## Podcast Transcript: Redlining Still Affects Health Today

## [Theme music]

**Ashley Ahearn**: You're listening to Environmental Health Chat – a show from the National Institute of Environmental Health Sciences that explores the connections between our health and our world.

I'm Ashley Ahearn.

## [Music fades out]

To understand today's environmental health challenges, we need to look to the past.

Discriminatory policies that were put in place generations ago by local, state, and federal governments are still affecting people of lower incomes and people of color today.

Rachel Morello-Frosch is a professor in the Department of Environmental Science, Policy, and Management and the School of Public Health at UC Berkeley. She studies how social inequality, among other factors, can play a role in the health of communities.

One example of a policy that contributes to continued social inequality in the U.S. today?

Redlining.

**Rachel Morello-Frosch (RM-F):** When people refer to redlining, they're referring to a federal program that was started in the 1930s in the wake of the Great Depression.

**AA:** The federal government was trying to stop systemic mortgage defaulting, so it created the Home Owners' Loan Corporation (HOLC). The HOLC was tasked with mapping cities throughout the U.S. based on how risky neighborhoods were for real estate investments and loans.

**RM-F:** Criteria included the proportion of black and immigrant residents, indicators of poverty of the neighborhood, and other factors, which were inherently racist. So, we ended up with a situation where neighborhoods were graded from A to D. A being the best, D being the worst. And the D neighborhoods were outlined in red, ergo, the term redlining.

**AA:** The Home Owners' Loan Corporation's maps reflected – and perpetuated – the racism and discrimination that was already happening at the time.

**RM-F:** So for already struggling neighborhoods that were facing discrimination, the redlining maps amplified and perpetuated those forms of discrimination as those maps were taken up by the banking industry and other institutions to allocate investments.

AA: (on tape): Tell me about why redlining is bad for people's health.

**RM-F:** What happened when these neighborhoods were redlined is they were essentially then starved of investment opportunities, federally guaranteed loans, and other significant economic opportunities that could improve the health and well-being of the residents in those neighborhoods. In addition, redlined neighborhoods then often were designated as places where potentially hazardous sites could be sited. Whether it be industrial facilities, or later the bifurcation of communities of color with major freeway corridors or railways. Redlining helped accelerate those racist and discriminatory land use decisions into the future.

**AA:** Take Oakland, California, for example. In the 1900s African Americans had made a thriving community there, as many left the South to escape racial persecution and seek economic opportunity.

The Home Owners' Loan Corporation gave many of the neighborhoods, particularly in West Oakland, a "D" grade. Then, highway 880 was built right through the middle of West Oakland to serve the ports, drawing heavy truck traffic and air pollution.

But there's another freeway – the 580 – that cuts through the neighborhoods of nearby Oakland Hills, which are not predominantly black and received "A" and "B" grades from the Home Owners' Loan Corporation back in the day.

**RM-F:** So we like to call it the tale of two corridors because the 580, which cuts through the higher graded neighborhoods is not allowed to have any truck traffic on it. So not surprisingly, the air quality impacts of those mobile source emissions are much more diminished in those higher-graded neighborhoods. While conversely, in West Oakland, all that freeway traffic plus the truck traffic that cuts through their neighborhoods and literally drives through their residential areas, has a very real and very localized impact on the air quality in these formerly redlined neighborhoods.

**AA:** With funding from NIEHS, Morello-Frosch and others have studied air pollution in West Oakland and found higher rates of nitrogen dioxide and PM 2.5 than surrounding areas.

**RM-F:** And so that means higher rates of asthma both among children and adults, higher rates of cardiovascular disease, and that combined with a lot of other neighborhood socioeconomic stressors can disproportionately impact and lead to higher rates of adverse health outcomes.

**AA:** As more people – both in the scientific community and beyond – wrap their heads around the concept of structural racism, Morello-Frosch says the evidence of how

historically racist policies like redlining affect the lives of people of color today is all around us, if we look for it.

Historically redlined neighborhoods are more likely to have <u>worse air quality</u>, a <u>lack of</u> <u>greenspace</u> and higher heat island risks, as well as elevated rates of <u>cardiovascular</u> <u>disease</u>, <u>asthma hospitalizations</u>, <u>poor birth outcomes</u>, and <u>other diseases</u>.

**RM-F:** We've looked at this in relation to redlining and access to green space in major cities in the U.S. where we definitely saw that redlined neighborhoods were much less likely to have green space.

We looked at it in relationship to ambient air pollution, particularly traffic related air pollution, and PM 2.5. across cities and again saw a very similar pattern, where air quality was much worse in redlined neighborhoods and cities across the U.S.

**AA:** A recent paper Morello-Frosch co-authored with her postdoctoral student, David Gonzalez, and another collaborator, Joan Casey, found that redlined neighborhoods have nearly twice the density of oil and gas wells than otherwise comparable neighborhoods that were not redlined.

And, she added, living near oil and gas development activities is associated with cardiovascular disease, poor perinatal outcomes, depression, and other diseases.

Morello-Frosch says she hopes her research helps point the way toward policies that embrace renewable energy and protect communities of color and historically redlined communities in the future.

**RM-F:** I think this kind of research is trying to understand how a racist policy that's over 80 years old and has been illegal for quite some time, still exerts its impact on the environmental quality of communities today, and in turn, is partially associated with the origins and persistence of the health disparities that we see today.

I think these studies can really give us a sense of where we need to be addressing forms of structural racism in our efforts to intervene and address the environmental hazards that are disproportionately located there.

## [Music comes up]

I'm Ashley Ahearn. Thanks for listening to Environmental Health Chat.