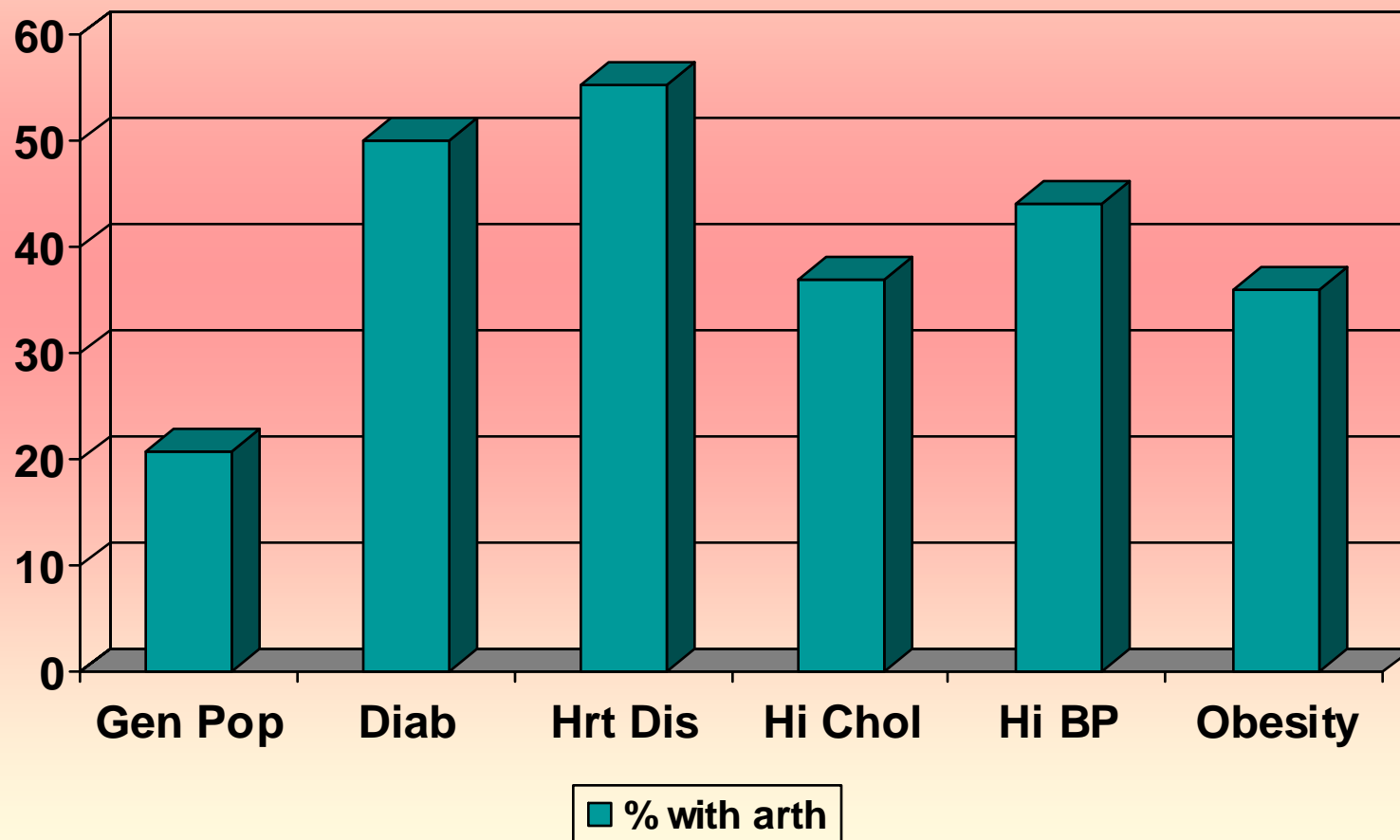
# Over Half of Adults with Heart Disease also Have Arthritis (NHIS, 2003-2005)



# Commonalities between Diabetes and Arthritis and Cardiovascular Disease

- Risk increases with age
- Many people have diabetes, cardiovascular disease and/or arthritis but have not been diagnosed

# Prevalence of arthritis among various population groups 2003-05 NHIS



# **Increased physical activity helps arthritis, diabetes, cardiovascular disease and their risk factors**

- Can reduce joint pain, improve function, and improve mental health in people with arthritis
- Can reduce blood glucose and risk factors for complications in people with diabetes
- Can help control body weight and help lower blood pressure and cholesterol

# Typical barriers to increased physical activity

## All Adults

- Lack of time
- Competing responsibilities
- Lack of motivation
- Unable to find an enjoyable activity
- No one to exercise with



# Arthritis-specific barriers to increased physical activity

## Adults with arthritis

- Concern about joint pain is the major barrier
- Fear of increased pain with activity
- Fear of additional joint damage
- Don't know which activities are "safe"

# Methods

- Combined 2003 & 2005 BRFSS data
- State-level analysis (state medians and ranges)
- by age, sex, race/ethnic group, and physical activity level

# BRFSS Questions

- **Case Definitions**

- Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?
- Have you ever been told by a doctor that you have diabetes?
- Has a doctor, nurse, or other health professional EVER told you that you had:
  - a heart attack, also called a myocardial infarction?
  - angina or coronary heart disease?

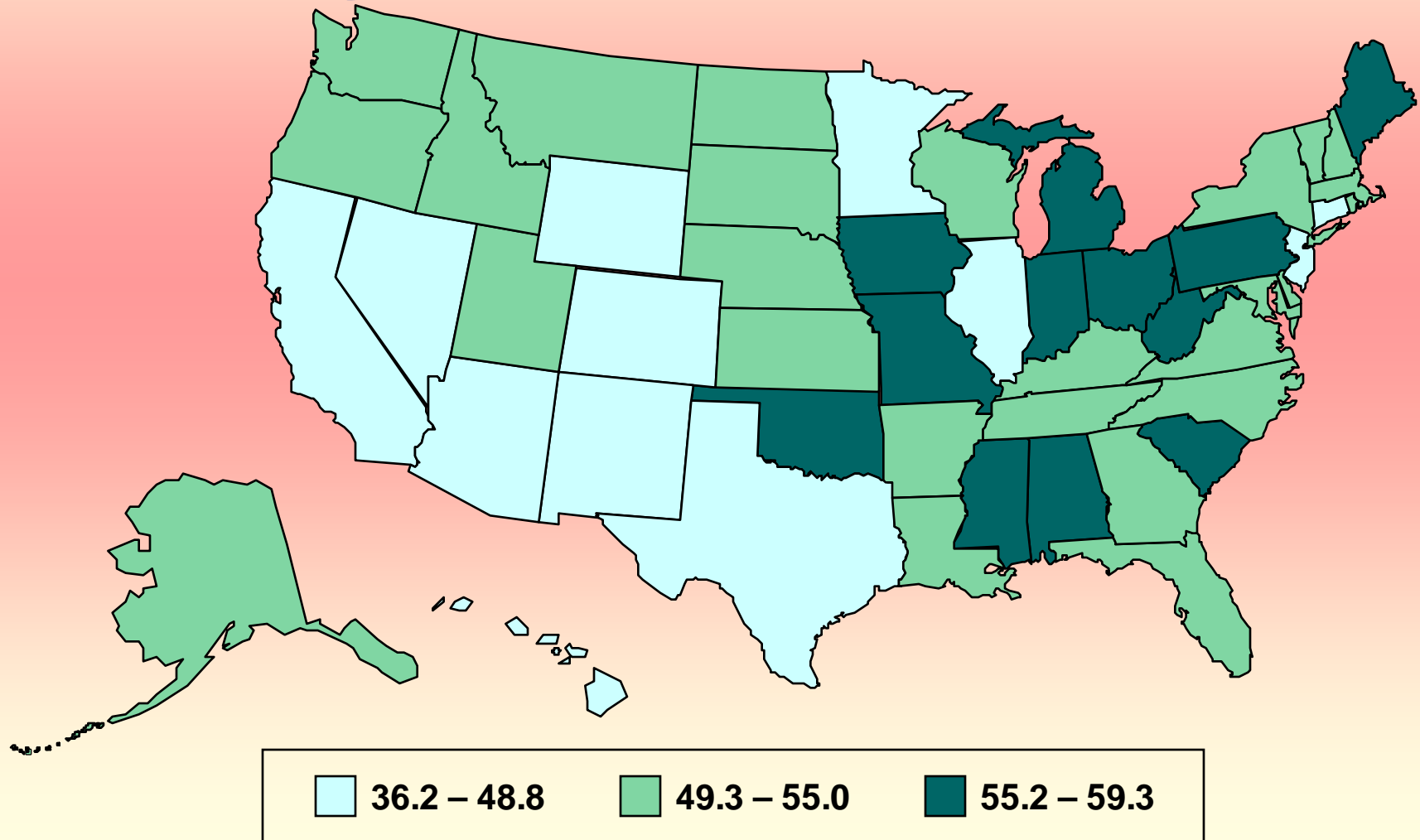
- **Limitations**

- Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?

# BRFSS Questions

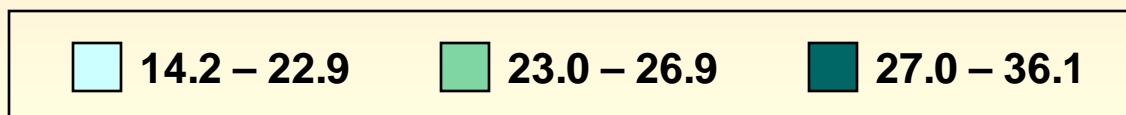
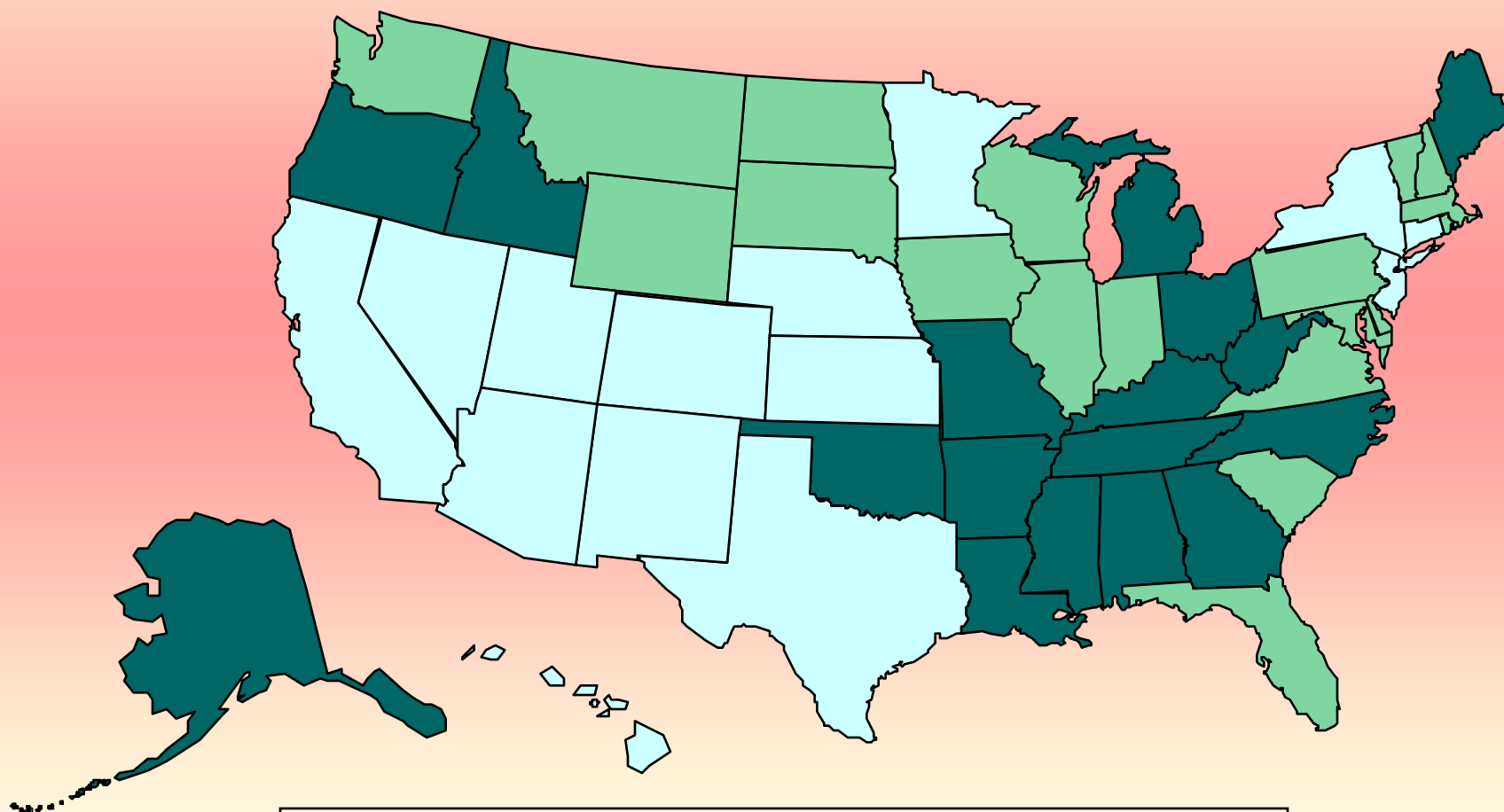
- **Physical Activity**
- Physical activity is estimated from a combination of 6 questions that puts people into one of 3 categories.
- We focus on those who are Inactive (no reported moderate or vigorous activity)
- Moving people from the inactive group to a higher level of activity provides most benefit

# Prevalence of Arthritis Among Adults with Diabetes Median 52.6% (Range 36.2% HI – 59.3% MO)

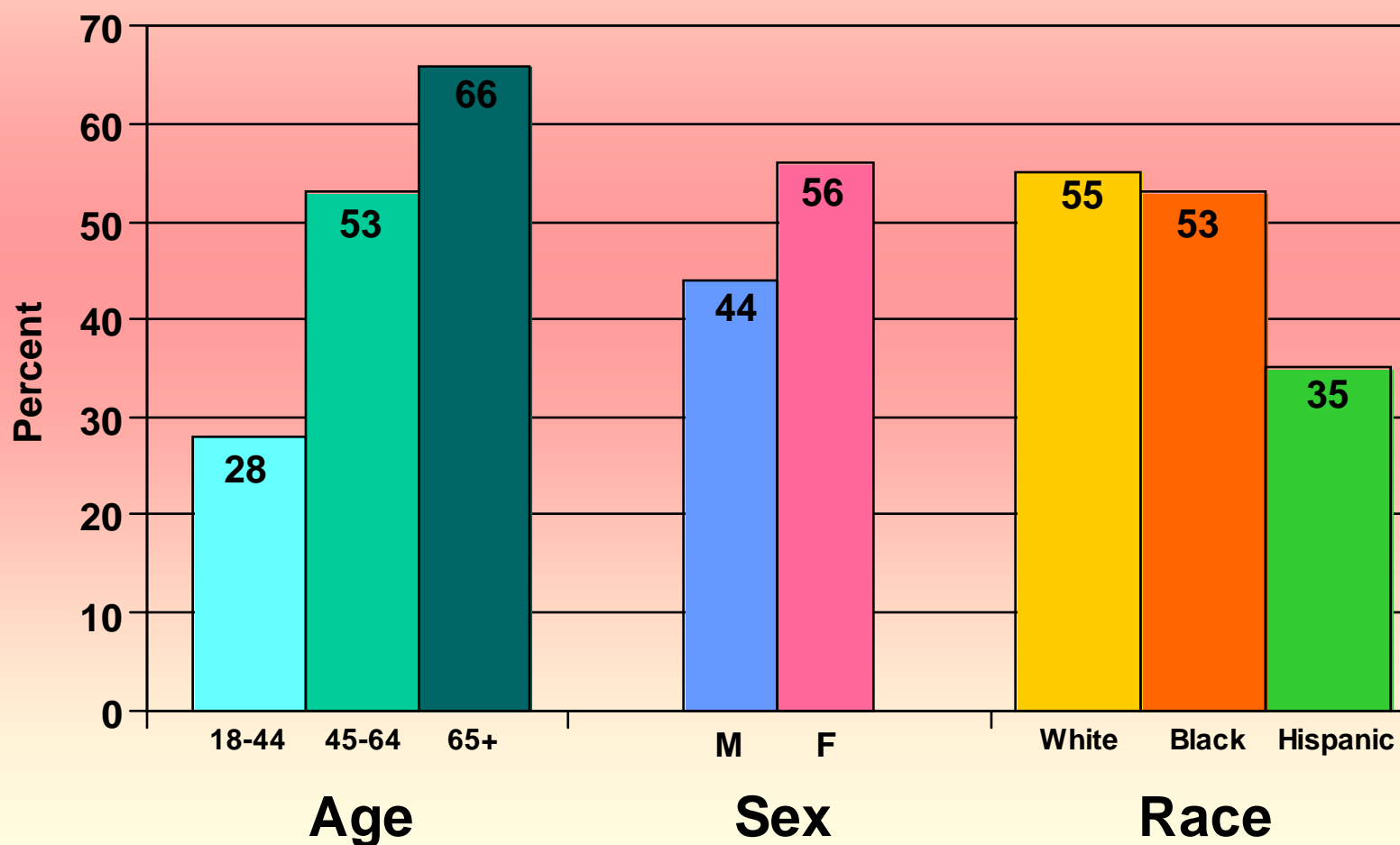


# Prevalence of Arthritis-attributable Activity Limitation Among Adults with Diabetes

## Median 25.2% (Range 14.2% HI – 36.1% WV)



# Arthritis Among People with Diabetes by Age, Sex, and Race (state medians)

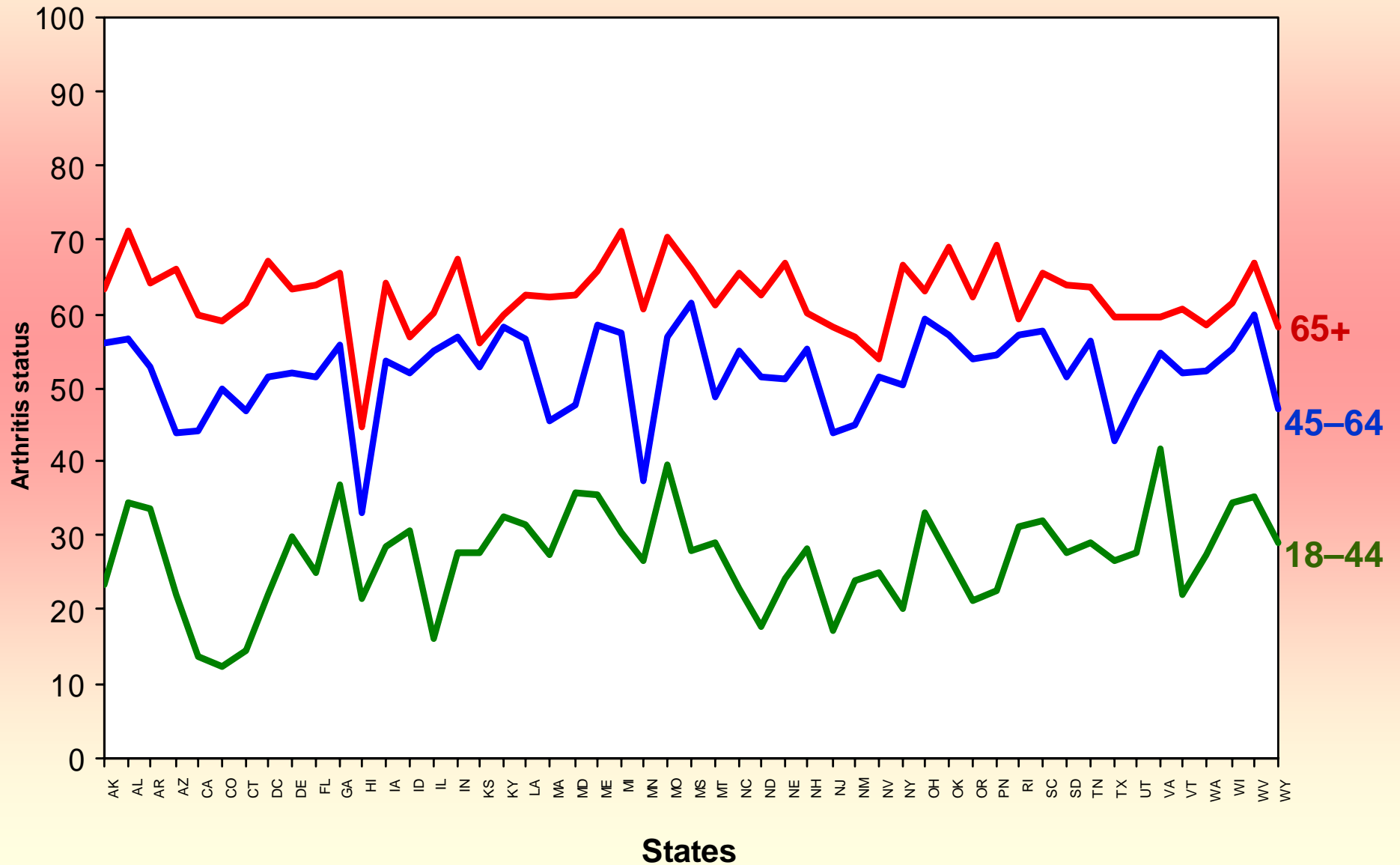


# Arthritis Prevalence Among Adults by Age Group

Age Group	Median all adults	Median and Range People with diabetes
18-44	11%	28% (13% CO – 42% VA)
45-64	36%	53% (33% HI – 61% MS)
65+	56%	63% (45% HI – 71% MS)

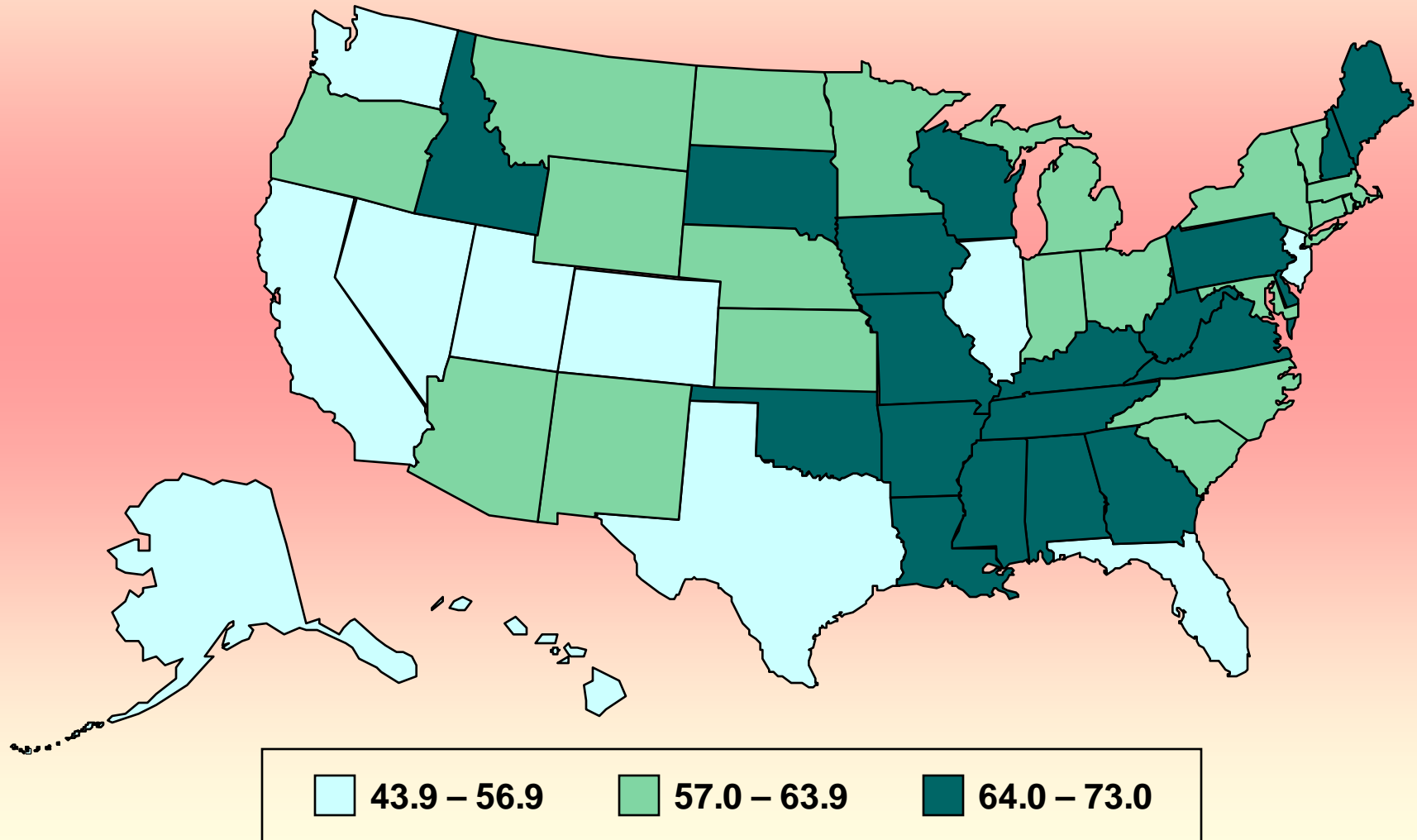


# Arthritis Prevalence Among Adults with Diabetes by Age



# Prevalence of Arthritis among Adults with Diabetes who are Inactive

Median 61.1% (Range 43.9% CA – 73% IA)



# Discussion

- Overall, arthritis affects about half of the adults with diabetes.
- About ¼ of adult with diabetes report arthritis-attributable activity limitation.
- Arthritis is especially prevalent among women and adults 45 years and older with diabetes.
- Arthritis prevalence among people with diabetes who are inactive is about 61%, with state estimates ranging from 44% to 73%.

# Public Health Implications

- Diabetes and cardiovascular disease programs could improve success in promoting physical activity by addressing arthritis as a potential barrier
- Both arthritis, diabetes, and cardiovascular disease programs are targeting many of the same people with a similar message: increase physical activity
- Evidence-based programs can help people with arthritis and other chronic diseases become more physically active.

# Evidence-based Exercise Programs Recommended for People with Arthritis

- Arthritis Foundation Aquatics Program
- Arthritis Foundation Exercise Program
- EnhanceFitness
- Any self-directed exercise will help – walking, biking, swimming

# What to take for arthritis pain?



**Take a walk. A bike ride. A swim.** Studies show that 30 minutes of moderate physical activity three or more days a week can relieve pain and help you move more easily. If 30 minutes at once is too much, try 10 or 15 minutes a few times a day. To make it fun, invite a friend or family member to join you. Stick with it, and in just four to six weeks you could be hurting less and feeling better.

**Physical Activity. The Arthritis Pain Reliever.**

Call [1-800-283-7800](tel:1-800-283-7800) to learn more.

A MESSAGE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION • THE ARTHRITIS FOUNDATION •  
THE DEPARTMENT OF HEALTH & HUMAN SERVICES



# BUENOS DÍAS, ARTRITIS.

## HOY, NO NOS VENCERÁS.



Los estudios indican que 30 minutos diarios de actividad física por lo menos tres veces por semana permiten aliviar el dolor provocado por la artritis y aumentar la movilidad. Usted comenzará a sentirse mejor en muy pocas semanas, incluso si hace ejercicio por períodos de 10 minutos tres veces al día. Camine, haga ciclismo, natación o elija una actividad física que acelere su ritmo cardiaco. Y no se deje vencer por la artritis. Si desea más información, llámenos al 1-800-283-7800.

[www.cdcarthritis.gov](http://www.cdcarthritis.gov)



# Self-management Education Programs for People with Arthritis

- Arthritis Foundation Self-Help Program
- Chronic Disease Self Management Program



Many of CDC's State Arthritis Programs are partnering with other chronic disease programs to promote increased physical activity and self-management.

- CDC is moving towards more integrated chronic disease programs at the state level.
  
- Examples of state-program collaboration:
  - Kentucky Arthritis Program and Physical Activity and Nutrition Program are working together to expand the reach of multiple evidence based interventions through their local health department structure.
  
  - Michigan "Partners on the Path" Arthritis Program is involved in a statewide initiative to expand the reach of Chronic Disease Self Management Program (CDSMP) through Area Agencies on Aging (AAAs) and the Diabetes Outreach Network (DON).

# Conclusion

- State-level diabetes and arthritis programs may reach more people and more effectively reach target groups to increase physical activity by working together.
- Program Integration makes sense in this case



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# Questions?



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