

# **Arlington Housing Production Plan Health Addendum**

**Prepared for the Arlington Department of Planning and Community  
Development  
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## Arlington Housing Production Plan Health Addendum

The goal of this document is to strengthen the recommendations in the Arlington Housing Production Plan by providing evidence of how housing impacts health and supplemental recommendations that will have a positive impact on health indicators in Arlington. The Health Addendum is divided into three parts: the evidence based links between housing and health, the Town's health profile, and recommendations to address any issues that are highlighted in the data or through stakeholder engagement.

### The links between Housing & Health

#### Quality & Universal Design

Housing that is not clean, safe, adequately maintained, ventilated, or free from pests and contaminants, such as mold, lead, and carbon monoxide, is an important contributor to rates of injury, asthma symptoms, cancer, neurotoxicity, cardiovascular disease, depression, and poor mental health. Poor housing quality is also the strongest predictor of emotional and behavioral problems in low income children, resulting primarily from parental stress. Lack of universal design may lead to injury amongst the elderly in addition to preventing aging in place.<sup>1</sup>

#### Location

Easy access to public transportation, green space, quality schools, good jobs, healthy foods, and medical care can help reduce the incidence and/or severity of chronic disease, injury, respiratory disease, poor mental health, and even mortality.<sup>1</sup>

#### Stability & Affordability

When householders pay more than 30% of their gross income on housing, they become "cost burdened". Choosing between housing payments and other expenses is linked to cutbacks on basic essentials such as food, medical care, and utilities and increased stress. It is a well-established cause of biochemical changes to the brain and body that decrease resilience, age people more rapidly, and decrease resistance to disease. Children in unstable housing are also at risk of malnutrition and developmental delays that can have lifelong health consequences. When householders spend more than 50% of their income on housing, the severe cost burden can lead to overcrowded, substandard, or unsanitary housing environments, and eventually eviction or homelessness.<sup>2</sup>

Sources: Adapted from Megan Sandel, Pew Charitable Trusts Healthy Housing Indicators, and Human Impact Partners, 29th street/San Pedro Street Area Health Impact Assessment (2009).

<sup>1</sup> Krieger, James, and Donna L. Higgins. "Housing and health: time again for public health action." *American journal of public health* 92.5 (2002): 758-768.

<sup>2</sup> Cutts, Diana Becker, et al. "US housing insecurity and the health of very young children." *American Journal of Public Health* 101.8 (2011): 1508-1514.

## Arlington Profile

Housing Stability and Affordability are two major dimensions of housing the town should focus on. Housing Quality in Arlington is overall very strong as is nearly every element of location.

### The Top 5 Housing and Health Priority Areas:

1. Unintentional falls amongst the elderly
2. Asthma hospitalizations for youth ages 0-19
3. Near roadway pollutant exposure from heavily trafficked roadways
4. Substance abuse hospitalizations
5. Risk of Social Isolation amongst the elderly

### Key Summary:

Current rates of chronic diseases, hospitalizations, and health behaviors paint an overall healthy picture for Arlington amongst the general population as well as seniors.<sup>3</sup>

Although a few issues emerged in our convening with key stakeholders, **affordability was raised as the primary concern. The Housing Production Plan also raises this as a high priority.**

### Key Demographic Factors

Income, race and education are amongst the most important demographic predictors of lifetime health outcomes. Arlington is largely white (83%), 66.2% have a bachelor's degree or higher and only about 20% have a high school diploma or less. The Town also has a very low poverty rate (4%), 0 homeless residents, and 72% of households earn \$50,000 or more per year. This puts Arlington at a low risk of health problems related to demographics.

### Vulnerable populations

Vulnerable populations include those who are low-income, linguistically or otherwise isolated, populations with disabilities, the very young, and the elderly. As summarized above, Arlington is overwhelmingly white and well educated, with very little poverty. According to 5 year American Community Survey (ACS) data 2.6% of Arlington's total (18,726) households (12% of the Town's non-English speaking households) are linguistically isolated<sup>4</sup>. By limiting a household's ability to understand and communicate in English, linguistic isolation can be a barrier to receiving medical and social services and can make these households more vulnerable during emergency situations. The proportion of linguistically isolated households in Arlington is very low, making this a low risk factor. Finally, numbers of school age children and children under the age of 9 are projected to increase until 2020, and then start to decrease according to MAPC population projections, while the elderly population is projected to increase steadily. **This report will therefore focus on residents who are 65 or older as the primary vulnerable group.**

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<sup>3</sup> Massachusetts Healthy Aging Collaborative Arlington Profile. [https://mahealthyagingcollaborative.org/wp-content/themes/mhac/pdf/community\\_profiles\\_ci/Y2%20towncode010\\_Arlington.pdf](https://mahealthyagingcollaborative.org/wp-content/themes/mhac/pdf/community_profiles_ci/Y2%20towncode010_Arlington.pdf);

<sup>4</sup> "Linguistic isolation" is relates to the English-speaking ability of all adults in a household. A household is linguistically isolated if all adults speak a language other than English and none speaks English "very well." Adult is defined as age 14 or older, which identifies household members of high school age and older.

## Health Metrics

Hospitalizations, prevalence of chronic diseases, and health behaviors illustrate the current health status of Arlington residents. These data are primarily useful for establishing a baseline of how the Town is doing with respect to housing-related health issues. Demographic and health-related housing indicators such as housing quality and affordability will help predict what the health of residents may look like in the future.

### Top Housing Related Health Issues

#### Quality and Universal Design:

- Unintentional Falls (65+)
- Asthma Hospitalizations (youth 0-19)

#### Location:

- Near Roadway Pollutant Exposure from heavy traffic on Rte. 2 and Mass Ave
- Risk of Social Isolation among those over 65 living alone

#### Affordability & Stability:

- Substance Abuse Hospitalizations

### Summary

Overall, Arlington is a healthy community. We were not able to obtain the overall hospitalization rate for the Town, but the age-adjusted<sup>5</sup> hospitalization rate for the elderly is 578 per 100,000 people compared to the state's 646 per 100,000.

### Spotlight on Senior Health

Arlington's seniors are in pretty good shape relative to the state. **The town is**

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<sup>5</sup> Age adjustment normalizes population age distributions so that communities with different median ages are comparable. Without age adjustment, aging communities like Arlington look worse than they would otherwise simply because older individuals are more likely to have chronic diseases and be heavier users of the health care system.

**either equal to or outperforms the state rate for every single health indicator in the following categories** defined by the Massachusetts Healthy Aging Collaborative:

- Wellness and prevention
- Nutrition/diet
- Mental health
- Chronic disease
- Living with a disability
- Access to care, and
- Service utilization.

The only indicator where Arlington has higher rates than average for the elderly is the rate of unintentional falls. Other exceptions not as closely related to housing issues are osteoporosis, glaucoma, and breast cancer, although osteoporosis can exacerbate falls for elderly women.

### Stakeholder Engagement

MAPC convened a team of stakeholders from hospitals, community health, local health, Council on Aging, and planning to discuss health and housing issues in Arlington. This meeting served as a forum for discussion about Town-specific issues, and also highlighted potential opportunities for collaboration. It served as a launching point for future involvement of health stakeholders in this and other housing processes.

Representatives from the following groups were present at the meeting: Mt. Auburn Hospital, Arlington Council on Aging, Public Health Advocacy Institute, Minuteman Senior Services, Community Health Network Area (CHNA) 17, and representatives from Arlington's Department of Health and Human Services, Board of Health, and Department of Planning and Community Development.

## Interpreting Data in This Document

All data shown here is meant to supplement the data presented in the main Housing Production Plan.

### Arlington Numbers

Due to the way that health data are collected, all data for Arlington are estimates generated through statistical modeling for the Town itself. The only exception is data for health care utilization amongst seniors, which are directly measured by the health insurance source.

### School Performance

Housing instability and lack of affordability have been linked to school performance and behavioral problems primarily in small children, but also amongst adolescents. Although these data are still only preliminarily linked and not directly associated with MCAS scores, they are the only source of publicly available data for school performance across school districts, which is why we are using these figures here.<sup>6</sup> They should be interpreted only as a possible monitoring tool rather than clear causal evidence.

### Performance

All interpretations about whether or not the Town is performing better, worse, or no differently than the state average are based on statistical significance. Statistical significance in this case was derived by either the Massachusetts Department of Public Health or the Massachusetts Healthy Aging Collaborative, and is based on 95% confidence intervals. This approach is used because the Town numbers represented below are the midpoint of a statistically-derived range estimated from larger geographies. For specific information on how these were calculated, please visit:

<https://mahealthyagingcollaborative.org/data-report/explore-the-profiles/data-sources-and-methods/#data>

### Data Sources

Descriptions and links to data sources are included as Appendices to this document. The full comprehensive housing metrics from the Massachusetts Healthy Aging Collaborative, Mt. Auburn's Community Health Needs Assessment and Environmental Public Health Tracking Data Reports are included as appendices.

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<sup>6</sup> Mueller, Elizabeth J., and J. Rosie Tighe. "Making the case for affordable housing: Connecting housing with health and education outcomes." *Journal of Planning Literature* 21.4 (2007): 371-385.

## Housing Related Health Metrics in Arlington

Overall, data on the prevalence of chronic diseases, health behaviors, and hospitalizations support the idea that Arlington is a healthy community. Substance abuse and mental health are the only exceptions to this. Frequent users of emergency services typically report lower levels of social support and poor mental health.<sup>7</sup> Given that 83% of Arlington’s residents report receiving adequate emotional support and nearly 97% are satisfied with life, this suggests that a smaller subset of the population is repeatedly using emergency services.

### Adults

|  | Health Metric  | Arlington | State         | Performance   |
|--|--|-----------|---------------|---------------|
| Quality  | Estimated Current Tobacco Smokers <sup>i</sup>                                   | 9.6%      | 9.1%          | No difference |
| Quality & Location   | Age Adjusted Asthma Hospitalizations per 10,000 <sup>ii</sup>                    | 41.5      | 73.9          | Better        |
|  | Asthma Prevalence <sup>i</sup>   | 9.1%      | 11.8%         | Better        |
| Affordability & Stability                                  | Age Adjusted COPD <sup>8</sup> Hospitalizations per 10,000 people <sup>iii</sup> | 19.5      | 23.3          | Better        |
| All  | % 65 and over who did not see a doctor due to cost <sup>iv</sup>                 | 4.3%      | 3.7%          | No difference |
|  | % 65 and over satisfied with life <sup>iv</sup>                                  | 96.8%     | 95.8%         | No difference |
|  | Consume 5 or more vegetables a day <sup>v</sup>                                  | 32.9%     | 24.9%         | Better        |
|  | Estimated Obesity Prevalence <sup>vi</sup>                                       | 17.3%     | 22.6%         | Better        |
|  | Substance Abuse Emergency Department Visits per 10,000 <sup>vii</sup>            | 48.2      | 33.9          | Worse         |
|  | Excessive Drinking <sup>i</sup>  | 8.0%      | 9.2%          | No difference |
|  | Cardiovascular Disease Hospitalizations per 10,000 <sup>iii</sup>                | 101.9     | 139.4         | Better        |
|  | Diabetes Prevalence <sup>i</sup>   | 27.1%     | 32.1%         | Better        |
|  | Self-Reported Poor Mental Health <sup>i</sup>                                    | 11.4%     | 11.1%         | No difference |
|  | Age Adjusted Mental Health Emergency Department Visits per 10,000 <sup>vii</sup> | 175.7     | 238           | Better        |
| % 65 and over ever Diagnosed with Depression <sup>iv</sup> | 28.1%  | 28.6%     | No difference |               |
| Low Birth Weight <sup>iv</sup>                             | 8.2%   | 7.8%      | No difference |               |
|  | Age Adjusted 1 year Mortality Rate <sup>iv</sup>                                 | 4.8%      | 4.7%          | No difference |

### Children and Youth

|  | Health Metric  | Arlington | State | Performance |
|--|--|-----------|-------|-------------|
| Quality                                | Blood Lead Levels <sup>ii</sup>  | Lower     | 3.7   | Better      |
| Quality & Location                     | Age-Specific Asthma Hospitalizations per 10,000 people (ages 0-19) <sup>viii</sup> | 27.2      | 19.2  | Worse       |
|  | Asthma Prevalence in K-8 kids <sup>ii</sup>  | 7.1 %     | 12.4% | Better      |
|  | Asthma Emergency Department Visits per 10,000 people (ages 0-19) <sup>viii</sup>   | 49.4      | 82.0  | Better      |
| Affordability & Stability <sup>9</sup> | Science and Tech/Eng MCAS 2015, proficient or higher, all grades <sup>ix</sup>     | 75%       | 54%   | Better      |

<sup>7</sup> Byrne, Molly, et al. "Frequent attenders to an emergency department: a study of primary health care use, medical profile, and psychosocial characteristics." *Annals of emergency medicine* 41.3 (2003): 309-318.

<sup>8</sup> Chronic Obstructive Pulmonary Disease; a respiratory disease that is often co-morbid with various other chronic diseases and is therefore a good proxy of co-morbidity.

|  |  |       |       |        |
|--|--|-------|-------|--------|
|  | Science and Tech/Eng 2015 MCAS, needs improvement or warning/failing, all grades | 25%   | 45%   | Better |
|  | % attending college or university <sup>ix</sup>                                  | 84.2% | 76.2% | Better |
|  | High school dropout rate <sup>ix</sup>   | 0.6%  | 5.1%  | Better |

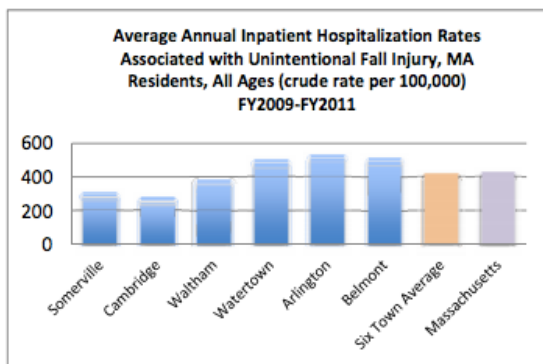
### Senior health <sup>x</sup>

|  | Health Metric  | Arlington | State         | Performance   |
|--|--|-----------|---------------|---------------|
| Chronic Disease                        | Alzheimer's disease or related dementias                   | 14.1%     | 14.4%         | No difference |
|  | Ever had a heart attack                                    | 5.0%      | 5.0%          | No difference |
|  | Ischemic heart disease                                     | 43.9%     | 44.1%         | No difference |
|  | Osteoporosis   | 23.5%     | 21.7%         | Worse         |
|  | Osteoarthritis/rheumatoid arthritis                        | 49.3%     | 50.2%         | No difference |
|  | 4+ chronic conditions                                      | 57.7%     | 61.5%         | Better        |
| Living with Disability                 | % disabled for a year or more                              | 31.3%     | 31.0%         | No difference |
|  | <b>Hearing impairment</b>                                  |           |               |               |
|  | % 65-74 with hearing difficulty                            | 4.6%      | 7.4%          | No difference |
|  | % 75+ with hearing difficulty                              | 17.8%     | 21.2%         | No difference |
|  | <b>Vision impairment</b>                                   |           |               |               |
|  | 65-74 with vision difficulty                               | 1.9%      | 3.2%          | No difference |
|  | 75+ with vision difficulty                                 | 7.6%      | 9.3%          | No difference |
|  | <b>Cognition impairment</b>                                |           |               |               |
|  | 65-74 with cognition difficulty                            | 2.4%      | 4.7%          | No difference |
|  | 75+ with cognition difficulty                              | 8.0%      | 12.1%         | No difference |
|  | <b>Ambulatory impairment</b>                               |           |               |               |
|  | 65-74 with ambulatory difficulty                           | 7.0%      | 12.9%         | No difference |
|  | 75+ with ambulatory difficulty                             | 24.0%     | 29.4%         | No difference |
|  | <b>Self-care impairment</b>                                |           |               |               |
|  | 65-74 with self-care difficulty                            | 1.3%      | 3.7%          | No difference |
|  | 75+ with self-care difficulty                              | 7.3%      | 12.2%         | No difference |
|  | <b>Independent living impairment</b>                       |           |               |               |
|  | 65-74 with independent living difficulty                   | 3.4%      | 7.2%          | No difference |
| 75+ with independent living difficulty | 22.7%  | 24.3%     | No difference |               |
| Access to Care                         |  | 21.9%     | 21.2%         | No difference |
|  | Medicare managed care enrollees<br>% with a regular doctor | 96.1%     | 96.2%         | No difference |
| Service Utilization                    | Emergency room visits/1000 persons<br>(65+ only)           | 578       | 646           | Better        |
|  | Inpatient hospital stays/1000 persons<br>(65+ only)        | 347       | 354           | No difference |

<sup>9</sup> See page 6 for description on housing instability and school performance. Mueller, Elizabeth J., and J. Rosie Tighe. "Making the case for affordable housing: Connecting housing with health and education outcomes." Journal of Planning Literature 21.4 (2007): 371-385.

## Senior Health

Overall, seniors in Arlington are just as, or healthier than, the State average according to a comprehensive report conducted by the Massachusetts Healthy Aging Collaborative. The primary housing-related exception to this is hospitalizations due to unintentional falls amongst elders and high rates of osteoporosis which can exacerbate the risk of injury upon falling. These data should be interpreted cautiously since the rate is not adjusted for age and Arlington is an older community, but they nevertheless indicate an area that could benefit from housing design that is aging supportive. These data show that Arlington has 530 hospitalizations per 100,000 (53 per 10,000) for elder falls, which is higher than the surrounding communities and the Massachusetts rate of 429 per 100,000 (42.9 per 10,000).



The crude rate of deaths from unintentional fall injuries in Arlington is 46.2 per 100,000<sup>10</sup>, compared to 43 per 100,000 across the state<sup>11</sup>.

<sup>10</sup> DPH Community Health Needs Assessment Draft Data Release, 2016

<sup>11</sup> <http://www.mass.gov/eohhs/docs/dph/injury-surveillance/elder-falls-august2013.pdf>

## Housing Determinants



**Lead, Pests, Mold, Mildew, Allergens, and Indoor Pollutants.**

**Lead:** Although blood lead levels remain below the state average and screening rates are high at 80%, 91% of Arlington's housing stock contains lead compared to 71% in Massachusetts as a whole<sup>12</sup> so this continues to be a risk factor that the town should monitor over time. The population that is most vulnerable to the impacts of lead is children aged 0-6, a group which is projected to decrease by roughly 15% by 2030. Although this population is decreasing, the Town should continue its high screening rate to monitor blood lead levels, particularly in this vulnerable group.

Pests, mold, mildew, allergens, and indoor pollutants were not highlighted as issues through stakeholder engagement with Arlington's Health Compliance Officer under the local Department of Health and Human Services.



**Cost Burdened Households, % Renters, Food Insecurity, Cost Barriers to Health Care**

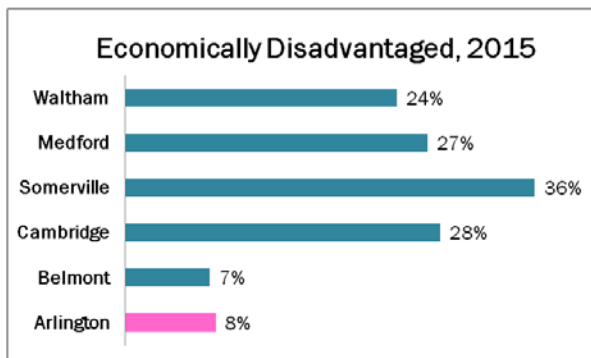
**Food Insecurity:** to the best of our knowledge, no local USDA measure of food insecurity exists as of yet. Starting in 2015, the Department of Elementary and Secondary Education (DESE) started reporting the proportion of "economically disadvantaged"<sup>13</sup> students, which

<sup>12</sup> MA Bureau of Environmental Health (BEH) Environmental Public Health Tracking (EPHT) Arlington Community Profile. <https://matracking.ehs.state.ma.us/>, click "community profile".

<sup>13</sup> Calculated based on a student's participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program (SNAP); the Transitional Assistance for Families with Dependent Children (TAFDC); the Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid). Source: DESE.



includes students receiving free or reduced lunch. By this metric, 7.9% of Arlington’s students are considered economically disadvantaged, which is significantly lower than the 27.4% at the state level. This trend also applies to Arlington compared to its surrounding municipalities, who aside from Belmont, also have significantly higher proportions of students receiving benefits.



Source: DESE, 2014-2015 enrollment data

To confirm this applied specifically to possible food insecurity as well, we also looked at specifically at the proportion of students receiving free or reduced lunches in 2015 as well as adults receiving SNAP (supplemental nutrition assistance program) benefits. The same pattern emerges. In Arlington 702 students (13%) received free or reduced lunches out of the 5304 students district-wide, compared to 54% at the state level. For adults, an estimated 2.9% of Arlington residents receive SNAP benefits, according to 5 year ACS estimates, which is substantially lower than the 9.5% receiving food stamps across the state.

**Access to Healthcare:** Amongst Arlington’s Elderly, 4.3% (95% confidence interval estimate of 2.3 – 6.3%) reported not seeing a doctor when they needed to due to the cost, which is similar to the state’s rate of 3.7% (3.3% - 4.0% CI).

Data on the proportion of renters vs. homeowners and cost burdened households are included in the main HPP. Overall both demonstrate the significant need for more affordable and stable housing.



**Transportation, Healthy Food, Walkability, Crime, Pollution, Jobs**

**Transportation:** Arlington is reasonably well served by transit, but there is still ample opportunity to expand service. There are more than a dozen bus routes that serve the Town, but they don’t all run frequently and the lack of rail makes it more difficult for residents to access other inner core communities where residents may work or otherwise spend time.

**Walkability:** Walk Score, a company who measures the walkability of cities and Towns recently updated their methodology. With the new metrics, Arlington scores a 65 and qualifies as “somewhat walkable”<sup>14</sup> rather than its previous score of 91, which had qualified it as “walkers paradise”. “Somewhat walkable” is defined as some errands can be accomplished on foot.<sup>15</sup> According to this metric, the most walkable neighborhoods in the Town are East Arlington and Arlington Center.

| Rank | Neighborhood      | Walk Score |
|------|-------------------|------------|
| 1    | East Arlington    | 76         |
| 2    | Arlington Center  | 69         |
| 3    | Brattle           | 55         |
| 4    | Arlington Heights | 55         |

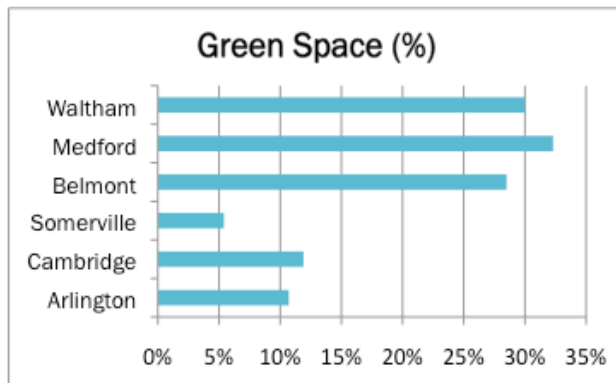
**Healthy Food Access:** There are 3 full service grocery stores (Trader Joes, Whole Foods, and Stop and Shop) in Arlington, all

<sup>14</sup> <https://www.walkscore.com/MA/Arlington>

<sup>15</sup> <https://www.walkscore.com/methodology.shtml>

of which serve fresh produce and are accessible by walking or public transit. As an urban community, Arlington residents have access to other grocery stores in the area via public transit. Five more full service grocery stores are within a few miles of the Town's boundaries including a Star Market in Belmont, Wilson Farm in Lexington, Whole Foods in Medford, and Trader Joes and Whole Foods in Cambridge. Arlington is also served by a weekly Farmers Market from June through October.

**Green Space:** Green space is relatively low in Arlington, as a result of the constrained urban environment. Only 10.7% of the Town's land is agricultural, forest, open space, or recreation<sup>6</sup>.



Studies are beginning to show that greenness<sup>16</sup>, more than open space, can provide mental health benefits, as well as helping to mitigate the impacts of climate change related to extreme heat and storm events. The latter benefit is particularly important in Arlington because of its large senior population, 31.9% of whom are living alone<sup>vi</sup>, a factor which predisposes them to social isolation and is one of the most important risk factors for dying due to extreme heat.

<sup>16</sup> James, Peter, et al. "A review of the health benefits of greenness." *Current epidemiology reports* 2.2 (2015): 131-142.

**Pollution:** Regional pollutants such as PM2.5 and Ozone are very low in Arlington, but since it is an urban community with substantial through traffic, areas of the Town within 500 feet of heavily trafficked roadways are susceptible to the impacts of ultrafine particulate matter pollution. Evidence suggests anything over 30,000 vehicles/day could begin to impact health while anything over 50,000 vehicles/day could severely impact it. The main consequences of ultrafine particulate matter are cardiovascular disease and to a lesser extent, pulmonary disease. The routes in Arlington that exceed these limits are:

Mass Ave. (2002): 31,800 vehicles/day  
 Rte 2 (2010) 70,000+ vehicles/day<sup>17</sup>  
 Rte 60, north of Rte. 2 (2002): 27,900 vehicles/day

**Social Cohesion and Crime:** Social support, defined broadly as the general perception that one feels cared for emotionally and can count on others for information and small resources such as knowing your neighbor can watch your kids when you get home late from work, is an important indicator of social health and non-financial resource availability. Given that 83% of residents feel they have adequate emotional support, that the voter participation rate is quite high<sup>14</sup>, and both property and violent crime rates are relatively low, suggest Arlington has a health promoting social environment. 85.7% of Arlington voters (≥18) participated in the 2012 presidential election, compared to 73.3% in the State.<sup>18</sup> 83% of Arlington residents say

<sup>17</sup> Central Transportation Planning Staff (CTPS) average daily count (ADT) data for Arlington. <http://www.ctps.org/geoserver/www/apps/adtApp/index.html>

<sup>18</sup> Voter participation is a typically used as a proxy for the level of social engagement.

they receive adequate emotional support, compared to the state rate of 80.7%.<sup>19</sup> Arlington has substantially lower violent (121) and property crime (1,452) rates per 100,000 residents compared to the State (428 and 2,259 respectively).

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<sup>19</sup> Mt. Auburn Hospital 2015 Community Health Needs Assessment.  
<https://www.mountauburnhospital.org/app/files/public/746/mount-auburn-hospital-community-health-needs-assessment-2015.pdf>

## Recommendations

### 1. Maintain low blood lead levels from lead paint in housing

- 1.1 Maintain high screening rates for blood lead levels, particularly amongst children ages 0-6, who are most at risk.
- 1.2 Prioritize the removal of lead-based paint in housing during rehabilitation, if possible.

### 2 Determine the cause of high asthma hospitalization rates among youth aged 0-19

- 2.1 Collaborate with Arlington's Department of Health and Human Services and Mt. Auburn Hospital to identify the cause(s) of high youth asthma hospitalization for Arlington youth.

### 3 Retain existing trees and greenery, and increase greenery whenever possible

- 3.1 Prioritize the incorporation of greenery around new and rehabilitated housing—particularly affordable housing—to improve mental health and increase Arlington's resilience against climate change.

### 4 Identify additional financial programs and other resources or policies that can support continued affordability for residents of the Town

- 4.1 Collaborate with Arlington Department of Health and Human Services and CHNA 7 partners to identify possibilities such as nutritional assistance and utilities assistance programs or policies that help alleviate financial burden for cost-burdened families. Focus on food, education and schooling costs, child care, health care support, and energy and utilities programs that promote clean and/or reduced energy costs.

### 5 Address risks of social isolation amongst elderly living alone

- 5.1 Jointly develop plan with health care system, if it does not already exist, to manage outreach and care during extreme heat events.
- 5.2 Develop housing for the elderly near services and amenities they would use and be able to access physically on their own, rather than relying on vehicles.
- 5.3 For existing housing, consider partnering with health care and aging service providers to provide social interactions for elderly residents with each other and surrounding community members.
- 5.4 Consider housing models that explicitly integrate populations so they mutually benefit each other, such as giving college students free rent for living with and helping elderly residents.

### 6 Reduce the risk of elderly falls

- 6.1 Develop a strategic plan and partnership to prevent unintentional falls amongst the elderly. State resource: <http://www.mass.gov/eohhs/docs/dph/injury-surveillance/strategic-plan-2012-2016.pdf>

### 7 Protect all residents from impacts of ultrafine particulate matter near heavily trafficked roadways

- 7.1 Explore measures to protect affordable and other housing from ultrafine particulate pollution near Mass Ave, Rte. 2, and Rte. 60. Resources:

- Require or encourage air filtration or other mitigating tactics for new or significantly rehabilitated housing built close to heavily trafficked roadways. Examples include
- Somerville Zoning Ordinance (not yet adopted), Los Angeles Ordinance on air filtration near heavily trafficked roadways: <http://planning.lacity.org/ordinances/docs/cugu/184245.pdf>
- The Community Assessment of Freeway Exposure and Health Study (CAFEH) research team, based at Tufts: <http://sites.tufts.edu/cafeh/>

**8 Continue to be proactive promoting affordable, inclusive, community integrated, and aging supportive housing in order to continue to promote population health and prevent future problems**

## Primary Data Source Description

### Mt. Auburn Hospital Community Health Needs Assessment

Under the Affordable Care Act all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every 3 years in order to identify the most pressing health issues in the community to then invest in preventing them. These geographies are based on a hospital's self-defined primary service area. Arlington falls under Mt. Auburn Hospital's primary service area, as does Cambridge, Somerville, Waltham, Belmont, and Watertown.

### Massachusetts Environmental Public Health Tracking Data

This data source is managed by the Bureau of Environmental Health at the Massachusetts Department of Public Health and is funded by a National Effort from the Centers for Disease Control (CDC) to increase the tracking of environmental health determinants. The data portal includes air quality, blood lead, cancer, asthma, and other data related to health. The data pulled for this report is under the "community profile" link.

### Massachusetts Healthy Aging Collaborative Data

The Massachusetts Healthy Aging Collaborative is a network of leaders in community, health and wellness, government, advocacy, research, business, education, and philanthropy who have come together to advance healthy aging. These data, funded by Tufts Health Connector, details individual town data alongside of state averages, allowing for a comparison of how a town is doing relative to the rest of the state by each variable. Multi-dimensional indicators of healthy aging and healthy aging programs are identified along with GIS analyses that will enable communities to address local challenges and better allocate resources to those areas (physical, social and health) of greater need. Learn more about the [Healthy Aging Data Report](#).

### Community Health Needs Assessment Draft Data Release from MDPH

These data will be released fully soon, but are an initial attempt at replacing MassCHIP with critical hospitalization, prevalence, health behavior, and other health-related data to partners who need them for data analyses. The full data release is forthcoming, but DPH provided this report with an advanced version to facilitate the creation of this report.

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<sup>i</sup> BRFSS small area estimates, 3 year average 2012-2014 from DPH draft data release

<sup>ii</sup> Massachusetts Environmental Public Health Tracking Community Profile for Arlington

<sup>iii</sup> All hospital admissions database, calendar year 2013

<sup>iv</sup> Massachusetts Healthy Aging Collaborative Arlington Community Profile

<sup>v</sup> BRFSS small area estimates, 3 year average: 2005, 2007, 2009

<sup>vi</sup> BRFSS small area estimates, 3 year average 2008-2010

<sup>vii</sup> All hospital emergency discharge database, calendar year 2013

<sup>viii</sup> Mt. Auburn 2015 Community Health Needs Assessment

<sup>ix</sup> Massachusetts Department of Elementary and Secondary Education Arlington District Profile, 2015.

<sup>x</sup> All data on senior health was derived from the Massachusetts Health Aging Collaborative Arlington Community Profile