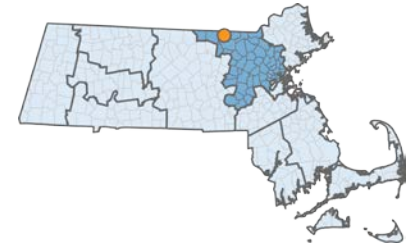# Pepperell (Middlesex)

Pepperell is a rural community situated 35 miles northwest of Boston adjacent to the New Hampshire border with 942 residents aged 65 or older. Pepperell is somewhat walkable with a walkscore of 63/100. Compared to state averages, older residents of Pepperell score better on these healthy aging indicators with lower rates of depression, rheumatoid arthritis/osteoarthritis, and hip fractures. However, older residents of Pepperell have higher rates of ischemic heart disease, congestive heart failure, and tooth loss. They are less likely to follow the health promotion step of having a shingles vaccine. Community resources to promote healthy aging include a Council on Aging and a recreation department.

POPULATION CHARACTERISTICS

		COMMUNITY ESTIMATE	STATE ESTIMATE
Total population all ages		11,497	6,547,629
Population 60 years or older as % of total population		14.2%	19.2%
Total population 60 years or older		1,624	1,249,723
Population 65 years or older as % of total population		8.3%	13.7%
Total population 65 years or older		942	891,303
% 65-74 years		63.3%	49.8%
% 75-84 years		31.6%	34.3%
% 85 years or older		5.1%	15.8%
Gender (65+ population)			
% female		56.2%	58.5%
Race/Ethnicity (65+ population)			
% White		98.9%	91.5%
% African American		0.0%	3.8%
% Asian		0.0%	2.7%
% Other		1.1%	2.1%
% Hispanic/Latino		1.5%	2.9%
Marital Status (65+ population)			
% married		58.7%	50.9%
% divorced/separated		22.8%	11.7%
% widowed		16.3%	30.2%
% never married		2.1%	7.3%
Education (65+ population)			
% with less than high school education		22.9%	20.4%
% with high school or some college		55.6%	54.5%
% with college degree		21.4%	25.1%
% of 65+ population living alone		26.9%	30.3%
% of 65+ population who speak only English at home		93.2%	83.4%
% of 65+ population who are veterans of military service		14.0%	11.5%
Age-sex adjusted 1-year mortality rate	B	3.6%	4.7%

HEALTHY AGING INDICATORS	BETTER / WORSE STATE RATE	COMMUNITY ESTIMATE	STATE ESTIMATE
Geographic Migration (65+ population)			
% moved within same county		0.7%	3.5%
% moved from different county in Massachusetts		0.0%	1.0%
% moved from different state		0.0%	0.7%
WELLNESS and PREVENTION			
% any physical activity within last month		72.4%	72.4%
% injured in a fall within last 3 months		4.9%	5.1%
% ever had hip fracture	B	2.3%	3.9%
% with self-reported fair or poor health status		25.0%	20.7%
% with 15+ physically unhealthy days last month		15.7%	14.0%
% with physical exam/check-up in past year		89.6%	90.2%
% flu shot past year		65.8%	67.8%
% pneumonia vaccine		64.4%	60.8%
% shingles vaccine	W	8.7%	14.9%
% cholesterol screening		95.0%	95.8%
% mammogram within last 2 years (women)		84.8%	85.4%
% colorectal cancer screening		66.0%	65.6%
Oral Health			
% with complete tooth loss	W	45.5%	35.9%
% with annual dental exam		74.9%	76.1%
# dentists per 100,000 persons (all ages)		88	85
NUTRITION/DIET			
% with 5 or more servings of fruit or vegetables per day		24.1%	24.9%
% obese		24.2%	22.6%
% high cholesterol		71.2%	73.6%
% current smokers		10.6%	9.1%
% excessive drinking		9.7%	9.2%
MENTAL HEALTH			
% with 15+ days poor mental health last month		10.0%	6.7%
% satisfied with life		96.5%	95.8%
% receiving adequate emotional support		80.3%	80.7%
% ever diagnosed with depression	B	24.9%	28.6%
CHRONIC DISEASE			
% with Alzheimer's disease or related dementias		13.3%	14.4%
% with diabetes		32.1%	32.1%
% with stroke		11.7%	12.6%
% with chronic obstructive pulmonary disease		24.6%	23.3%
% with asthma		12.1%	11.8%
% with hypertension		75.3%	77.5%

HEALTHY AGING INDICATORS	BETTER / WORSE STATE RATE	COMMUNITY ESTIMATE	STATE ESTIMATE
% ever had a heart attack		4.1%	5.0%
% with ischemic heart disease	W	49.9%	44.1%
% with congestive heart failure	W	29.2%	24.8%
% with atrial fibrillation	W	20.3%	16.1%
% with osteoarthritis/rheumatoid arthritis	B	44.2%	50.2%
% with osteoporosis		19.5%	21.7%
% with glaucoma		23.2%	25.1%
% with cataract	B	57.0%	65.7%
% women with breast cancer		11.1%	10.3%
% with colon cancer		2.6%	3.3%
% men with prostate cancer		14.4%	14.6%
% with lung cancer		2.8%	2.1%
% with hypothyroidism		15.7%	17.2%
% with anemia	B	42.2%	48.7%
% with benign prostatic hyperplasia	B	27.7%	40.9%
% with chronic kidney disease		21.4%	22.2%
Summary chronic disease measures			
% with 4+ chronic conditions		58.2%	61.5%
% with 0 chronic conditions	B	11.0%	7.8%
LIVING WITH DISABILITY			
% disabled for a year or more	W	37.2%	31.0%
Hearing impairment			
% 65-74 with hearing difficulty		2.0%	7.4%
% 75+ with hearing difficulty		20.2%	21.2%
Vision impairment			
% 65-74 with vision difficulty		0.0%	3.2%
% 75+ with vision difficulty		11.6%	9.3%
Cognition impairment			
% 65-74 with cognition difficulty		1.1%	4.7%
% 75+ with cognition difficulty		4.9%	12.1%
Ambulatory impairment			
% 65-74 with ambulatory difficulty		10.4%	12.9%
% 75+ with ambulatory difficulty		17.6%	29.4%
Self-care impairment			
% 65-74 with self-care difficulty		6.7%	3.7%
% 75+ with self-care difficulty		15.0%	12.2%
Independent living impairment			
% 65-74 with independent living difficulty		2.4%	7.2%
% 75+ with independent living difficulty		15.6%	24.3%

HEALTHY AGING INDICATORS

HEALTHY AGING INDICATORS	BETTER / WORSE STATE RATE	COMMUNITY ESTIMATE	STATE ESTIMATE
ACCESS TO CARE			
Medicare (65+ population)			
% Medicare managed care enrollees		29.1%	21.2%
% dually eligible for Medicare and Medicaid		9.2%	15.9%
% with a regular doctor		96.3%	96.2%
% did not see doctor when needed due to cost		2.0%	3.7%
# of primary care providers (within 5 miles)		6	11,897
# of hospitals (within 5 miles)		0	69
# of nursing homes (within 5 miles)		1	418
# of home health agencies (in same town)		19	210
SERVICE UTILIZATION			
Physician visits per year	*	8.8	7.6
Emergency room visits/1000 persons 65+ years per year		634	646
Part D monthly prescription fills per person per year		50.4	52.7
Home health visits per year		4.5	4.2
Durable medical equipment claims per year		2.3	2.1
Inpatient hospital stays/1000 persons 65+ years per year		309	354
Inpatient hospital readmissions (as % of admissions)		17.4%	17.8%
Skilled nursing facility stays/1000 persons 65+ years per year		102	117
COMMUNITY VARIABLES & CIVIC ENGAGEMENT			
Air Pollution/Air Quality Index			
Annual # of unhealthy days for older adults		0	NA
Walkability of Community			
Walkability score (0-100)	Somewhat Walkable	63.0	52.6
# of registered voters (age 18+)		8,202	4,342,841
Voter participation rate in 2012 presidential election (age 18+)		79.6%	73.3%
SAFETY			
Violent crime rate / 100,000 persons		216	428
Property crime rate / 100,000 persons		1,599	2,259
# of motor vehicle fatalities involving adult age 60+/ town		1	484
# of motor vehicle fatalities involving adult age 60+/county		87	484
ECONOMIC VARIABLES			
Poverty (65+ Population)			
% with income below the poverty level past year		6.8%	9.3%
Household income (65+ householder)			
% households with annual income < $20,000		22.8%	28.4%
% households with annual income $20,000-49,999		39.5%	34.1%
% households with annual income > $50,000		37.7%	37.5%

HEALTHY AGING INDICATORS	$ COUNTY ESTIMATE	$ STATE ESTIMATE	RATIO OF COUNTY TO STATE
Elder Economic Security Standard Index			
Single, homeowner without mortgage, good health	$24,600	$23,808	1.03
Single, renter, good health	$28,956	$27,924	1.04
Couple, homeowner without mortgage, good health	$35,616	$35,532	1.00
Couple, renter, good health	$39,972	$39,648	1.01

TECHNICAL NOTES
*See our technical report (http://mahealthyagingcollaborative.org/data-report/explore-the-profiles/data-sources-and-methods/#technical) for information on data sources, methodology, and margin of errors. For most indicators the reported community and state values are both estimates derived from sample data. Thus, it is possible that some of the differences between state and community estimates may be due to chance associated with population sampling. We use the terms "better" and "worse" to highlight differences between local and state estimates that we are confident are not due to chance. "Better" is used where a higher/lower value should have positive implications for the health of older residents. "Worse" is used where a higher/lower score should have negative implications for the health of older residents. When the implication for healthy aging is unclear we use an *.

General Notes

- *We used a hierarchical approach to reporting. We report estimates for every city/town in Massachusetts and 16 Boston neighborhoods when data allow. In other cases, we could only report indicators for aggregated areas (e.g., 14 MA counties, 33 Aging Service Access Points, 310 or 311 geographic units). The same estimate is reported for all cities/towns within aggregated geographic areas.*
- *Total population estimates are from the 2010 Census and are reported for 367 geographic units (351 individual cities/towns and 16 subareas within Boston). Other population characteristic estimates are from the American Community Survey (ACS) (either 2007-2011 or 2008-2012) and are reported for the 367 geographic units. Note that % may not add up to 100% due to rounding error.*
- *Mortality rate, specific chronic disease, access and utilization estimates are for beneficiaries 65 years or older in 2011 from the 2011 Centers for Medicare and Medicaid Services (CMS) Master Beneficiary Summary File (MBSF). For these estimates some towns with smaller populations were aggregated together, resulting in 311 geographic areas in the state. The same estimate is reported for all cities/towns within aggregated geographic areas.*
- *The 2007-2011 Behavioral Risk Factor Surveillance System (BRFSS) is the source for wellness, health behavior, and some prevention estimates. BRFSS indicators were estimated for persons 60 years or older for 33 geographic areas based on Aging Services Access Point (ASAP) geographic service areas. The same rate is reported for all cities/towns within the same ASAP service area.*
- *Dentist supply estimates for 2010 were from the Area Resource File for 14 MA counties. The same rate is reported for all cities/towns within the same county.*
- *Access to care data pertaining to the # of primary care providers, hospitals, nursing homes, and home health agencies were obtained July-August 2014 from the following CMS websites: http://www.medicare.gov/nursinghomecompare/search.html, http://www.medicare.gov/homehealthcompare/search.html, http://www.medicare.gov/hospitalcompare/search.html, http://www.medicare.gov/physiciancompare/results.html.*
- *Walkability Estimates were downloaded from http://www.walkscore.com/ in July-August, 2013 using the finder term "city/town name, Massachusetts." Estimates are reported for 367 individual cities/towns and subareas within Boston. "NA" is reported for towns where data on block length and intersection density were not posted. The state estimates are simple unweighted averages of the values reported for all towns with posted data and the 16 subareas within Boston.*
- *Air pollution/air quality estimates are from the US Environmental Protection Agency reported for 14 MA counties for older adults with no specific health concerns (2013). The same rate is reported for cities/towns within the same county.*
- *2012 voter participation data from the Massachusetts Elections Division, Secretary of the Commonwealth.*
- *Estimates are from 2007-2011 FBI Uniform Crime Reports (http://www.fbi.gov/stats-services/crimestats). Some towns with smaller populations were aggregated together resulting in 310 geographic areas in the state. The same rate is reported for all cities/towns within these aggregated geographic areas and for subareas within Boston.*
- *Data on fatal auto (driver, passenger) and pedestrian accidents for persons age 60+ is from the Fatal Accident Reporting System of the National Highway Traffic Safety Administration (2008-2012), reported at the town and county level.*
- *The household income < $20,000 estimates are from the 2007-2011 ACS and are reported for individual cities/towns. The city of Boston rate is reported for all subareas within Boston. Poverty status for adults 65+ ACS 2007-2011.*
- *The 2010 Elder Economic Security Standard Index estimates were downloaded from http://www.basiceconomicsecurity.org/El/ for 14 counties for persons 65 years or older. The same rate is reported for all cities/towns within the same county.*
- *The University of Massachusetts Boston Gerontology Institute Research Team includes: Elizabeth Dugan, Frank Porell, Nina Silverstein, Chae Man Lee, Joo Suk Chae, Brittany Gaines, Kristina Turk, Mei Chen, and Hyo Jung Lee. We thank Amanda Cox from the NYTimes.com for data visualization contributions.*
- **Please send your questions/comments/ideas to beth.dugan@umb.edu or post to the Massachusetts Healthy Aging Collaborative website at http://mahealthyagingcollaborative.org/connect/conversations/*