**Activity 3.2 Student Materials**

In this activity, you will use what you have learned about the sources, risks, and consequences of childhood lead poisoning to design solutions for Brookton, a community in which a high percentage of the children have elevated blood lead levels. These solutions will be debated during class in a mock debate for the Brookton City Council.

*Before class:*

Prior to the debate, read the materials provided below. These include a general description of the city, data showing the distribution of elevated blood lead levels among children, and various demographic characteristics of different neighborhoods. Carefully review the information about your role as a community stakeholder (landlord, community member from one of four neighborhoods, elementary school teacher/principal, or health care provider), mayor, or member of City Council.

* If you are a stakeholder, consider what solution you should recommend to City Council to reduce childhood lead poisoning in Brookton. Come to class with an outline of your proposal and be prepared to present this solution in a 3-minute presentation. City Council members may ask you questions and debate the best solution.
* If you are a City Council member, read the information about each stakeholder group and consider what types of solutions the various stakeholders are most likely to support, what factors they will consider in making their decisions, and thus prepare questions to ask of the groups.

About Brookton

Brookton is a city of 100,000 people in the Northeast region of the U.S. Brookton is proud of its history; 80% of the homes were built before 1950. However, due to the closure of the lead smelter that employed many people in the city until 1980, unemployment and poverty are high, especially in the North town and East town neighborhoods, where many people rent their homes from landlords.

The Brookton health director just released a stunning report that 20% of the children under age 6 have blood lead levels over 10 μg/dL, which is five times the statewide rate (4%) and more than 10 times the national average. The City Council has convened a hearing of Brookton stakeholders to gather ideas for how to reduce childhood lead poisoning in their city.

The Brookton City Government will be facing budget cuts and is concerned about finding a low-cost, and efficient solution to this problem. The fire department inspects all rental units for fire hazards every five years, but no other inspections are done regularly. The Health Department is considering applying for a $500,000 state grant to address the problem if they can show strong community support.

Data and Demographics

*Cost Estimates*

Visual inspection of a home: $50

Dust wipes + visual inspection $200

Risk assessment $500

Mean lead hazard control cost $5,000

*Population data*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **% White** | **% African American** | **% Latino** | **Average income** | **% Children with eBLLs** |
| North town | 5% | 85% | 10% | $15,000 | 30% |
| East town | 10% | 55% | 35% | $12,000 | 35% |
| South town | 90% | 5% | 5% | $60,000 | 3% |
| West town | 45% | 40% | 15% | $40,000 | 10% |
| Brookton Total | 50% | 40% | 10% | $40,000 | 20% |
| Statewide Total | 80% | 15% | 5% | $50,000 | 4% |

*Housing data*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Mean Housing Value** | **% Rented housing** | **Total number of homes** | **Number built before 1978** |
| North town | $35,000 | 90% | 15,000 | 13,000 |
| East town | $30,000 | 80% | 10,000 | 9,000 |
| South town | $90,000 | 20% | 10,000 | 9,000, |
| West town | $60,000 | 50% | 15,000 | 9,000 |
| Brookton Total | $XX | XX | 50,000 | 40,000 |