Introduction

Housing is a basic building block of urban space, and decent, affordable housing is vital to human health. Indeed, the impacts of inadequate housing on urban health are found in cities worldwide. While these impacts occur in developing and developed countries, population densities, poverty, property rights, culture, and other factors vary across settings and influence the contours of the problem and the policies employed to improve housing and concomitant health issues (Gilbert and Ward 1985; Stewart 2001; Vaid and Evans 2017; Ward 2015). An effective approach to understanding housing and urban health, therefore, is to consider the relationship in the context of one country, the United States.

Housing and urban health in the United States have a long and well-documented history. For over 160 years, urbanization has been associated with an increased demand for housing, as well as concerns about substandard housing for impoverished populations and immigrants (Mumford 1961; von Hoffman 1998). The problem of poor housing and health in the nation’s urban areas has been very visible at times in U.S. history. However, the prominence of the problem seemed to recede as late 19th and early 20th century reform efforts produced improvements to urban housing, and the water supply, and as sanitation and bacterial studies emerged as vital to the field of public health (Fairchild et al. 2010).

In the late 1980s, housing conditions and health re-emerged as an important public health issue (Krieger and Higgins 2002). For several decades, the twin goals of health and affordable housing have co-existed in policy circles. Interestingly, the narrative over time has changed from late 19th century images of filthy, dense slums serving as hotbeds for infectious diseases to today’s inadequate housing fostering chronic and acute illnesses such as asthma and lead poisoning, especially for children (Krieger and Higgins 2002; Pollack and Egerter 2008; von Hoffman 1998). At the same time, the urban populations most affected by inadequate housing, groups such as immigrants, minorities, and the poor, seem to remain constant over time.

Substandard housing can result directly from physical conditions or indirectly through social conditions related to income disparities. Physical conditions may be due to inferior building construction, particularly before building codes, but also after these and inspections became routine in cities. Poor construction or deteriorating structures can cause leaks and dampness, which can aggravate respiratory problems and may cause depression in some people (Krieger and Higgins 2002). Social conditions, especially economic stratification, distribute housing quality by income; in other words,
substandard housing goes to lower-income households. These households are least able to make repairs and may not always be empowered to compel landlords to address structural conditions. Indirectly, housing affordability impacts health in other ways. For example, some lower-income households resort to overcrowded conditions in order to afford housing, and these conditions have implications for the spread of illness. Also, lower-income households may shift their scarce resources to pay for housing, leaving less for nutritional food, preventative health measures, and prescription medicines, all necessary to maintaining good health (Maqbool et al. 2015).

This chapter provides an overview of the history of housing and health in U.S. cities, a discussion of housing and health today, and a concise summary of relevant research and policy discussions from the literature. We then narrow our focus to Los Angeles. In addition to elaborating on inadequate housing and its relationship to health, we discuss strategies developed to address the problem. In order to focus attention on the links between housing and urban health, we do not consider the effects of neighborhoods on health, a topic which itself has an abundant literature and complex research findings.

Our chapter relies primarily on existing literature, as well as secondary data such as the American Housing Survey. In addition, this chapter is informed by the authors’ experiences in housing policy and recent field research in the Los Angeles area.

Housing and Urban Health in the U.S.: A Brief History

Housing in the United States has always been central to urban life. Housing provides shelter and sometimes is an important financial asset. The quality and cost of housing have always been intricably intertwined, with unhealthy housing tending to impact poor rather than affluent residents. For example, in the 1800s and early 1900s, cities such as New York, Boston, and Chicago witnessed a growing population with large numbers of poor, immigrants, and others packed into tenements. Accompanying this trend were increased infant mortality and fears of the spread of infectious disease, among other concerns (Fairchild et al. 2010; Krieger and Higgins 2002; Mumford 1961).

As cities continued to grow in the mid-1800s, health concerns associated with inadequate housing and other urban problems emerged, spawning a movement aimed at reducing unhealthy conditions; this movement recognized the deplorable housing conditions in tenements and railway flats, which characterized the slums of cities such as New York and Chicago (Fairchild et al. 2010; Lubove 1962). In the absence of strong building regulations, tenements often lacked decent plumbing, light, and air. Furthermore, overcrowding was a widespread problem for tenements in large U.S. cities, especially New York, and it exacerbated health problems (Mumford 1961; Scott 1969).

New York passed the first laws addressing the problems of slum housing. The New York Tenement House Law of 1867 was designed to address fire exits, light, and ventilation. This trailblazing law had shortcomings that were addressed over many decades of additional regulation. For example, the 1901 New York State Tenement Housing Act strengthened the law by requiring each apartment to have its own bathroom and by improving standards for light, ventilation, and fire escapes; it also resulted in inspections enforcing the building laws (Krieger and Higgins 2002; Levy 1988; So and Getzels 1988). While New York was a leader in legislation aimed at poor tenement conditions, reformers in other cities also worked to improve structural and sanitary conditions, and their efforts resulted in similar regulations (Scott 1969).

Many of the efforts to improve housing conditions from 1867 to the 1930s came from local and state initiatives and coincided with an increase in the number of local public health departments in the early 20th century (CDC 1999; Scott 1969). However, reformers’ concerns did reach the federal level starting in the 1890s. Congress authorized a modest study by the Bureau of Labor on slum areas in four cities; this study found that these slums were mainly populated by immigrants, experienced...
significant overcrowding, witnessed relatively high crime rates, and had many poorly lit and venti-
lated rooms. These findings were consistent with investigations by local commissions and seemed
to highlight the serious issue of overcrowding. As Lawrence Veiller, Deputy Tenement Housing
Commissioner of New York, wrote in 1905, “Crowding is bad enough in its effect on the human
race, but overcrowding is a word fraught with fatal significance” (p. 49). Local findings notwithstanding,
the federal government did not take action to address problems in these slums, so local reformers
and public health officials remained the principal agents of change (Lubove 1962; Scott 1969).

Reformers voiced ongoing concerns about slum conditions in the 20th century. Public health
officials, building departments, planners, and others participated in the reform movement and its sub-
sequent policies as advocates, social commentators, and practicing professionals (Krieger and Higgins
2002; Scott 1969).

In the next section, we discuss housing and urban health in the United States today. In doing so,
we present a concise review of the literature, from public health and allied fields, concerning the
impacts of poor housing on human health.

**Housing Conditions and Urban Health Today**

Health issues linked to inadequate housing in the modern era are generally different from those
of a century ago. Impoverished neighborhoods in the U.S. continue to have housing and health
problems, but their sanitary conditions do not rival those of the slums of 120 years ago. However,
poorer households in cities tend to inhabit neighborhoods with older housing stock. As shown in
Figures 39.1 and 39.2, older housing tends to be marked by deteriorating physical conditions such
as damaged roofs and walls, and also is more likely to have lead paint than newer housing. The pri-
mary concern about lead paint is the ingestion of paint chips or inhaled dust by children, which in
sufficiently high levels can cause renal damage and affect the development of the brain and nervous
system, resulting in aggressive behavior and lower intelligence (Leech et al. 2016; Liu et al. 2013;
Loghman-Adham 1997; Pollack and Egerter 2008; Shao et al. 2017; Vandivere et al. 2006).

**Figure 39.1** Exterior physical housing problems by age of housing, United States, 2015.

*Source:* Data from U.S. Census Bureau (2015b).
Structural deterioration and poor housing conditions can cause or contribute to many health problems for adults and children (Miles and Jacobs 2008; Shafiei 2011). In addition to injuries from falling debris or unsafe features like damaged stairs, poor structural conditions may allow water leaks, which can further degrade the structure and promote rot, holes in walls, and other problems (see Figures 39.3 and 39.4). Water leaks from old pipes, structural holes, dampness, and poor ventilation can contribute to the severity, duration, and spread of infections (Barton et al. 2007; Lowe and Haas 2007; Sun et al. 2017). Structural problems also are an attractive environment for pests. In a qualitative study of low-income households in a Boston neighborhood, Hernández (2016) documents the problem of holes in the interior walls of apartments: “insect and rodent infestations were extremely common problems for families living in older and poorly maintained dwellings” (p. 934). Mice and rats can spread a wide range of diseases, either directly through biting and their bodily waste or indirectly by carrying other pests such as fleas or ticks (Childs et al. 1998; Easterbrook et al. 2005; Himsworth et al. 2013). The Centers for Disease Control and Prevention (CDC) maintain a list of diseases associated with such pests, which includes hantavirus pulmonary syndrome, salmonellosis, and Lyme disease (CDC 2012).

Research shows that rats and mice produce allergens (e.g., urinary protein in household dust) that contribute to asthma and other respiratory problems (Crain et al. 2002; Crocker et al. 2011; Salo et al. 2009). However, the link between housing and respiratory problems is not limited to rodent allergens. Cockroaches in homes also can result in health problems: their droppings are present in many urban households, especially older, deteriorating structures housing lower-income families; and cockroach allergen has been linked to the development of asthma (Chew et al. 2006; Crocker et al. 2011; Do et al. 2016). In one study of public housing in New York City, researchers observed cockroaches in 77% of the housing units and found that apartments with cockroaches “had 1.7 times greater odds of having an asthmatic resident” (Chew et al. 2006, p. 502).

Exposure to mold or fungi in the home has been a major concern among health professionals for many years. While researchers have dismissed extreme claims about “toxic” mold in structures (see,
for example, Borchers et al. 2017), public health researchers and practitioners continue to associate mold in homes with chronic health problems. For example, fungi or mold related to water intrusion through deteriorating walls or leaky pipes has been identified as a contributor to asthma and other respiratory illnesses (Braubach et al. 2011; Fisk et al. 2007; Gold et al. 2017; Miles 2005; Miller 1992; Zock et al. 2002). In one study, researchers found a statistically significant association between mold (i.e., Cladosporium) levels in the home and “children’s asthma in combination with persistent colds” (Polyzoi et al. 2017, p. 28). In addition to health implications, these researchers note indirect impacts such as school absences experienced by young asthmatics.

Asthma is a growing health concern in the United States. According to the CDC (2017), over 24 million Americans had asthma in 2014. Both children and adults are affected, but children have a higher incidence of cases, and minorities have a higher incidence than Whites. Moreover, lower socioeconomic groups have been disproportionately burdened with the illness (Ashley 2015; CDC 2017; Moorman et al. 2012). Asthma is very costly according to the CDC. It reports, “Asthma costs the US about $56 billion in medical costs, lost school and work days, and early deaths in 2007” (2011, n.p.).

Clearly, asthma is a critical health concern. However, it is difficult to determine the exact degree to which housing conditions are responsible: in addition to problems such as mold and vermin infestation, asthma is linked to long-term exposure to other environmental pollutants including vehicle emissions (Miles 2005; Shafiei 2011). Moreover, emerging research suggests that exposure to certain

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Figure 39.3 Water damage and rot in a bathroom.
Source: Benjamin G. Ramm, legal consultant.
allergens such as cockroaches and mice may actually decrease wheezing (a common pre-condition to asthma) in children, depending on the age of first exposure (Lynch et al. 2014). That being said, poor housing conditions remain an important area for intervention to stem the rise in asthma and related illnesses.

Historically, housing overcrowding was considered a significant health problem in cities. Overcrowding, however, generally decreased during the 20th century, until the 1980s, when it began to increase in the U.S. (Myers et al. 1996). Considering the country as a whole, the percentage of overcrowded units today seems relatively modest, with about 1.7% of owner-occupied units and approximately 6.2% of renter-occupied units in this category (U.S. Census Bureau 2015a). The disparities associated with overcrowding, however, raise concerns. Renters, Latinos, lower-income people, and immigrants disproportionately live in overcrowded rental units. Moreover, overcrowded conditions are not evenly distributed across the U.S.; urbanized areas and communities near the southern border tend to have higher overcrowding rates (Choi 1993; Clark, W.A.V. et al. 2000; McConnell 2015; Myers et al. 1996).

The research results on the health implications of overcrowded housing have been somewhat mixed (Myers et al. 1996; Solari and Mare 2012). While research does not support the wide range of ills attributed to overcrowding in the past, it does reveal direct and indirect links between residential overcrowding and health. Studies have found an association between overcrowding and the spread of tuberculosis and infectious respiratory illnesses (Clark, M. et al. 2002; Marsh et al. 2000;
Shingadia and Novelli 2003; Wanyeki et al. 2006), as well as scabies and other types of skin infections (FitzGerald et al. 2014). In addition, overcrowding has been found to increase stress levels (Acevedo-Garcia 2000; Marsh et al. 2000) and contribute to mental health problems including depression (Bashir 2002; Patel et al. 2010; Suglia et al. 2014).

Housing conditions and housing-related situations are linked to various mental health outcomes (Baker et al. 2017). Research suggests that substandard housing is associated with poor mental health including depression; more generally, it can lower psychological well-being (Jones-Rounds et al. 2014; Krieger and Higgins 2002; Novoa et al. 2015). Eviction, which sometimes results from complaints to a landlord about poor structural conditions, is a situation with health consequences. Evictions and harassment from landlords can create stress in tenants, which may result in depression and even physical symptoms like hypertension (Vásquez-Vera et al. 2017). Other research cites housing conditions as one of several household stressors that cumulatively result in negative mental and physical impacts for occupants (Baker et al. 2017; Evans and English 2002; Evans and Kim 2007).

In this section, we have discussed many of the health problems associated with poor housing conditions; Table 39.1 summarizes these housing and health associations. As this discussion concludes, it is important to note that the housing–health relationship is blurred by the reality that low-income households tend to occupy substandard housing and lower-income people tend to have other circumstances that may compromise their health. For example, because of limited resources, the poor may forgo medical care including prescription drugs, dental care, and nutritious food (Commonwealth Fund 2011; Desmond 2016; Pollack and Egerter 2008). These complex interactions are important to understanding the housing–health relationship.

The next section narrows focus to explore housing and urban health in Los Angeles, California.

Housing and Urban Health: The Case of Los Angeles

Housing and health concerns in Los Angeles are similar to issues at the national level, but the area also has a somewhat unique history with regard to substandard housing. A big part of this story is the demography of the area: Los Angeles County has a diverse population with the largest number of immigrants (approximately 3.5 million) of any county in the U.S. (Migration Policy Institute 2017). Moreover, at the metropolitan level, Los Angeles is home to the second-largest population of undocumented immigrants, estimated at about 1 million (Passel and Cohn 2017).

The diverse population and other characteristics of the Los Angeles region manifest themselves in complex sorting of households in space, especially as households factor in the availability of affordable housing. Typical of urban areas with diverse populations, Los Angeles has some racially and economically segregated populations (i.e., similar socioeconomic backgrounds and/or identities, including ethnic enclaves). As discussed previously in this chapter, minorities and lower-income households, as well as immigrants, are more likely to live in older buildings, which are associated with poor housing conditions (see Figures 39.5 and 39.6 showing older multi-family housing in the Westlake neighborhood of Los Angeles).

In this case study of Los Angeles, we provide some background and context and then examine the area’s housing conditions, the residents most affected, a subset of the business population renting to poor households, and the organizations (public and nonprofit) working to maintain good housing and improve inadequate housing. It is important to note that the label Los Angeles can mean a city, county, sub-metropolitan area, or (when combined with another county) metropolitan area. Data used in this case study may be available at one but not another scale. For example, the Los Angeles public health department operates at the county level, while building departments tend to be city operations. Therefore, while our primary focus is on the City of Los Angeles, we provide data from different geographic scales in this section and identify the scale for clarity of discussion.


<table>
<thead>
<tr>
<th>General health issues</th>
<th>Housing conditions/situations</th>
<th>Potential health impacts (short and long term)</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory problems</td>
<td>Mouse allergen. Cockroach infestation. Mold and mildew from: leaking pipes; holes in walls or roof; inadequate ventilation; holes in walls or roof; inadequate weatherproofing and drainage.</td>
<td>Asthma. Chronic bronchitis. Chronic pneumonia. Eye problems (conjunctivitis). Allergic rhinitis. Chronic sinusitis.</td>
<td>Braubach et al. (2011); Chew et al. (2006); Crain et al. (2002); Crocker et al. (2011); Do et al. (2016); Fisk et al. (2007); Krieger and Higgins (2002); Lowe and Haas (2007); Miles (2005); Miller (1992); Polyzoi et al. (2017); Salo et al. (2009); Zock et al. (2002).</td>
</tr>
<tr>
<td>Spread of infections</td>
<td>Overcrowding</td>
<td>Tuberculosis. Respiratory diseases. Scabies. Psychological distress.</td>
<td>Acevedo-Garcia (2000); Clark, M. et al. (2002); FitzGerald et al. (2014); Marsh et al. (2000); Shingadia and Novelli (2003); Suglia et al. (2014); Wanyeki et al. (2006).</td>
</tr>
<tr>
<td>Mental health</td>
<td>Poor housing physical conditions (and health problems related to these conditions). Evictions/harassment from landlords.</td>
<td>Lower psychological well-being. Depression. Stress (hypertension as indirect impact).</td>
<td>Evans and English (2002); Evans and Kim (2007); Jones-Rounds et al. (2014); Krieger and Higgins (2002); Novoa et al. (2015); Vásquez-Vera et al. (2017).</td>
</tr>
</tbody>
</table>

Note: Summaries of the health implications of poor housing can be found in Braubach et al. (2011); Krieger and Higgins (2002); and Lowe and Haas (2007).
Figure 39.5  Multi-family housing in Los Angeles.
Source: Adrian Marquez.

Figure 39.6  Multi-family housing in Los Angeles.
Source: Adrian Marquez.
Background and Context

The city’s public health department was established in 1857, primarily to address the spread of disease in the urban population; a similar department was created by Los Angeles County in 1903 to address rural health issues. In the first part of the 20th century, the city public health department followed trends in the larger public health field by expanding laboratory research efforts, regulations, and healthcare services. When the city and county public health departments became one agency in 1964, the scope of responsibilities for this agency grew to include general public health and hospitals. Mental health services, while originally housed in the agency, eventually became their own department (Fielding et al. 2013). Today, the Los Angeles County Department of Public Health (DPH) is a complex organization with many divisions and serves a large territory with a population of many millions.

The evolution of the DPH coincided with notable changes in the demographics of Los Angeles. In the 1970s, the city’s population saw a relatively large influx of immigrants from Central America (mainly from El Salvador and Guatemala) seeking refuge from the civil wars in their home countries (Nielsen 1989). An undersupply of housing forced these immigrants and others to compete for the affordable units and resort to residential overcrowding, including finding shelter in illegal garage conversions of single-family homes (Chavez and Quinn 1987).

These housing circumstances gave rise to tenant activism, a movement that played a pivotal role in Los Angeles slum reform in the 1970s (Pitkin 2002). The work of these activists led to the passage of the Los Angeles Rent Stabilization Ordinance (LARSO) in 1979 to control rent increases to buildings built before that year, thus helping to keep rents affordable to tenants struggling with high housing costs. LARSO also provided protections to tenants by limiting the number of reasons for which a landlord could evict a tenant.

A continued housing crisis, in part owing to the low production of housing units in the 1980s (Nielsen 1989), motivated tenant activists to work for another policy change in the early 1990s; this time the focus was slum housing. The Blue Ribbon Citizens’ Committee, consisting of a group of Los Angeles attorneys, real estate developers, religious leaders, representatives of nonprofit organizations, and academics, presented two reports to city leaders. The reports described the poor management of housing complaints by the Department of Building and Safety and the Health Department, the two local agencies tasked with responding to housing issues (Merrifield and Blasi 1999; Pitkin 2002; Tobar 1997). These reports led to the creation of the Los Angeles Housing Department (LAHD), since renamed the Los Angeles Housing and Community Investment Department (HCID), and the creation of the Systematic Code Enforcement Program (SCEP), which is managed by HCID. Under this new arrangement, SCEP was charged with inspecting city apartments every three years with the goal of reducing slum housing.

Overcrowding was a problem in Los Angeles in the 1990s and continues today. A study by Myers and Lee showed that 35.2 percent of immigrants who had arrived in southern California during the 1970s lived in overcrowded housing in 1980. A decade later, 47.9 percent of recent immigrants did so” (Light 2006, p. 76). Despite overcrowding being illegal, officials in city agencies were concerned that enforcing the density laws would increase the homeless population (Light 2006). Today, the lack of sufficient affordable housing in Los Angeles contributes to the overcrowding problem. The city’s overcrowding rate is more than 10 percentage points higher than that of the country as a whole and, of all the city’s overcrowded units, approximately 84% are occupied by renters (U.S. Census Bureau 2016).

Overcrowding is primarily a problem for the lower-income population. Using census tract data, Figure 39.7 displays a map of the percentage of overcrowded units beside a map of the poverty rate in Los Angeles County; these maps show considerable overlap between the rates of overcrowding and poverty. The results from a correlational analysis of these data confirm the visual representation with a moderately high, statistically significant Pearson correlation coefficient of 0.676.2
Figure 39.7 Overcrowded units (left) and poverty level correlate (right) in Los Angeles County, 2015 (census tracts, by quantile).

Source: U.S. Census Bureau (2015a).

Notes: Percentage of overcrowded units (left); percentage of population below poverty level (right). There is no universal definition of overcrowding. In the United States, it is common to define overcrowding based on data collected by the U.S. Census Bureau. A typical definition of overcrowding is 1.01 persons or more per room.

Table 39.2 Selected demographic and housing characteristics, Los Angeles and U.S., 2015

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Los Angeles city</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whites</td>
<td>52.7%</td>
<td>73.6%</td>
</tr>
<tr>
<td>Blacks</td>
<td>9.0%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Asians</td>
<td>11.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Hispanics</td>
<td>48.7%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Immigrants</td>
<td>34.7%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$50,205</td>
<td>$53,889</td>
</tr>
<tr>
<td>Below poverty level</td>
<td>22.1%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Cost-burdened households</td>
<td>53.4%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Overcrowded units</td>
<td>13.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Built before 1960</td>
<td>49.2%</td>
<td>29.2%</td>
</tr>
</tbody>
</table>

Sources: Data for cost-burdened households from U.S. Department of Housing and Urban Development (n.d.); all other data from U.S. Census Bureau (2016).

Notes: 1 Hispanics of any race; 2 foreign born persons used as a proxy for immigrants; 3 households paying more than 30% of their income on housing; 4 overcrowded units defined as units with more than one person per room.
Today, Los Angeles continues to be a dynamic and demographically rich city. The population is diverse, with a higher proportion of Asians and Hispanics than in the country as a whole. Blacks constitute about 9% of the population, which is a bit smaller than the nation’s proportion of this group. Immigrants, however, make up 34.7% of the city’s total population, which far exceeds the share of this group in the nation’s population (see Table 39.2).

In addition to its demographic diversity, Los Angeles is distinguished by its high housing costs, especially relative to income. Based on the 2016 Housing Opportunity Index (HOI), which measures the share of houses affordable to households at the area median income in metropolitan centers across the nation, the Los Angeles–Long Beach–Glendale area was ranked 70 out of 71 for housing affordability (National Association of Home Builders 2017). Based on the HOI, Figure 39.8 shows that the Los Angeles area has historically been far below the national figures in terms of affordability; rents also are relatively high when compared to those of most of the country. In 2016, for example, the housing wage in Los Angeles County was $28.65, almost four times the federal minimum wage. Lastly, a strong indicator of the affordability problem is cost burden. In 2015, 53.4% of the households of Los Angeles, compared to 34.2% for the nation as a whole, were cost-burdened (paid more than 30% of their income toward housing).

**Housing as a Health Crisis in Los Angeles**

The problem of substandard housing in Los Angeles has been officially declared a health crisis. While data on housing conditions are somewhat limited, there are some official sources that shed light on the problem. The 2015 American Housing Survey (AHS) estimates that, in the Los Angeles–Long Beach metropolitan area, approximately 249,500 units are inadequate in terms of one or more housing systems and maintenance, including wiring, plumbing, heating, electric, and general upkeep. In addition, the AHS found over 2 million houses with building exterior problems such as holes in roofs (U.S. Census Bureau 2015b). The 2015 AHS also reported, for the previous year, that 282,000

![Figure 39.8 Housing Opportunity Index, Los Angeles area and the nation, 2006–2016. Source: National Association of Homebuilders (2017).](image)
houses had signs of rats or mice, 747,100 homes had signs of cockroaches, and 147,300 had mold (see Figure 39.9). In another report prepared by a nonprofit organization, it was estimated that approximately 48,000 people live in “extreme” substandard homes in Los Angeles (Lowe and Haas 2007, p. 3).

A review of existing studies and literature indicates that older, substandard housing is experienced more by (and thus disproportionately affects) particular populations. For example, in Los Angeles County, Latino immigrants and African-American households are two groups over-represented in substandard housing; the health effects can be significant for these households. According to the 2011 Los Angeles County Health Survey, in L.A. County, “Significant disparity exists by race/ethnicity as African-American children had over three times the rate of asthma (24.9%) compared to Latinos (8.0%), whites (7.2%), and Asians/Pacific Islanders (4.1%)” (Los Angeles County Department of Public Health 2014, p. 2). Also, the County Health Department found that, among persons under 21 years of age, Latinos and African-Americans accounted for over 90% of the lead poisoning cases in Los Angeles County between 2006 and 2010, 81.1% and 10.8% respectively (Los Angeles County Department of Public Health 2014). Owing to poor housing conditions, these populations also are more at risk of mental health problems. Adults living in substandard housing may find an unhealthy home environment adding to the stress of their daily lives as they struggle to make ends meet and maintain affordable housing (Leavitt and Lingafelter 2005; Los Angeles County Department of Public Health 2015).

Figure 39.9  Cockroaches in a corner.
Source: Benjamin G. Ramm, legal consultant.
Specific information on many issues concerning housing and health is not readily available in Los Angeles. For example, the number of households using pesticides to combat cockroaches and other pests is unknown. However, the routine use of these pesticides may have significant consequences for some housing occupants, especially children (Ma et al. 2002; Pogoda and Preston-Martin 1997). Research associates older housing in poor repair with pesticide use and indicates that inner-city children are exposed to high levels of pesticides for this reason (Landrigan et al. 1999). Ironically, pesticides are used to kill pests that are associated with respiratory illness, but exposure to pesticides themselves may cause respiratory problems.

**Contributors to Substandard Housing in Los Angeles**

Substandard housing in Los Angeles is created and sustained by several phenomena; these include business practices, the market, and institutions. Advocates from nonprofit organizations cite the

![Figure 39.10](image_url)  
**Figure 39.10** Water damage and rotted floor.  
*Source:* Benjamin G. Ramm, legal consultant.
lack of proper landlord maintenance, especially in older, decaying, renter-occupied buildings, for most of the existing substandard housing conditions in Los Angeles. Housing deterioration often begins with unseen problems, particularly plumbing systems. Galvanized pipes, commonly used in many mid-20th century developments throughout Los Angeles, are a significant concern because they are less durable than more expensive copper pipes (Stein 1991); in fact, while galvanized pipes last 20 to 50 years, copper pipes typically last 50 years or more. Water leaks from pipes can harm the building’s structure and result in health problems for tenants. Such conditions should be addressed immediately by the landlord upon discovery, but often they are not.6 (See Figures 39.10 and 39.11.)

Some landlords use business models that support the neglect of building maintenance, especially expensive repairs such as re-piping, and they may even ignore public safety and health laws (and related citations) in the name of profit. Many tenant advocates characterize these landlords as “greedy” and duplicitous. According to a report produced by tenants’ advocacy organizations in Los Angeles, some landlords have skills in “evading the highest level of public scrutiny with superficial repairs and appearing to cooperate with city officials, by hiring tenants to do some work, and managing relationships in this manner” (Lowe and Haas 2007, p. 30). However, in some cases, when landlords are required to respond to health and safety citations, they blame the tenants for causing pest infestations and other problems by not taking care of their homes.

Figure 39.11 Broken ceiling and mold.
Source: Benjamin G. Ramm, legal consultant.

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Landlords who fail to address problems at their properties and expose tenants to unsafe homes are often called “slumlords.” Tenant advocates define “slumlords” as criminal landlords “who profit by collecting rent and by not maintaining their properties,” and who “consistently, repeatedly and intentionally violate housing and health laws in order to maximize profit” (Lowe and Haas 2007, pp. 4, 26). In Los Angeles, slumlords “constitute 1–2% of the entire landlord population”; however, one slumlord could own “over 200 buildings . . . which house over 1,700 families and 8,000 people” (Lowe and Haas 2007, p. 4). Thus, it can be argued that slumlords are a large part of the housing and public health crisis in Los Angeles.

The housing market and demographics of Los Angeles contribute to the substandard housing problem. As discussed previously, Los Angeles is a very expensive housing market; affordable housing is scarce. In many cases, the available affordable housing is in older, less desirable buildings. Poor households with little choice, a subset of which are undocumented immigrants, rent this housing as a matter of necessity. In a worst case scenario, these vulnerable households will end up in a slumlord’s building, living in fear of losing their homes. They do not know where to go to find another affordable rental unit, and they feel powerless to compel the landlord to make repairs (Leavitt and Lingafelter 2005; Sosa 2010). In their article on low-wage workers and housing in the greater Los Angeles area, Leavitt and Lingafelter (2005), quoting a staff member of a labor rights organization, emphasize this point: “The level of oppression is so high for many people that they have lost hope and just settle for what they have. The oppression is both economic and psychological, often causing depression and denial about the reality of housing conditions” (pp. 50–51). Thus, the market, slumlords (suppliers), and vulnerable tenants (demanders) collide, contributing to the problem.

Institutions (laws and local public agencies) also contribute to the substandard housing problem in Los Angeles. The city has a rent control law, originally passed in 1978; this law prohibited rent increases above a certain percentage a year regardless of demand in the market. Landlords respond to such laws in several different ways, including using deferred maintenance to offset the loss in rent revenue as the market increases; such laws, economists argue, lead to poorer housing conditions (Arnott 1995; Moon and Stotsky 1993). In addition, as predicted by a set of Los Angeles-based researchers, landlords might remove their housing from the market (perhaps converting it to condominiums for purchase), reducing the supply of rental housing and thus affordability (Rydell et al. 1981). Los Angeles’s law has gone through revisions over the years; today it is known as LARSO and essentially applies to buildings with at least two units built before November 1978 (Los Angeles Housing and Community Investment Department 2017a).

LARSO is not a strict rent control law, but a more moderate approach. Under LARSO, for example, a landlord can raise the rent of a unit to market price when a tenant moves out. LARSO has been crafted to “protect tenants from excessive rent increases on their residential rental unit, while at the same time allowing landlords a reasonable return on their investment” (Los Angeles Housing and Community Investment Department 2016). Such fine splitting of goals does not have the substantial impacts of strict rent control (Arnott 1995; Bergman 2014). In buildings with long-term tenants, landlords are likely to defer maintenance or otherwise encourage tenants to vacate; units with renter turnover are likely to lose affordability. Both of these outcomes do not support the goal of healthy housing.

Local government is an important factor in eliminating substandard housing. The Los Angeles Housing and Community Investment Department (HCID), formerly known as the Los Angeles Housing Department, is a city department with a range of responsibilities, including enforcing housing codes through multi-family building inspections and citation issuance to landlords for building violations. Through its Regulatory Compliance and Code Bureau, HCID is the primary
department involved in substandard housing issues for most of the city’s rental units (Los Angeles Housing and Community Investment Department 2017b).

HCID uses several approaches to enforcing housing codes. Under SCEP, HCID staff conducts regular inspections of multi-family rental properties to ensure units are safe and habitable. Owners are charged a fee of $43.32 per unit per year to cover the inspections performed by the agency, and for another re-inspection if a notice to comply is issued (Los Angeles Housing and Community Investment Department 2017). When a notice to comply is issued, the landlord has 30 days to remedy the problem, unless it is deemed an emergency repair, in which case the landlord is asked to comply within a three- or seven-day period, depending on the situation. After the stated repair period, HCID staff re-inspects the property. If the property is still out of compliance, the landlord is summoned to a General Manager’s Hearing to discuss a plan of action and schedule for the repairs. In non-responsive cases, the cited property’s file is forwarded to the Office of the City Attorney as an official criminal complaint and becomes eligible for prosecution.

In addition to the regular inspection program, housing problems may be reported by tenants. Tenants can file complaints through the HCID website, by phone, or in person at one of the HCID offices. There is no charge for tenants to file complaints, and landlords cannot evict or harass them for doing so.

SCEP has contributed to the identification of housing problems in the city. Between April 2005 and June 2008, SCEP found 860,113 violations, with “67 percent of the City’s [LA]RSO properties and 58 percent of market-rate properties” (Flaming et al. 2009, p. 162) represented in the set of properties with violations. While SCEP is not universally appreciated, some landlords find the program helpful in identifying needed maintenance. At the same time, other landlords think inspection quality is inconsistent and want tenants held accountable for some of the violations (Flaming et al. 2009).

Another program operated by HCID is the Rent Escrow Account Program (REAP), designed to promote repairs and maintenance of rental properties. Properties are placed in REAP when they are subject to one or two notices to comply (Los Angeles Housing and Community Investment Department 2015). When properties are placed in REAP, a portion of the affected tenants’ rents goes into an escrow account managed by HCID; by holding part of the rents in escrow, REAP hopes to encourage landlords to remedy the code violations. Funds remain unavailable to owners unless used to make the required repairs.

HCID has several other enforcement efforts. These include: the Lead Hazard Remediation Program; the HOME Inspection Program, whereby all buildings are subject to inspections; the Urgent Repair Program, which allows only a two-day order to comply with a citation; and the Specialized Enforcement Unit, whereby attention is focused on frequently cited buildings and the owners who do not comply with citations.

The HCID is not the only housing standards enforcement arm of local government. The DPH also receives official complaints from tenants when mold, cockroach infestation, and related problems are present. The DPH code enforcement focuses on businesses, and apartment buildings are considered to be businesses. On its website, the DPH has an online complaint page with a pull-down window that includes “an unmaintained rental” unit as the problem; the site lists typical complaints, including rodent problems, mold in rental housing units, lead exposure hazards, and others (Los Angeles County Department of Public Health n.d.).

HCID and the DPH appear to have adequate programming in place. Tenants’ advocates, however, express frustrations with both agencies, as well as other agencies involved in the enforcement process. The chief complaint concerns jurisdictional issues, as the agencies operate at local, county, and state levels, and many tenants without the assistance of legal counsel are unsure about where to file a complaint or which agency is responsible for their unit (see Table 39.3 for a list of agencies that
address substandard housing issues). In an informal test of complaint processes over the phone, the city and county departments responsible for housing standards complaints were called by the authors for basic information. Each department had an automated interactive voice-response system with multiple layers. In the case of the county, a human eventually came on the line, but would not or could not identify which area of housing standards were under the county’s jurisdiction. The city call never connected with a live human voice, only a message saying that there was a high volume of calls and a suggestion to call later. Having several potential agencies dealing with a particular property, and trying to figure out who has the authority to enforce which laws, complicates the process of addressing substandard housing.

As demonstrated, there are numerous contributors to the problem of substandard housing in Los Angeles. Recalcitrant landlords, unintended consequences of rent stabilization, and blurred lines among administrative enforcement agencies all contribute to the crisis, as does tenants’ reluctance to file complaints for fear of losing their housing. Thus, while the current system succeeds in reducing housing problems, other individual and organizational actions are vital to improving housing conditions in the city.

**Efforts by Tenants and Advocates in Los Angeles to Combat Substandard Housing**

Tenants and advocates combat substandard housing in a variety of ways. Two approaches that can be effective are the legal system and organizational collaboration among tenants’ advocates aimed at data collection, outreach, and informing policy. The legal route has at least two forms. The first, a useful but relatively rare approach, is the class action lawsuit. A barrier to this approach is the scarcity of landlord-tenant legal practitioners with sufficient expertise to pursue this type of litigation (Sosa 2010).
California allows for class action lawsuits when “the question is one of common or general interest, of many persons, or when the parties are numerous and it is impractical to bring them all before the court” (FindLaw 2016). However, class action lawsuits against slumlords are difficult to litigate because the situational circumstances must meet certain criteria. For example, these lawsuits must be “focused around the building itself, and . . . usually [there] has to be a defect in a major system of the building, like the gas, water, or electricity” (Sosa 2010, p. 11). If defects such as these are found, then in legal terms landlords are violating the “implied warranty of habitability.” Once a judge “certifies” a class action lawsuit and validates some or all of the tenants’ claims, the case is usually settled out of court. Landlords tend to settle, because going to trial could severely damage their reputations and lead to significant financial loss. Interestingly, tenants go home with thousands of dollars in their pockets after a settlement, but their actual living conditions rarely change (Sosa 2010).

An individual tenant working with a lawyer may also use the legal system to address housing problems. For example, attorneys defending evictions can directly address substandard conditions. The tenant of a substandard unit is not obligated to pay the full rent, and can counter an eviction by proving that the unit is in substandard condition. The court decides if and by how much the rent should be reduced until the landlord completes repairs, and in some cases a tenant lawsuit can result in heavier penalties for the landlord. For instance, when local enforcement agencies have issued orders to repair substandard conditions, the consequences for ignoring those orders can be severe (B. Ramm, personal communication, February 24, 2017). Landlords can be barred from collecting rent and subjected to additional damages and award of the tenant’s attorney fees (B. Ramm, personal communication, February 24, 2017).

Collaboration among local organizations is another potentially effective approach to reducing substandard housing. Los Angeles has a number of organizations that address blighted housing, and these organizations have adopted policies and implemented projects to help reduce the number of unhealthy homes. For example, for the past 15 years, community groups have been working together to collect and analyze data in order to better understand the links between housing and health. In a multi-city study of housing and health, PolicyLink, a policy research think tank, observed a collaboration of several organizations combating substandard housing in Los Angeles. In reporting the results, PolicyLink wrote:

In Los Angeles, Better Neighborhoods, Same Neighbors: A Public Health Approach to Slum Housing and Neighborhood Stability is a community-based public health initiative that includes practitioners, doctors, health promoters, tenant organizers, and researchers. Since 1998, a coalition of four groups—Los Angeles Community Action Network (LACAN), Strategic Actions for a Just Economy (SAJE), Esperanza Community Action Housing Corporation, and St. John’s Well Child and Family Center—have taken a multipronged approach to improve health by improving housing. St. John’s provides health assessments and exams and compiles data on illnesses that prevail in slum housing. It then refers certain patients to Esperanza, which goes into homes to interview residents and assess housing conditions. SAJE and LACAN are tenant organizers and educate tenants about their rights, help them find legal counsel, and press landlords to improve their properties.

(Bell and Rubin 2007, p. 42)

Some collaborative efforts involve nonprofit organizations and other community groups working with local public agencies. The Asthma Coalition of Los Angeles County, for example, entails coordination between the DPH and community partners to “advocate policy and systems change to
prevent, minimize, and manage the burden of asthma” (Los Angeles County Department of Public Health 2015, p. 15). Such collaborative ventures can be effective in reducing substandard housing and related health problems, but they are still fairly limited in scope and number.

The relationship between housing and health in Los Angeles, as in other cities, continues to be an important public policy issue. Addressing poor housing conditions and concomitant health problems requires, at the very least, a clear and accessible tenant complaint process, a fair and efficient disposition of complaints, and an effective system for monitoring compliance with housing standards, including responses to violations. Moreover, the problem of substandard housing and the systems developed to address it must be known and understood by local policymakers. Thus, efforts by public, private, and nonprofit entities to inform and advocate to city leaders about this issue are essential to improving housing quality, the lives of tenants, and cities in general.

**Conclusion**

Housing and health are inextricably linked in urban environments. In the United States, substandard housing was historically common in big city slums, and it presented a serious threat to public health. A reform movement that began in the late 1800s resulted in notable gains in housing quality and public health. In the mid-1900s, the controversial federal policy of urban renewal razed “blighted” housing and neighborhoods in some cities; removing older buildings in this manner may have reduced threats to the health of residents. Government rehabilitation programs over the decades have improved the urban housing stock with many positive benefits. At the same time, affordability has become the most pressing housing policy concern in cities. In part as a result of insufficient affordable housing, housing and health re-emerged as an important issue in the late 1980s, and it continues today.

In the case of Los Angeles, demographics, the age of the housing stock, and the lack of affordable housing have converged to create a housing and health crisis. A majority renter city with a significant number of immigrants and low-income households, a majority of housing units over 50 years old, and housing costs significantly higher than those of the rest of the country has resulted in overcrowding and poor housing conditions. These housing problems are associated with asthma related to rodent and cockroach infestation, higher susceptibility to the spread of communicable disease due to overcrowding, cognitive impairment in children due to lead exposure, and mental health issues as a result of living in unhealthy housing. Contributing to substandard housing in the city are: slumlords, who may maximize profits by taking rents without properly maintaining their properties; the housing market, which leaves little housing choice for lower-income households; and local laws and agencies that result in sub-optimal results for maintaining housing quality. All these contributing factors are important; but the last issue, especially the unclear boundaries between public agencies and the lack of general coordination, is solvable and seems a good starting point for public health professionals in Los Angeles.

Overall, the case of Los Angeles suggests several steps that should be taken in cities to improve housing conditions and concomitant health issues. First, a review of existing laws and policies that might negatively impact housing conditions should be conducted on a regular basis as part of a city’s housing planning process. Second, local public health agencies should take the lead in eradicating unhealthy housing and work closely with other agencies involved in code enforcement; they should coordinate policies and practices to ensure the enforcement process is transparent to tenants and landlords. These practices should involve well-crafted policies that include significant disincentives for landlords to defer maintenance and ignore code citations. Third, local tenant advocacy groups should collaborate with each other and local public agencies to build a strong coalition around the goal of eliminating substandard housing. Finally, cities need to encourage
production of housing affordable to low- and moderate-income families to ensure that a scarcity of housing does not result in only bad options in terms of housing quality for households with few resources.

Notes

1 There is no universal definition of overcrowding. In the United States, it is common to define overcrowding based on data collected by the U.S. Census Bureau. A typical definition of overcrowding is 1.01 persons or greater per room.

2 The correlation analysis uses all census tracts within Los Angeles County with occupied housing units (n=2,342).

3 The Los Angeles–Long Beach–Glendale Metropolitan Division is a regional area, larger than the City, but smaller than the Metropolitan Statistical Area.

4 Housing wage is defined as the hourly pay needed to afford a two-bedroom dwelling unit at fair market rent (National Low Income Housing Coalition 2016).

5 Landlords or housing managers also may treat a housing unit or a whole residential building with pesticides.

6 If left unattended, water leaks can cause a cascade of problems including wood rot, mold, and the attraction of cockroaches. No matter how clean a living space might be or how often the exterminator visits, leaking pipes promote infestation, as the cockroaches breed in the warm, dark, moist spaces between walls. Cockroach waste from excrement and decaying bodies can become airborne and is easily inhaled by occupants of the affected housing. As discussed previously in the chapter, this type of exposure can produce allergens and result in asthma.

7 Single-unit rentals are under the jurisdiction of the Los Angeles Department of Building and Safety.

8 Interestingly, HCID inspectors do not have the authority to deem a building “substandard,” because state law assigns authority to a public health officer working at the county health department. California law states a unit is substandard when vermin or pest infestation is determined by a health officer (California State Code, section 17930.3A12). A health officer works under the jurisdiction of the DPH, as this department has dedicated health inspectors, which means that the inspectors from HCID do not have the same authority.

9 However, getting the judge to “certify” a class action suit has gotten more complex over the years owing to arguments presented by lawyers that have convinced judges that certain habitability violations do not make a class action, such as building-wide cockroach infestation (B. Ramm, personal communication, February 25, 2017).

10 These organizations include city agencies, nonprofit organizations, and public interest law organizations.

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