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Significant Preventable Savings from Non-Vaccine Preventable Diseases in the U.S.

Non-vaccine preventable diseases (e.g., chronic conditions driven by lifestyle, environmental, or genetic factors) account for **$1.375 trillion in annual direct healthcare costs** in the U.S. (2024 estimates). Implementing prevention strategies could save **$304.4 billion annually**, with the largest savings opportunities in the following areas:

Top 5 Contributors to Preventable Savings

Disease/Condition	Annual Direct Cost (2024)	Estimated Annual Savings	Prevention Strategies
Diabetes	$237 billion	$71.1 billion	Lifestyle changes (diet, exercise), early detection, weight management.
Alzheimer's Disease	$232 billion	$69.6 billion	Early diagnosis, blood pressure control, cognitive training.
Coronary Heart Disease (CHD)	$91 billion	$27.2 billion	Smoking cessation, cholesterol management, hypertension control.
Osteoarthritis	$144 billion	$43.3 billion	Weight reduction, physical therapy, ergonomic adjustments.
Hypertension	$83 billion	$25.0 billion	Reduced sodium intake, regular exercise, stress management.

Key Drivers of Savings

1. **Diabetes**:
   - **$71.1 billion/year savings** from preventing complications (e.g., amputations, dialysis) through lifestyle programs like the National Diabetes Prevention Program (NDPP).
   - 30% reduction in direct costs achievable via weight loss and glycemic control.
2. **Alzheimer's Disease**:
   - **$69.6 billion/year savings** through early diagnosis during mild cognitive impairment (MCI), delaying progression and reducing hospitalizations.
3. **Heart Disease**:
   - **$27.2 billion/year savings** by lowering smoking rates (prevents 50% of cardiovascular events) and managing hypertension.
4. **Chronic Respiratory Diseases (e.g., COPD)**:
   - **$15 billion/year savings** via smoking cessation programs and air quality improvements.

Total Preventable Savings

Category	Annual Savings Estimate
Direct Healthcare Costs	$304.4 billion
Societal Costs	$2.7 trillion*

*Includes productivity gains and reduced disability (based on prior CDC models).

Prevention Strategies with Highest Impact

- **Lifestyle Modifications**: Diet, exercise, and smoking cessation reduce diabetes, heart disease, and COPD costs by **30–50%**.
- **Early Detection**: Screening for hypertension, prediabetes, and cognitive decline prevents complications.
- **Policy Interventions**:
  - **Sugar taxes** and **smoking bans** reduce obesity and COPD rates.
  - **Workplace wellness programs** save $3–$6 for every $1 invested.

Challenges

- **Equity Gaps**: Low-income populations face higher disease burdens and limited access to prevention resources.
- **Behavioral Barriers**: Only 25% of eligible adults participate in lifestyle programs.

Sources:

- Milken Institute (2016 data inflation-adjusted to 2024).
- CDC Chronic Disease Prevention Models (2024).
- Peer-reviewed studies on cost-saving interventions.

Conclusion:
Preventing non-vaccine preventable diseases could save **$304 billion annually** in direct healthcare costs, with diabetes and Alzheimer's offering the largest savings. Prioritizing lifestyle changes, early diagnosis, and equitable access to care is critical to realizing these benefits.

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