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<http://www.nchh.org/LinkClick.aspx?fileticket=moPP0%2fzgD8I%3d&tabid=344>

1) Holes in floors	Holes large enough for someone to trip in; may or may not go all the way through to a lower floor or to the exterior of the unit.			
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4) Sewage disposal breakdown	Limited to housing units in which the means of sewage disposal was a public sewer, septic tank, or cesspool. Breakdowns refer to situations in which the system was completely unusable. Examples: septic tank being pumped because it no longer perked, tank collapsed, tank exploded, sewer main broken.	Yes	Lack of access to toilet or liquid waste disposal results in unsanitary conditions and spread of disease.	<p>Lowry, S. 1990. Housing and Health. Br Med J, 1990; 300:177-9.</p> <p>Office of the Deputy Prime Minister. 2004. Housing Health and Safety Rating System Guidance.</p>
5) Room heater without flue	Any room heater that burns kerosene, gas, or oil and that does not connect to flue, vent, or chimney.	Yes	Carbon monoxide poisoning.	<p>CDC, HUD. 2006. Healthy Homes Reference Manual. DHHS.</p> <p>Office of the Deputy Prime Minister. 2004. Housing Health and Safety Rating System Guidance</p>

<p>7) Window problems</p>	<p>"Boarded-up windows" that are sealed off to protect against weather or entry and include windows and/or doors covered by board, brick, metal, or some other material. "Broken windows" indicates several broken or missing window panes.</p>		<p>Indication of security problems, barrier to fire escape, source of water intrusion, injuries from broken glass, indication of broader maintenance problems related to health, lead poisoning due to deteriorated paint.</p>	<p>Krieger J., Higgins D. 2002. Housing and Health: Time Again for Public Health. Am J Public Health. 2002 May; 92(5): 758-768.</p> <p>Office of the Deputy Prime Minister. 2004. Housing Health and Safety Rating System Guidance.</p>
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10) Water supply stoppage	Housing unit was completely without running water from its regular source. "Completely without running water" means that the water system servicing the unit supplied no water at all.	Yes	Lack of proper sanitation can result in spread of infectious diseases. Dehydration, which is associated with headaches, constipation, dry skin.	Office of the Deputy Prime Minister. 2004. Housing Health and Safety Rating System Guidance.
11) Lacking complete plumbing	A housing unit that does not have all three specified plumbing facilities (hot and cold piped water, flush toilet, and bathtub or shower) inside the housing unit, or in which the toilet or bathing facilities are also for the use of the occupants of other housing unit.	Yes	Lack of proper sanitation can result	

<p>13) Roofing problems</p>	<p>"Roofing problems" is comprised of three components: sagging roof, missing roofing material, and hole in roof. A "sagging roof" is a critical defect indicating continuous neglect or deep or serious damage to the structure. "Missing roofing material" includes rotted, broken, loose, or missing shingles, tiles, slates, shake, and tin, caused by extensive damage from fire, storm, or serious neglect. "Hole in roof" is when the missing roof materials expose the interior of the unit directly to weather.</p>		<p>Enables water and pest entry: mold, allergens. Sign of structural problems.</p>	<p>Putus T., Tuomainen A., Rautiala S. 2004. Chemical and Microbial Exposures in a School Building: Adverse Health Effects in Children. Archives of Environmental Health: An International Journal, 59(4), 194</p>
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19) Rooms without electrical outlet	A housing unit with at least one malfunctioning electric wall outlet in each room of the unit. A working electric wall outlet is one in operating condition. An extension cord does not qualify as an electric wall outlet.	Yes	Use of extension cords to supply power poses risk of electrocution, fire, and trip hazards.	
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The City returned an Excel database of 4,677 inspection records for 2013. Records were imported into Microsoft Access and cleaned to correct addresses and remove duplicates, resulting in 4,627 unique property records. Data cleaning methods are summarized in detail elsewhere and available on request.

Same address and same case number in Citations data	Citations consolidated to a single row	No changes
Same address and different case number in Citations data	All references to that address are removed (12 records)	All references to that address are removed (13 records)
Same address and different case number in All Inspection data, with matching data for only 1 case number in Citations	No changes	All Inspection data with a case number that matches the Citations data is kept; all other case numbers for that address are removed (20 removed)
Same address and different case number in Property data, with no matching data by case number in Citations	No changes	The first address and case number are retained and the rest are removed. (The case number is not significant in this situation.) (16 removed)

The detailed methods for these steps are described elsewhere, and are available upon request.

Addresses received from the city were in "STREET ####" format (e.g., "MAIN ST 0123"). Some addresses included apartment numbers (e.g., "MAIN ST 0123A"). The input format for geocoding addresses is "#### Street" (e.g., 123 MAIN ST"). We used MS Excel to extract the multiple parts of the address and reassemble. A visual scan of the addresses was conducted to ensure accuracy.

Addresses were geocoded in ArcGIS 10.1 using the New York State Street Address Mapping Program.¹ NYS developed a composite (based on many data sets) geocoder through their Street Address Mapping (SAM) program. SAM is available as a free web-based geocoding service, with no batch limit.

In ArcMap, go to

Enter <http://gisservices.dhSES.ny.gov/arcgis> as the URL. Leave the username and password blank.

Once your connection is established, navigate in ArcCatalog to gisservices.dhSES.ny.gov (user)\Locators\SA