Community Perceptions of Living Next to a Major Railyard: The ENRRICH Project.

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BACKGROUND:
The BNSF San Bernardino Railyard (SBR) is a major trade gateway in the United States and one of the busiest facilities of its kind in California. Local community and air pollution control agencies have identified SBR as a significant public health and environmental justice issue. The Environmental Railyard Research Impacting Community Health (ENRRICH) project has aims to examine potential health effects associated with residential proximity to this railyard. As part of a qualitative preparatory phase we explored community members perceived environmental health risks and their thoughts about possible changes in their environment. We see this input as essential to the conduct of respectful health research that will include mitigation foundation development.

METHODS:
Community-based participatory research (CBPR) strategies were utilized to engage the community residents living in close proximity to the railyard. Semi-structured key informant interviews (n=12) and five focus groups (n=53) were conducted in English and Spanish. Following Grounded Theory methodology, interviews and focus groups were recorded, transcribed verbatim, translated, thematically coded for recurrent themes and organized into overarching categories.

RESULTS:
Five overarching themes were found: perception of health consequences, perceived factors influencing health, community infrastructure and challenges, community relationship with SBR, and desired changes for the community. Residents understand the threat of outdoor air pollution and associated risks, but barriers including lack of community infrastructure, violence and the economic downturn hinder their motivation and ability to act. While seen as a nuisance and somewhat recognized for its inherent risks, residents often chose not to engage in thoughts about health consequences since air pollution was not an immediate visible and pressing concern as they battle with the impacts of the economic downturn and poverty to survive.

CONCLUSION:
Resident perspective is critical to inform the health research and risk reduction mitigation plans, adding complexity to the planned health outcomes research.