Tree Prescription:
Recent Research on
Urban Forests & Human Health

Climate Action Team Public Health Workgroup
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Rx: Health Inequities

West Oakland

Piedmont
Rx: Two Research Projects

Green Rx

Tree ROI

Sacramento Tree Foundation

Forest Service Department of Agriculture

Cal Fire Since 1885

UD4H Urban Design 4 Health

Kaiser Permanente Division of Research | Northern California

University of Illinois at Urbana-Champaign
Multiple Measures

- Asthma
- Attention Deficit Disorder
- Cardiovascular disease
- General health
- Mental / Emotional health
- Overweight / Obesity
- Physical activity
- Social cohesion
- Type 2 diabetes
The Findings

More neighborhood tree canopy cover was significantly associated with:

• Better General Health Score
• Less Overweight / Obesity
• Higher Social Cohesion
**GreenRx 10% More Tree Cover**

What health differences do we see?

<table>
<thead>
<tr>
<th>Adult Health Measure</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight/obese</td>
<td>-19%</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>-19%</td>
</tr>
<tr>
<td>Current asthma</td>
<td>-10%</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>-7%</td>
</tr>
<tr>
<td>General Health</td>
<td>+3%</td>
</tr>
<tr>
<td>Social Cohesion</td>
<td>+1%</td>
</tr>
</tbody>
</table>

Source: J Ulmer et al, *Multiple health benefits of urban tree canopy, Health & Place*
Thinking outside the...

Dr. Backman connects CHIS to Canopy data

Ray Tretheway hires DrPH

TBD: Health Economics Analysis

Not just p-values: Predictive Modeling

Hi Res Data: CHIS & LIDAR

Big picture: Multiple Health Measures

Big picture: Advisory Committee
Tree$ ROI: The Next Steps

Larger Region
Tree$ ROI: The Next Steps

Actual Health Care Costs
Tree$ ROI: The Next Steps

Health Care vs $ Tree Care $
Rx: New Research Paths

• Do the math: health care $$$ savings

• +++ ↑↑↑ QOL, creativity, and productivity $$$

• Include Wealth as a control factor – not just Income?

• How do we reach the doctors & nurse practitioners?

• Cross-sector research: pooling $ and ↑↑ innovation

• Cap & Trade investment = RESEARCH Goldmine
Rx: ...Beyond the Box again
Thank you!

Questions?

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