Public Health & Prevention:
Supporting Healthy Aging in Los Angeles County

Senior Center Directors’ Knowledge Fair
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Los Angeles County Department of Public Health
Los Angeles County Department of Public Health

• Vision
  – Healthy People in Healthy Communities

• Mission:
  – To protect health, prevent disease, and promote health and well-being

• Public Health stats:
  – Annual budget of over $850 million
  – 39 programs; 14 Health Centers
  – Nearly 4,000 staff members serving 9.8 million L.A. County residents
Major Public Health Responsibilities

- Preventing and controlling disease
- Promoting good health
- Promoting healthy and safe physical and social environments
Public Health in the Health Reform Era

• Landmark policy changes provide new opportunities for prevention:
  ✓ Expanded access to coverage
  ✓ No-cost preventive services
  ✓ Public health investments

• We must maximize those opportunities given the:
  – growth of our aging population;
  – persistence of health inequities; and
  – burden of chronic conditions.
The Aging Population

• In LA County, people aged 65+ are projected to grow from 1.1 million to 2.2 million from 2010 to 2030.

• By 2030, about two-thirds of the 65+ population will be Latino, Asian, and African-American.

Kao, DT & Lloyd, DA. *Los Angeles Population Change and Healthy Aging. Los Angeles, CA: USC Roybal Institute on Aging, 2010*
Life Expectancy at Birth by Sex and Race/Ethnicity, LA County, 2011

- Total: Male 78.9, Female 84.3
- White: Male 78.5, Female 83.8
- Latino: Male 80.3, Female 85.3
- African American: Male 72.0, Female 79.1
- Asian/Pacific Islander: Male 83.6, Female 87.9

Sources: 2010 Linked Death Files, Los Angeles County Department of Public Health, Data Collection and Analysis (DCA) Unit. 2009 to 2010 Linked Birth Files, Los Angeles County Department of Public Health, Data Collection and Analysis (DCA) Unit. July 1, 2010 Population Estimates, prepared for County of Los Angeles, Internal Services Department, Social Services Systems Division, released 1/26/2013.
# Trends in the Leading Causes of Death

Los Angeles County, 2001-2010

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>2001</th>
<th>2010</th>
<th>% Change from 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>220</td>
<td>138</td>
<td>-37%</td>
</tr>
<tr>
<td>Stroke</td>
<td>56</td>
<td>36</td>
<td>-36%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>42</td>
<td>33</td>
<td>-21%</td>
</tr>
<tr>
<td>Emphysema</td>
<td>36</td>
<td>30</td>
<td>-17%</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>12</td>
<td>25</td>
<td>108%</td>
</tr>
<tr>
<td>Pneumonia &amp; influenza</td>
<td>32</td>
<td>22</td>
<td>-31%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>24</td>
<td>21</td>
<td>-13%</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>18</td>
<td>14</td>
<td>-22%</td>
</tr>
<tr>
<td>Chronic liver disease</td>
<td>12</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>Breast cancer (female)</td>
<td>24</td>
<td>21</td>
<td>-13%</td>
</tr>
</tbody>
</table>

Source: Office of Health Assessment and Epidemiology, Los Angeles County Department of Public Health
# Leading Causes of Death, Los Angeles County, by Gender, 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cause of Death</td>
<td>No. of</td>
<td>Premature</td>
<td>Cause of Death</td>
<td>No. of</td>
<td>Premature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deaths</td>
<td>Death</td>
<td></td>
<td>Deaths</td>
<td>Death</td>
</tr>
<tr>
<td>Rank</td>
<td></td>
<td></td>
<td>Rank</td>
<td></td>
<td></td>
<td>Rank</td>
</tr>
<tr>
<td>1.</td>
<td>Coronary heart disease</td>
<td>6,651</td>
<td>1</td>
<td>Coronary heart disease</td>
<td>5,984</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Lung cancer</td>
<td>1,602</td>
<td>7</td>
<td>Stroke</td>
<td>1,873</td>
<td>4</td>
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<tr>
<td>3.</td>
<td>Stroke</td>
<td>1,405</td>
<td>8</td>
<td>Alzheimer’s Disease</td>
<td>1,491</td>
<td>41</td>
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<tr>
<td>4.</td>
<td>Emphysema/COPD</td>
<td>1,246</td>
<td>14</td>
<td>Emphysema/COPD</td>
<td>1,376</td>
<td>15</td>
</tr>
<tr>
<td>5.</td>
<td>Diabetes</td>
<td>993</td>
<td>9</td>
<td>Lung cancer</td>
<td>1,339</td>
<td>3</td>
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<tr>
<td>6.</td>
<td>Pneumonia/flu</td>
<td>910</td>
<td>21</td>
<td>Breast cancer</td>
<td>1,109</td>
<td>2</td>
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<tr>
<td>7.</td>
<td>Liver disease</td>
<td>787</td>
<td>5</td>
<td>Pneumonia/flu</td>
<td>1,054</td>
<td>22</td>
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<tr>
<td>8.</td>
<td>Prostate cancer</td>
<td>766</td>
<td>25</td>
<td>Diabetes</td>
<td>901</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>Alzheimer’s Disease</td>
<td>751</td>
<td>44</td>
<td>Colorectal cancer</td>
<td>662</td>
<td>10</td>
</tr>
<tr>
<td>10.</td>
<td>Colorectal cancer</td>
<td>663</td>
<td>11</td>
<td>Hypertension</td>
<td>547</td>
<td>24</td>
</tr>
</tbody>
</table>
# Leading Causes of Death by Race/Ethnicity, Los Angeles County, 2010

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Number of deaths</th>
<th>Age-adjusted death rate</th>
<th>#1 cause</th>
<th>#2 cause</th>
<th>#3 cause</th>
<th>#4 cause</th>
<th>#5 cause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>28,738</td>
<td>667 per 100,000</td>
<td>Coronary heart disease</td>
<td>Emphysema/COPD</td>
<td>Lung cancer</td>
<td>Stroke</td>
<td>Alzheimer’s disease</td>
</tr>
<tr>
<td></td>
<td>6,845</td>
<td>151 per 100,000</td>
<td>1,743</td>
<td>1,655</td>
<td>1,534</td>
<td>1,509</td>
<td>1,444</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13,751</td>
<td>529 per 100,000</td>
<td>Coronary heart disease</td>
<td>Stroke</td>
<td>Diabetes</td>
<td>Liver disease</td>
<td>Lung cancer</td>
</tr>
<tr>
<td></td>
<td>2,555</td>
<td>111 per 100,000</td>
<td>780</td>
<td>690</td>
<td>587</td>
<td>441</td>
<td>441</td>
</tr>
<tr>
<td>Black</td>
<td>7,438</td>
<td>891 per 100,000</td>
<td>Coronary heart disease</td>
<td>Stroke</td>
<td>Lung cancer</td>
<td>Diabetes</td>
<td>Emphysema/COPD</td>
</tr>
<tr>
<td></td>
<td>1,721</td>
<td>208 per 100,000</td>
<td>446</td>
<td>433</td>
<td>294</td>
<td>289</td>
<td>237</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>6,343</td>
<td>429 per 100,000</td>
<td>Coronary heart disease</td>
<td>Stroke</td>
<td>Lung cancer</td>
<td>Pneumonia/Influenza</td>
<td>Diabetes</td>
</tr>
<tr>
<td></td>
<td>1,451</td>
<td>98 per 100,000</td>
<td>501</td>
<td>400</td>
<td>296</td>
<td>237</td>
<td>237</td>
</tr>
<tr>
<td>Los Angeles County Total*</td>
<td>56,538</td>
<td>615 per 100,000</td>
<td>Coronary heart disease</td>
<td>Stroke</td>
<td>Lung cancer</td>
<td>Emphysema/COPD</td>
<td>Alzheimer’s disease</td>
</tr>
<tr>
<td></td>
<td>12,635</td>
<td>138 per 100,000</td>
<td>3,278</td>
<td>2,941</td>
<td>2,622</td>
<td>2,242</td>
<td>2,242</td>
</tr>
</tbody>
</table>

*Total includes persons of other or unknown race/ethnicity.
Percent of Adults Diagnosed with Hypertension by Age Group, Los Angeles County, 2011

Source: Los Angeles County Health Survey, 2011
Percent of Adults Diagnosed with Diabetes by Age Group, Los Angeles County, 2011

* Percent of adults (18+ yrs) diagnosed with hypertension, LACHS 2011:

Source: Los Angeles County Health Survey, 2011
Prevalence of Obesity and Diabetes Among Adults in Los Angeles County, 1997-2011

Year:
- 97: 5.7%
- 98: 6.7%
- 99: 7.0%
- 00: 7.0%
- 01: 14.3%
- 02: 18.9%
- 03: 20.9%
- 04: 22.2%
- 05: 23.6%
- 06: 9.5%
- 07: 8.7%
- 08: 8.1%
- 09: 8.1%
- 10: 8.7%
- 11: 9.5%

Prevalence (%):
- Obesity: 5.7% to 23.6%
- Diabetes: 6.7% to 9.5%
## Economic burden of diabetes in Los Angeles County, 2007 and 2030

<table>
<thead>
<tr>
<th>Type</th>
<th>Estimated Population</th>
<th>LA County Total Costs*</th>
<th>In the U.S. Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>642,000</td>
<td>780,214</td>
<td>$6.4 bil</td>
</tr>
</tbody>
</table>

Projected population growth in LA County: 10.2 million (2007) to 11.7 million (2030); 7.4 million adults in 2007 vs. 8.9 million adults in 2030. Population projections accounted for migration, mortality, fertility trends, no natural catastrophes, etc.

* Estimated total costs include direct medical expenditures, lost productivity, and other indirect costs.

Source: Los Angeles County DPH; Multiple data sources used including data from Calif. Dept of Finance and CHIS.
The Guide to Community Preventive Services
Recommendations and Findings: Diabetes Prevention & Control

<table>
<thead>
<tr>
<th>Healthcare system level interventions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Case management interventions to improve glycemic control</td>
<td>Recommended</td>
</tr>
<tr>
<td>Disease management programs</td>
<td>Recommended</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-management education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In community gathering places – adults with Type 2 Diabetes</td>
<td>Recommended</td>
</tr>
<tr>
<td>In the home – children and adolescents with Type 1 Diabetes</td>
<td>Recommended</td>
</tr>
<tr>
<td>In the home – people with Type 2 Diabetes</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>In recreational camps</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>In worksites</td>
<td>Insufficient Evidence</td>
</tr>
<tr>
<td>In school settings</td>
<td>Insufficient Evidence</td>
</tr>
</tbody>
</table>

www.thecommunityguide.org/diabetes/
Health Factors

Health Outcomes

Mortality (50%)

Morbidity (50%)

Health behaviors (30%)

Clinical care (20%)

Social & economic factors (40%)

Physical environment (10%)

Tobacco use

Diet & exercise

Alcohol use

Unsafe sex

Access to care

Quality of care

Education

Employment

Income

Family & social support

Community safety

Environmental quality

Built environment

50%: Underlying Determinants of Health
Framework for Action

Representative model as applied to type 2 diabetes

Society
- Walkable and bikeable communities
- Menu labeling
- Affordable produce
- Enhanced school-based physical education
- Behavioral interventions to reduce screen time

Individual
- Worksite programs for overweight and obesity
- Screen individuals with hypertension for diabetes
- Screen adults for obesity and offer intensive interventions

Health State
- Well
- Prediabetes
- Diabetes
- Dead

Primary Care
- Social support interventions in community settings
- Self-management education (home and community)

Tertiary Care
- Case management and disease management
- Control blood pressure, lipid levels, and smoking
- Dialysis

Social and physical environment
Clinical care and social services

Mortality Due to Alzheimer's Disease, Los Angeles County, 2000-2010.

Source: 2000-2010 Linked Death Files, Los Angeles County Department of Public Health, Data Collection and Analysis (DCA) Unit.
Mortality Due to Alzheimer's Disease by Race/Ethnicity, Los Angeles County, 2010.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Mortality Rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian/Pacific Islander</td>
<td>11.6</td>
</tr>
<tr>
<td>Black</td>
<td>24.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>19.6</td>
</tr>
<tr>
<td>White</td>
<td>30.7</td>
</tr>
</tbody>
</table>

Source for mortality data: 2010-2010 Linked Death Files, Los Angeles County Department of Public Health, Data Collection and Analysis (DCA) Unit.
Caregiving for People with Alzheimer’s Disease

- Most people with dementia live at home.
- 75% of their family caregivers are women.
- About 1.1 million Californians provide unpaid care for a person with Alzheimer’s disease or dementia.
- At least 25% of California’s caregivers have been providing care for 6 years or more.

Source: Alzheimer’s Association
Alzheimer’s Disease: What can be done?

- Public education to increase public awareness of and understanding about Alzheimer’s disease
- If symptoms, early detection and treatment is key
- Although scientific results are mixed, lifestyle choices and risk reduction appear to matter:
  - Physical activity
  - Ongoing learning (keeping your mind active)
  - Healthy diet
  - Blood pressure control
  - Cholesterol control
  - Preventing traumatic brain injury
The Impact of Falls Among Older Adults

- Nationally, an estimated 1 in 3 adults age 65+ fall each year. This equates to approx. 373,000 in LA County alone.
- In LA County in 2011 (adults 65+): 
  - 35,509 ED visits for a fall (treated and released)
  - 20,013 nonfatal hospitalizations
  - 253 deaths
- Fall hospitalizations in 2011 alone cost LA County an estimated $1.3 billion
- White women 65+ are at highest risk of fall injury and death
- In 2012, an estimated 6% of patients with at least one fall hospitalization had multiple hospital visits for falls.

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. Falls among older adults: An overview
Non-Fatal Fall Hospitalization Rates by Age Group, LA County Residents, 2011

Data Source: Office of Statewide Health Planning and Development Hospital Discharge Data
Obtained from: CA Dept of Public Health, Safe & Active Communities Branch: http://epicenter.cdph.ca.gov
Non-Fatal Fall Hospitalization Rates Among LA County Residents 65+ Years Old

Data Source: Office of Statewide Health Planning and Development Hospital Discharge Data
Obtained from: CA Dept of Public Health, Safe & Active Communities Branch: http://epicenter.cdph.ca.gov
Falls – What Can Be Done?

• Educate the public that falls are preventable
• Provide tools to clinicians and care providers
  – Screen for fall risk as part of routine patient care
  – Review medications for potential side effects
  – Encourage regular physical activity, such as strength and balance training
• CDC Compendium of Effective Fall Interventions
  – Multi-faceted interventions
  – Exercise based interventions (I.e., Tai-Chi)
  – Improve home and built environment safety (supportive devices, remove clutter, improve lighting)
• Improve local surveillance of fall prevalence and linkage to services.
Emergency Preparedness and Seniors

- Public Health Emergency Preparedness (PHEP) Grant
  - Capability 1: Community Preparedness
  - Capability 2: Community Recovery

- These capabilities require engagement and collaboration with organizations that serve older adult populations

- Outreach and engagement with all community sectors is emphasized in our Emergency Preparedness and Resilience Community Coalition work
Senior Emergency Preparedness Action Committee (SEPAC)

• DPH currently chairs the SEPAC committee
• Mission: To improve outcomes related to emergency preparedness and response among LA’s older adult population
• SEPAC identifies and evaluates projects and plans to improve emergency preparedness among frail senior populations and people with disabilities
• Members include:
  – County of Los Angeles: Department of Public Health, Department of Parks and Recreation, Department of Public Social Services, Department of Mental Health, Chief Executive Office – Office of Emergency Management, Community and Senior Services
  – City of Los Angeles: Department of Aging, Department of Recreation and Parks. Emergency Management Department
  – Personal Assistance Services Council (PASC)
  – Housing Authority of City of Los Angeles (HACLA)
  – American Red Cross
ROAD-MAP Resource Package

- Resource package in English and Spanish for safety and preparedness
- Specifically tailored for senior audience -- toolkit of safety and preparedness materials: DVD, tri-fold worksheet, speakers’ notes
- Highlights steps to gather enough prescription medication for personal disaster supply
- Piloted with senior centers in 4 LA County SPAs

Ongoing Efforts:
- Community outreach events
- Coalition activities for seniors to support emergency preparedness

More information: Stella Fogelman
sfogelman@ph.lacounty.gov
Reducing the Toll of Chronic Disease:
The Community Transformation Grant

1. Tobacco free living
2. Active living and healthy eating
3. High impact clinical preventive services
4. Social and emotional wellness
5. Healthy and safe physical environments
For Healthy Aging, Many Sectors Play a Role

- Community
- Clinical care delivery system
- Government agencies
- Employers and Businesses
- Education Sector
- Media

Health Improvement Infrastructure

Adapted from For the Public’s Health: The Role of Measurement in Action and Accountability; Institute of Medicine, 2011
Reduced risk for heart disease and diabetes

- Regular physical activity
- Increased cardiovascular strength
- Decreased cholesterol
- Heart healthy diet
- Decreased blood pressure
- Decreased obesity
- Decreased sodium

Factors contributing to reduced risk:

- Tobacco control ordinances
- Air quality improvements
- Active transportation
- Community opportunities for physical activity
- Fluoridation
- Depression screening and treatment
- Smoking cessation programs
- Alcohol and drug abuse detection and brief intervention
- Early smoking cessation; uses stress reduction techniques
- Controls blood pressure & cholesterol with behavioral and Rx intervention
- Workplace wellness programs
- Social support interventions
- Regular medical check-ups and age appropriate screenings
- Increased green space and walkability

Additional initiatives:

- Safer communities
- Economic and educational opportunities
- School-based physical activity
- Menu labeling
- Local farmer’s markets
- Health consumer information and protection
- Active transportation
- Safer communities
- Economic and educational opportunities
- School-based physical activity
- Menu labeling
- Local farmer’s markets
- Health consumer information and protection
Challenges & Opportunities

As “Baby Boomers” begin utilizing the health care and social services system more intensively, we must:

- Promote age-appropriate screenings (e.g. colonoscopies, osteoporosis, depression and isolation) and services (e.g. evidence-based health promotion programs)
- Improve consumer health literacy and consumer protection
- Bolster cultural competencies of providers and allied health professionals
- Ensure adequate professional capacity to meet demand
Public Health’s Challenges & Opportunities

To improve physical, social and economic environments that impact health outcomes, we must:

— Strengthen programs, services and policies that prevent chronic disease;
— Prioritize vulnerable populations;
— Strive for safe and healthy communities, with an aging-in-place focus;
— Encourage social cohesion and engagement;
— Advocate for improvements to public education, public housing, job training and job creation.
Moving Forward

• Creating environments for healthy aging requires *many sectors* to *work together*.

• Coordinating healthy aging initiatives in clinical, social service, public health and academic settings will be important for sustained improvements over time.

• People of all ages deserve healthy communities, quality clinical care, and environmental and ecological supports to make healthy lifestyle choices.
Healthy Aging Initiative

DPH is currently partnering with:

- UCLA Department of General Internal Medicine and Health Services Research
- UCLA Department of Geriatrics
- UCLA and USC CTSI
- USC Roybal Institute of Aging
- City of Los Angeles Department of Aging
- Los Angeles County Department of Community and Senior Services
- Los Angeles County Department of Public Health
- Los Angeles County Department of Health Services
- Aging Services Network
- Kaiser Permanente
- Partners in Care Foundation,
- American Heart Association and the American Dental Association (voluntary associations)