

LIFE AT THE FENCELINE

Understanding Cumulative Health Hazards in Environmental Justice Communities

THE PROBLEM

In Albuquerque and across the United States, industrial and commercial facilities that can cause catastrophic harm through explosions or toxic releases operate often without the knowledge of the residents, business owners, schools, and medical facilities nearby. Serious chemical releases at the approximately 12,500 high-risk facilities that are part of the US Environmental Protection Agency's "Risk Management Plan" (RMP) program because they use or store highly hazardous chemicals are frighteningly common. From 2004–2013 there were over 1,500 reported chemical releases or explosions at RMP facilities that caused over \$2 billion in property damage, evacuation or "shelter in place" of half a million people, 17,099 injuries, and 58 deaths (US EPA).

Although Albuquerque still faces significant hazards from chemical facilities and toxic air pollution as described below,

community organizing and advocacy have produced some improvements.

Community organizations in the Mountain View community of Albuquerque supported the creation of the Valle de Oro National Wildlife Refuge, which helped preserve open space from more industrial development or gentrification in a community already heavily burdened with polluting and hazardous facilities. The Refuge and community partners created an Environmental Justice plan "to integrate environmental and economic justice into its daily practice as the land is restored for wildlife and developed as an educational and recreational resource for the community" (Friends of Valle de Oro National Wildlife Refuge).

In response to community pressure, Southside Water Reclamation Plant eliminated use of highly toxic chlorine gas in



Los Jardines Institute supports community gardens and other solutions to health and environmental hazards in Albuquerque.



Residents of Albuquerque and many other fenceline communities depend on dollar stores for household products and food. Dollar stores could support community health by stocking locally-grown fresh produce and ensuring all the products they sell are free of toxic chemicals.

its treatment process by switching to a much safer ultraviolet disinfection system. This conversion to a safer process removed the potential of a toxic disaster for 160,000 people living in a 5.4-mile radius, and allowed the facility to de-register from the RMP program (EPA RMP Database).

Many communities with concentrations of high-risk chemical facilities face multiple hazards, including potential chemical disasters, lack of access to healthy foods, daily exposure to toxic chemicals released into the air by industrial

RESEARCH FINDINGS

Details on the study methodology are included in the full report *Life at the Fenceline: Understanding Cumulative Health Hazards in Environmental Justice Communities*, available at www.ej4all.org/life-at-the-fenceline.

Overall findings for the nine communities studied are:

1. In most of the areas researched, large majorities of the population live in fenceline zones around highly hazardous facilities, and most schools and medical institutions are located in these zones, at much greater rates than nationally.
2. Fenceline zones around hazardous facilities are disproportionately Black, Latino, and impoverished, and face multiple health hazards and risks.

facilities, and even chemical exposures from everyday products in their homes. These health hazards are often amplified by other factors such as lack of access to health care; lack of quality public services and infrastructure; higher rates of diseases like diabetes and asthma; and stress from poverty, unemployment, and crime, among other factors.

Los Jardines Institute in Albuquerque, and community organizations in eight other areas of the US, worked together through the Environmental Justice Health Alliance for Chemical Policy Reform (EJHA) to research who lives in the “fenceline” zones (within three miles) near high-risk RMP facilities, what hazards they face, and possible solutions. The research addressed several interconnected issues:

- Who lives in fenceline zones near high-risk chemical facilities included in the EPA’s RMP program?
- What cancer risks and potential for respiratory illness related to toxic air pollution exposure (from both RMP facilities and other sources) do the people living in these fenceline zones face?
- What is the demographic profile of people living in areas within the fenceline zones that have Low Incomes and Low Access to healthy foods (known as LILA areas), two key indicators of unequal risks and health impacts?
- Where are important institutions, such as schools, hospitals and nursing facilities, and dollar stores (which in many areas are the only source of household products and food, and can contribute chemical exposures from the products they sell, or could choose to support health by selling nontoxic products and healthy foods) located in fenceline zones?

3. The most vulnerable neighborhoods—areas that are both low income and have low access to healthy foods—are even more heavily and disproportionately impacted.

Specific research findings for Albuquerque appear on page 4.

Cancer and Respiratory Hazard Data

In our findings, cancer risk from toxic air pollution, and potential for respiratory illness from air pollution, are based on EPA’s National Air Toxics Assessment data, including the Respiratory Hazard Index (RHI). For a full explanation, see Appendix A (Methodology) of the full report.

SOLUTIONS: What can be done to address these health and safety risks?

In order to protect communities, workers, businesses, and the environment, the EJHA and Los Jardines Institute recommend that local, state, and federal governments:

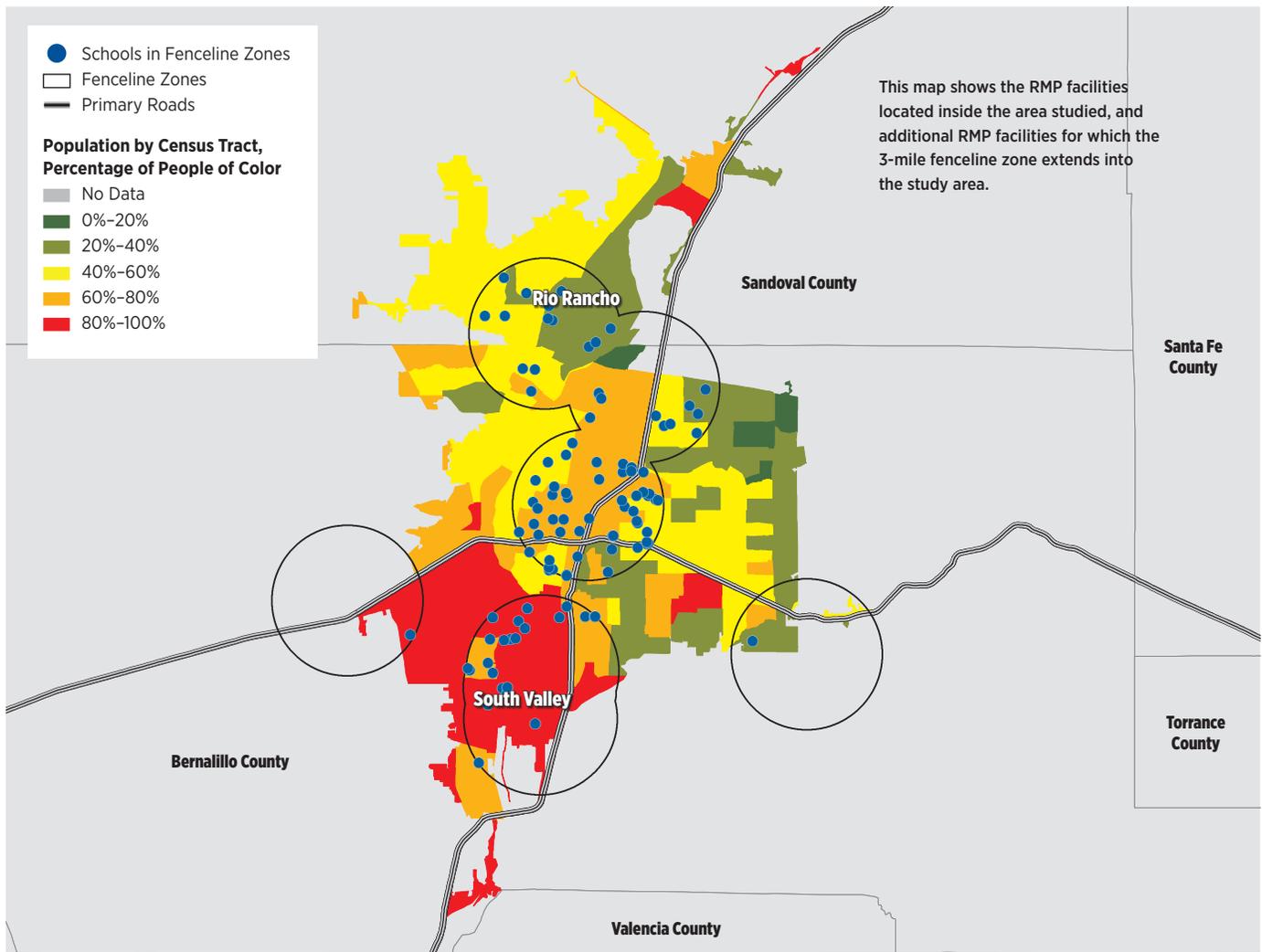
1. Require that facilities that use or store hazardous chemicals adopt safer chemicals and processes whenever possible;
2. Ensure that facilities share information on hazards and solutions, and emergency response plans, with fenceline communities and workers;
3. Require that polluting facilities continuously monitor, report, and reduce their fenceline-area emissions and health hazards;
4. Prevent the construction of new or expanded chemical facilities near homes and schools, and

the siting of new homes and schools near facilities that use or store hazardous chemicals;

5. Require publicly accessible, formal health-impact assessments and mitigation plans to gauge the cumulative impact of hazardous chemical exposures on fenceline communities;
6. Strengthen the enforcement of existing environmental and workplace health and safety regulations.

In addition, dollar store chains should implement broad policies to remove hazardous chemicals from the products they sell, stock fresh and healthy foods, and source safer products and foods locally and regionally.

Hazardous Facility Fenceline Zones, Schools, and Race in Albuquerque



RESULTS: ALBUQUERQUE, NEW MEXICO

There are seven RMP facilities located in Albuquerque.

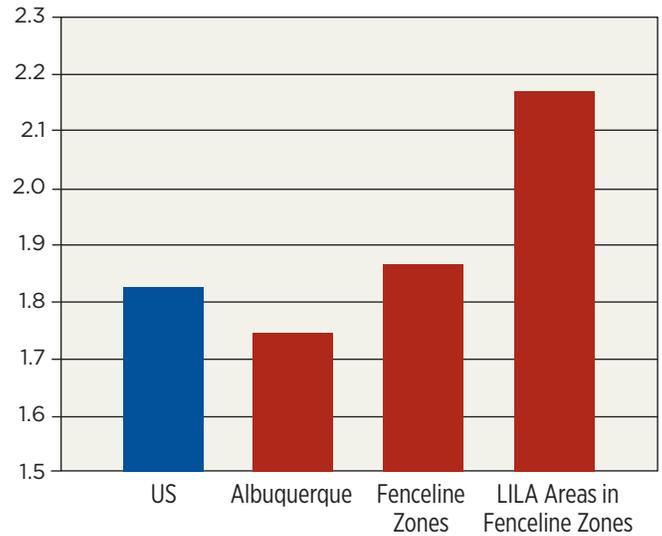
KEY FINDINGS

- More than 268,000 people, or 39% of people living in Albuquerque, live within 3 miles of an RMP facility.
- The potential for suffering respiratory problems from toxic air pollution exposure is 25% higher for those in low-income/low food access areas within fenceline zones compared to Albuquerque overall, while cancer risk is 10% higher.
- The percentage of Latinos in low-income/low food access areas within fenceline zones is 32% greater than for Latinos in Albuquerque overall, and is more than twice the rate for whites in these areas.
- The average household income for those living in low-income/low food access areas within 3 miles of an RMP facility is 26% lower than for Albuquerque as a whole.
- The percentage of those living in areas with low incomes and low access to healthy foods who have a high school or less education is 36% greater than for Albuquerque overall. The percentage of those living in low-income/low food access areas with a college degree or more education is 39% lower than for Albuquerque overall.

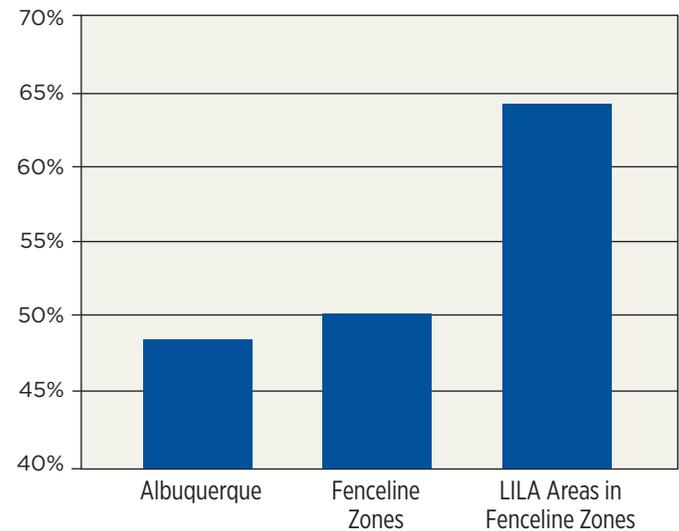


Leaders of the Campaign for Healthier Solutions, Los Jardines Institute, and allies call on dollar stores to sell healthier foods and safer products.

Respiratory Hazard from Air Pollution



Latino Population

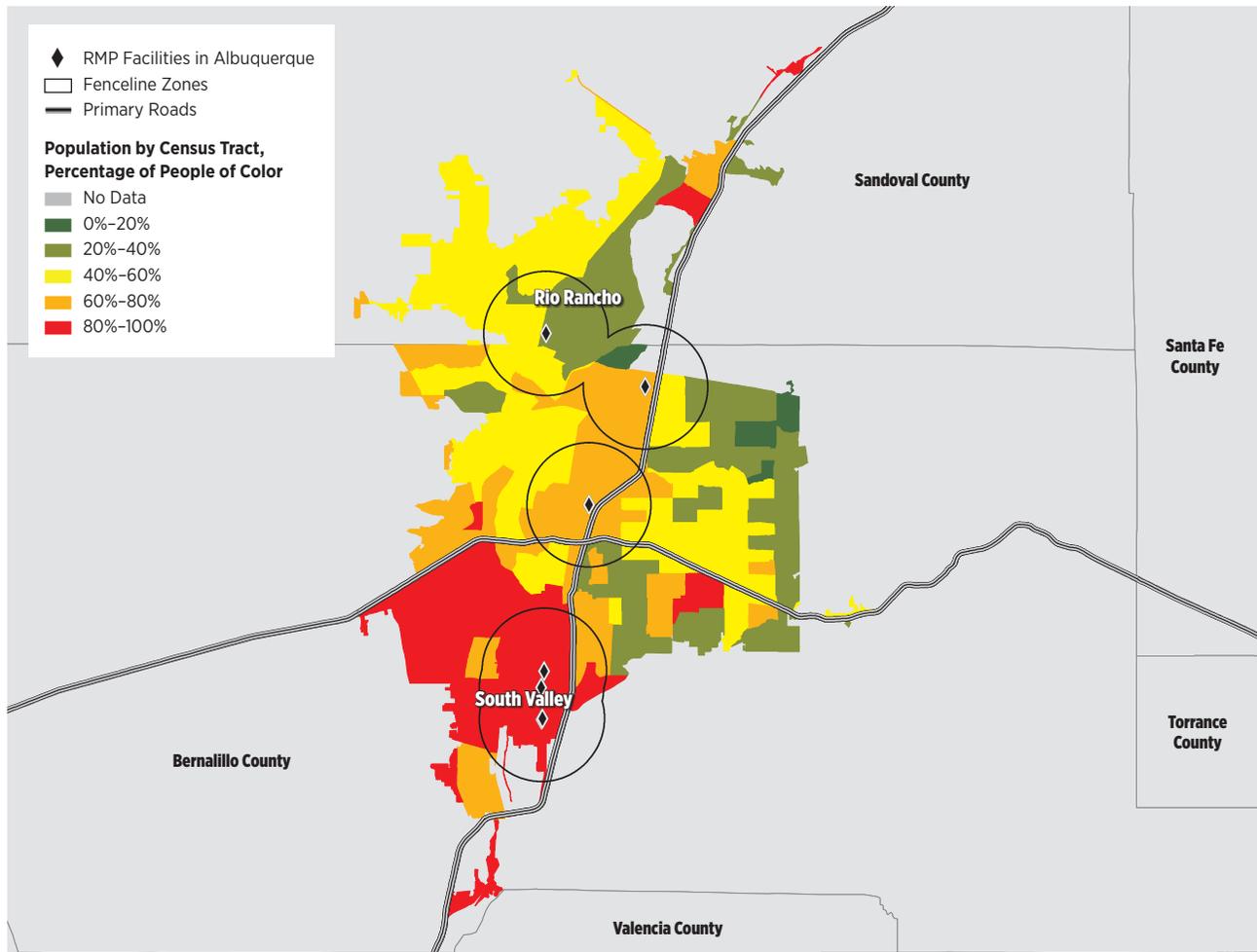


39% OF THE POPULATION OF

Albuquerque lives within 3 miles of an RMP facility.

Hazardous Facilities and Race in Albuquerque

For additional maps and other information about Albuquerque, visit <https://ej4all.org/life-at-the-fenceline>.



Albuquerque Data Summary

	Albuquerque Totals	Albuquerque 3 Mile Totals	Albuquerque 3 Mile LILA* Totals
Weighted Cancer	38.25	39.45	41.91
Weighted RHI	1.74	1.86	2.17
Percent Black	2.6%	2.5%	2.9%
Percent Hispanic	48.4%	50.1%	64.0%
Percent White	41.5%	40.1%	26.3%
Percent Children	23.3%	23.0%	24.3%
Percent Poverty	18.4%	18.4%	28.0%
Average Household Income	\$65,170	\$65,970	\$47,908
Average Home Value	\$209,745	\$219,400	\$150,054
Percent HS Graduate or Less	36.2%	37.4%	50.2%
Percent College Degree or More	29.4%	29.6%	18.9%

* LILA—Areas with Low-Income populations with Low Access to healthy foods.

Note: Highlighted numbers indicate a substantial difference from the full city or county, and the full 3-mile areas data.

Critical Institutions and Students in Albuquerque Fenceline Zones

	Albuquerque Totals	Albuquerque Fenceline Zones
Dollar Stores	55	21 (38%)
Medical Facilities	11	7 (64%)
Schools	279	106 (38%)
Students	120,916	44,129 (36%)

FIGHTING BACK

Community, worker, business, and health organizations in New Mexico and nationally are working to address these problems and implement safe, just, and sustainable solutions.

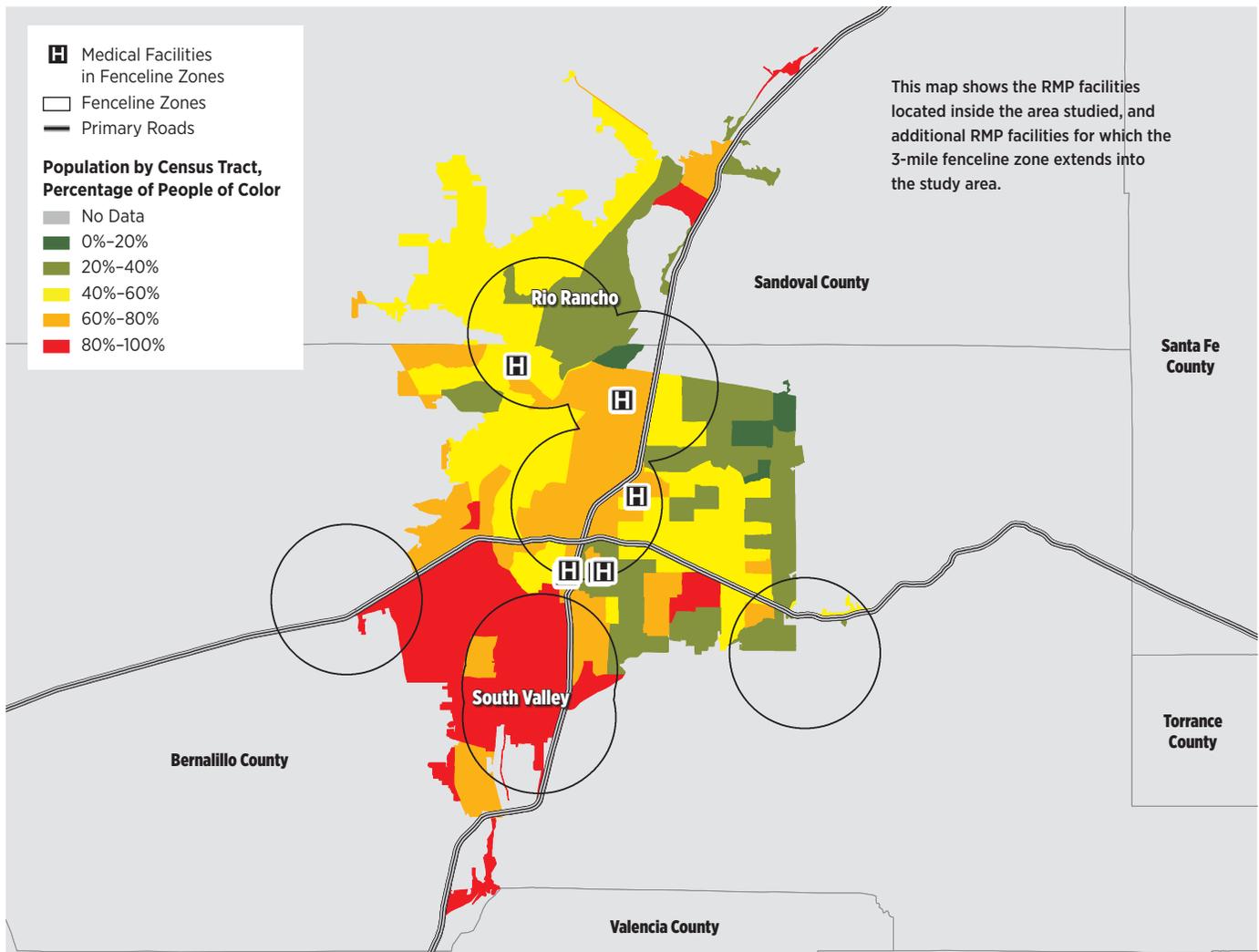
In Albuquerque, Los Jardines Institute (The Gardens Institute) works to build and support healthy and sustainable communities and spaces by providing opportunities that

promote multi-generational, community-based models of learning, sharing, and building community.

Los Jardines Institute is part of the national Environmental Justice Health Alliance for Chemical Policy Reform (EJHA), a network of grassroots organizations in more than 13 states that advocates for just, sustainable solutions to the health and environmental hazards faced by communities disproportionately impacted by toxic chemicals.

EJHA works to prevent chemical disasters by uniting communities at the fenceline of hazardous chemical facilities with national allies and experts to prevent catastrophic chemical releases from the nation's high-risk chemical facilities through information disclosure, community and worker involvement, and transition to safer chemicals and technologies.

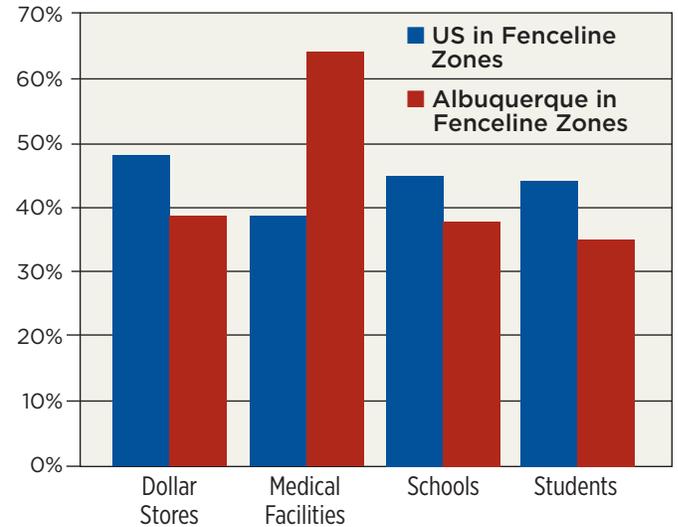
Hazardous Facility Fenceline Zones, Medical Facilities, and Race in Albuquerque



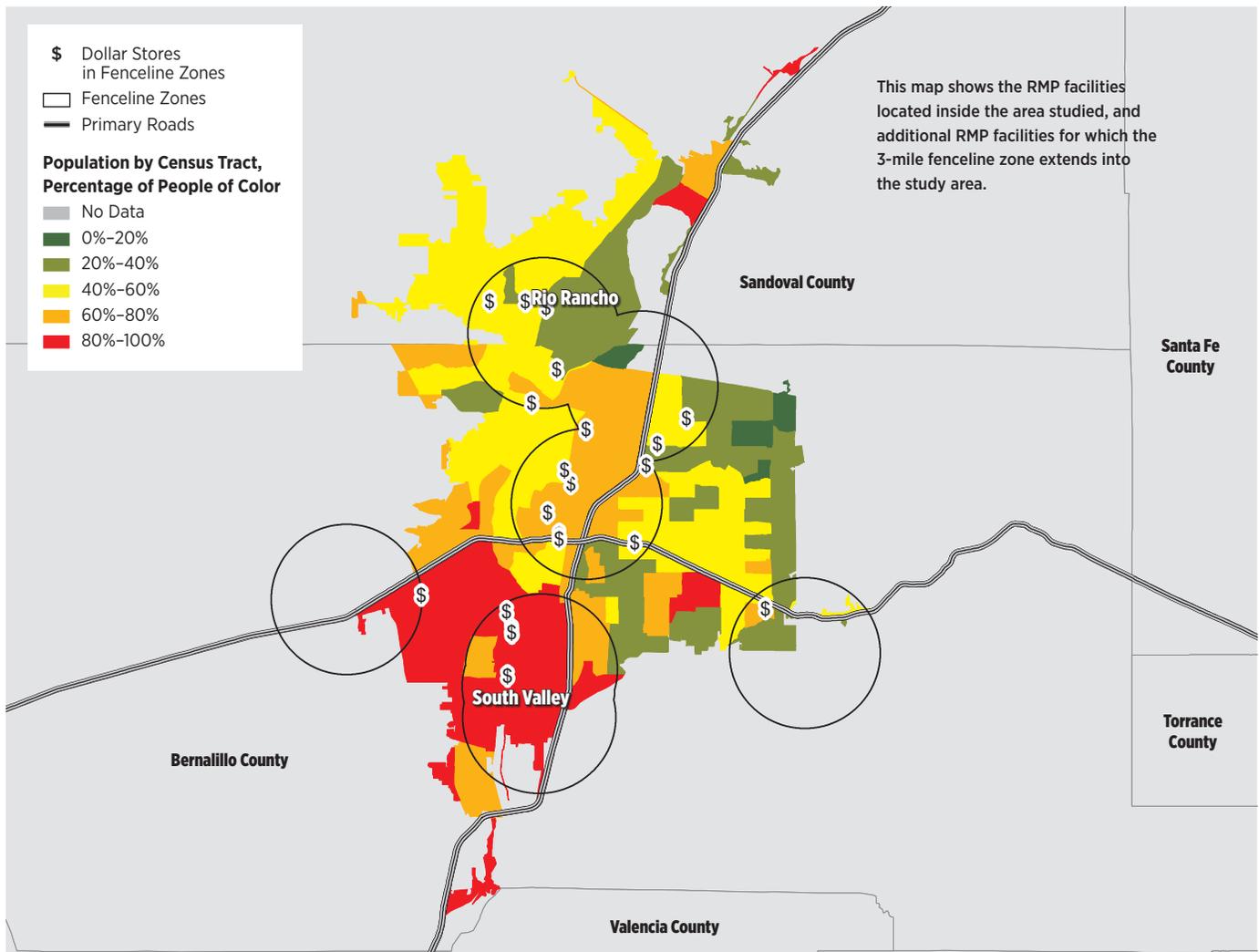
EJHA's Campaign for Healthier Solutions (CHS) works with discount retailers (dollar stores) to help them protect their customers and the communities in which they operate, and grow their businesses, by implementing corporate policies to phase out harmful chemicals in the products they sell, and by stocking safer products and healthier foods that support the communities in which their stores operate.

EJHA is part of the Coming Clean collaborative, which works to reform the toxic chemical and fossil fuel industries so they are no longer a source of harm, and to secure the systemic changes necessary for clean production, safe renewable energy, and a sustainable economy to flourish.

Critical Institutions and Students in Albuquerque Fenceline Zones Compared to National Rate



Hazardous Facility Fenceline Zones, Dollar Stores, and Race in Albuquerque



LEARN MORE & GET INVOLVED

Visit www.ej4all.org/life-at-the-fenceline to:

- Read the full *Life at the Fenceline* report
- Check the interactive map to find out if where you, your family, and friends live, work, or go to school is near a dangerous chemical facility

Read EJHA reports on chemical facility risks and dollar store products:

- Who's In Danger: Race, Poverty, and Chemical Disasters
<https://ej4all.org/assets/media/documents/ej4all-Who'sInDangerReport.pdf>
- A Day Late and a Dollar Short: Discount Retailers are Falling Behind on Safer Chemicals
https://ej4all.org/assets/media/documents/Report_ADayLateAndADollarShort.pdf

Contact Los Jardines Institute at ljinemexico@gmail.com or (505) 301-0276 or <http://www.losjardines.org>.

Environmental Justice Health Alliance for Chemical Policy Reform

coming clean

CAMPAIGN FOR
**Healthier
Solutions**

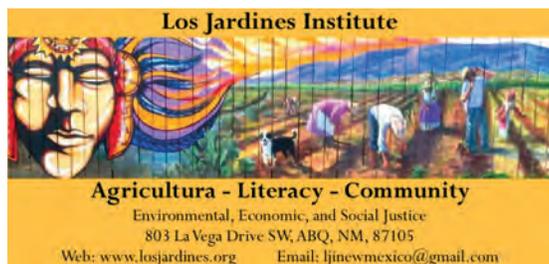


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Coming Clean is a national environmental health and justice collaborative of 200 organizations working to reform the chemical and fossil fuels industries so they are no longer a source of harm, and to secure systemic changes that allow a safe chemical and clean energy economy to flourish. Learn more at www.comingcleaninc.org.

The Environmental Justice Health Alliance for Chemical Policy Reform supports diverse movement towards safe chemicals and clean energy that leaves no community or worker behind. EJHA is a network of grassroots environmental justice organizations in communities that are disproportionately impacted by toxic chemicals, from old contaminated sites, ongoing exposure to polluting facilities, and toxic chemicals in household products and foods. Learn more at www.ej4all.org.

The Campaign for Healthier Solutions, hosted by Coming Clean and EJHA, is made up of interested organizations, dollar store customers, and investors who seek to work with discount retailers to help them protect their customers and the communities in which they operate, and also grow their business, by implementing corporate policies to identify and phase out harmful chemicals in the products they sell. Learn more at www.nontoxicdollarstores.org.

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