



DUWAMISH VALLEY CUMULATIVE HEALTH IMPACTS ANALYSIS: COMMUNITY FACT SHEET

In March 2013, the Duwamish River Cleanup Coalition/Technical Advisory Group (DRCC/TAG) and Just Health Action published a Cumulative Health Impacts Analysis (CHIA) for the Duwamish Valley. The project was funded by an EPA Environmental Justice Research Grant and the University of Washington's School of Public Health and Center for Ecogenetics and Environmental Health. This fact sheet gives an overview of the CHIA and its findings.

What is a Cumulative Health Impacts Analysis (CHIA)?

A study of cumulative impacts considers all exposures to toxic substances that can affect your health, such as air pollution and contaminated soils, as well as things known to make people more vulnerable to illness, such as stress or lack of health insurance. When all these factors are considered together, rather than in isolation, they can help public health professionals assess an individual's or community's cumulative health impacts and associated health risks.

Why a Duwamish Valley CHIA?

The neighborhoods around the Duwamish River are generally low-income, with large minority and immigrant communities. The Duwamish Valley is also home to Seattle's largest industrial and maritime trade centers, is bisected by three highways and the Duwamish River Superfund Site, all of which can be major sources of pollution exposures. Together, these factors can make a community highly vulnerable to health impacts.

Environmental justice (EJ) is a top EPA priority, meaning that "no group of people should bear a disproportionate burden of environmental harms and risks." However, "many minority, low-income, tribal and indigenous people in the United States have experienced higher levels of environmental pollution and other social and economic burdens." (EPA Plan EJ 2014).

In 1994, a Presidential Order on Environmental Justice directed EPA to identify cumulative exposures in environmental and health assessments of communities whenever possible, and to collect and analyze data on race, national origin, income and other conditions that may influence the health of those communities. Seattle and King County have also adopted Race and Social Justice Initiatives that require health inequities to be identified and addressed.

The Duwamish Valley CHIA was prepared to help inform EPA, WA Ecology, King County, and the City and Port of Seattle's Duwamish River cleanup decisions, develop risk reduction strategies for the affected neighborhoods, and improve health outcomes in those communities.

What did the CHIA find?

The Duwamish Valley CHIA examined environmental and socioeconomic data for 10 ZIP codes citywide, including 98108, which encompasses South Park, Georgetown and Beacon Hill. Examples of indicators used include poverty; the number and severity of contaminated waste sites; percent tree canopy; and frequency of asthma hospitalization. Using an established cumulative impacts ranking methodology and calculation, 98108 was compared to other areas of Seattle, as well as to Seattle and King County averages. Additional evidence at the larger Duwamish Valley level and smaller South Park and Georgetown census tract level was examined as well. The CHIA found that the Duwamish Valley has pronounced health inequities relative to other areas of Seattle, compromising their health and meriting attention from federal, state and local decision-makers.

Key Findings

- ▶ **ZIP code 98108 has the highest cumulative impact score of all Seattle areas in the study.**
The cumulative impact score is a combination of socioeconomic, environmental, and public health conditions ranging from 6–120, with higher scores indicating disproportionate impacts. 98108 received the highest score (106), while the lowest score (13) was for Magnolia (98199).
- ▶ **ZIP code 98108 ranks poorly for most environmental health factors.**
The 98108 ZIP code has the greatest number of contaminated waste sites and the poorest built environment characteristics of all areas studied, and ties with Eastlake (98102) for the most severe air pollution.
- ▶ **Analysis by ZIP codes obscures even greater impacts in South Park & Georgetown.**
South Park and Georgetown residents, examined separately from the rest of 98108, have a life expectancy is 73.3 years, eight years shorter than the Seattle and King County average (81.5 years), and 13 years shorter than for residents of Laurelhurst, in the 98105 ZIP code (86.4 years).

The full Duwamish Valley CHIA Report can be found online at: www.duwamishcleanup.org/programs/duwamish-community-health-initiative

Recommendations

Based on the findings of the Duwamish Valley CHIA, DRCC/TAG recommends:

1. Establishing a Community Health Task Force to identify and take actions to improve community health in South Park, Georgetown and the greater Duwamish Valley.
2. Creating a Community Health Mitigation and Revitalization Fund, managed by the affected community and funded by agencies with a public health mandate and parties responsible for cumulative impacts, to ensure the dedication of resources to health improvement actions identified by the Task Force.
3. Improving the cleanup plan for the Duwamish River Superfund site to ensure that at minimum the cleanup meets federal and state health standards as quickly as possible and over the long term, and adds complementary health benefits to offset chronic and cumulative impacts. This can be achieved by:
 - a) removing all highly contaminated toxic sediments, to ensure that the cleanup is final and permanent;
 - b) enforcing a comprehensive plan to control ongoing sources of toxic pollution, so that remaining natural river recovery areas are certain to meet health standards;
 - c) increasing green space, public access, and walking/biking trails along the river as part of Superfund's required restoration projects; and
 - d) hiring local, to ensure that the immediate benefits of cleanup flow to local residents in the form of good paying green jobs.

What's Next?

EPA is accepting public comments on its proposed Duwamish River Cleanup Plan until June 13, 2013, Information on how to comment, public hearings and other community meetings is available on DRCC/TAG's [web site at www.duwamishcleanup.org](http://www.duwamishcleanup.org).