Path to Transformation

One Agency’s Experience Embracing the Work of Health Equity & Environmental Justice

Adam Anderson, Sarah Hernandez, Rachel Wilson-Roussel, Devon Williford
September 16, 2015
Objectives

1. List available resources to encourage staff engagement in equity and justice work.

2. Introduce and discuss how publicly available data can be used by local health departments to inform equity and justice work.

3. Identify a few practical steps that can be implemented at your agency to further work on equity and justice.
Health Equity & Environmental Justice at CDPHE

Colorado Department of Public Health and Environment Strategic Map: 2011-2016

Align Priorities and Resources to Improve and Sustain Public Health and Environmental Quality

A. Achieve Targeted Improvements in Colorado’s Winnable Battles
B. Promote Programmatic Excellence
C. Strengthen the Integrated Public and Environmental Health System
D. Foster a Competent, Empowered Workforce
E. Create a More Efficient, Effective, Customer-Oriented Department

F. Promote Health Equity and Environmental Justice

G. Use Performance-Based Measures and Evaluation to Continuously Improve Effectiveness and Prioritize Resources

H. Strengthen Internal and External Communication
Health Equity & Environmental Justice Collaborative

**Mission**

To build an organizational culture that empowers and supports staff at every level in addressing the root causes of health inequity and environmental injustice.
Health Equity & Environmental Justice Collaborative

Mission

To build an organizational culture that empowers and supports staff at every level in addressing the root causes of health inequity and environmental injustice.

Goals

• Foster a department-wide culture promoting HE & EJ through shared data, training, and communication.
• Encourage the application of HE & EJ principles in everyday work
• Develop and implement policies that support this work
HE & EJ Policies and Tools

- Regulatory Review Process
- Overarching HE & EJ Policy
  - Permitting, Inspections, Enforcement, Request for Applications, Community Involvement, etc
HE & EJ Policies and Tools

Policy

- Regulatory Review Process
  - Overarching HE & EJ Policy
    - Permitting, Inspections, Enforcement, Request for Applications, Community Involvement, etc

Tools

- Resource & Training Catalog
- Core Competency Training Checklist
- Internal Policy Review Tool
- Data viewer
- HE & EJ Self-Assessment

department of Public Health & Environment
HE & EJ Policies and Tools

Policy

- Regulatory Review Process
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    - Permitting, Inspections, Enforcement, Request for Applications, Community Involvement, etc

Tools

- Resource & Training Catalog
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- HE & EJ Self-Assessment
# HE & EJ Policies and Tools

## CDPHE Health Equities and Environmental Justice Primer Training and Core Competencies Checklist

<table>
<thead>
<tr>
<th>Core Competencies Training</th>
<th>Awareness of Competency Complete?</th>
<th>Associated Competencies for reference</th>
<th>Date training completed</th>
<th>Training name</th>
<th>Additional date training completed</th>
<th>Additional training name</th>
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<tbody>
<tr>
<td><strong>CDPHE HBEJE Core Competency Area</strong></td>
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<tr>
<td>1</td>
<td>Knowledge of Public Health Framework</td>
<td>Awareness of environmental and public health</td>
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<tr>
<td>2</td>
<td>Awareness of the Social, Environmental and Structural Determinants of Health</td>
<td>Social justice principles; Causes of health inequities; Connection between race, class (SES), gender, sexual orientation, place, language and health, age, disability; Environmental justice principles</td>
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<tr>
<td>3</td>
<td>Community Knowledge</td>
<td>Awareness of community needs, issues, resources and leadership</td>
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<tr>
<td>4</td>
<td>Community Organizing</td>
<td>Awareness of the value of building and maintaining community trust</td>
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<tr>
<td>5</td>
<td>Leadership</td>
<td>Awareness of the importance of your role as a liaison between the department and the community</td>
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<tr>
<td>6</td>
<td>Collaboration Skills</td>
<td>Awareness of the importance of communicating effectively across different audiences</td>
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<tr>
<td>7</td>
<td>Problem Solving</td>
<td>No identified associated competency</td>
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<tr>
<td>8</td>
<td>Cultural Competency / Humility</td>
<td>Awareness that diverse perspectives and roles are necessary to promote public health issues</td>
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</table>
HE & EJ Policies and Tools

HEALTH EQUITY AND ENVIRONMENTAL JUSTICE REVIEW TOOL

Health equity and environmental justice (HE&OJ) promote the full health potential of all individuals regardless of age, color, race, national origin or income, with emphasis on individuals and communities who have experienced socioeconomic disadvantages or historical injustices. The public health system can positively affect population health outcomes by addressing these issues:
- Health equity is the focused effort to address differences in population health that can be traced to unequal economic and social conditions that are systemic and avoidable by upscaling social determinants of health.
- Environmental justice is the fair treatment and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

HE&OJ is a cross-cutting strategy for the Department. This tool is designed to direct attention to how policies (including those not typically associated with public health) impact the determinants associated with health equity and environmental justice.

<table>
<thead>
<tr>
<th>Policy Name</th>
<th>Policy Number</th>
<th>Latest Policy Rev/Date</th>
<th>Review Date</th>
<th>Reviewer Name &amp; Phone</th>
</tr>
</thead>
</table>

2. POLICY RATIONALE

Indicate the policy ramifications (e.g., policy is currently written) for the determinants listed in Table 1 (see Table 1 for an explanatory model of the determinants). If Positive, Negative, or No Impact, please explain.

a. Economic Opportunity
   - Positive | Explain
   - Negative | Explain
   - No Impact | Explain

b. Built Environment
   - Positive | Explain
   - Negative | Explain
   - No Impact | Explain

c. Environmental Quality
   - Positive | Explain
   - Negative | Explain
   - No Impact | Explain

d. Social Factors
   - Positive | Explain
   - Negative | Explain
   - No Impact | Explain

e. Health Access
   - Positive | Explain
   - Negative | Explain
   - No Impact | Explain

3. IMPACTED INDIVIDUALS/COMMUNITIES

If all responses are ‘No Impact’, go through the steps above.

a. Identify the individuals/communities impacted. Note any “very vulnerable” populations that are impacted (see Table 2) and explain vulnerability.
   - Yes (√) | Would an opportunity to comment be provided? Yes (√) | No (√) | Don’t know (√)

b. Have the impacted individuals/communities provided comments?
   - Yes (√) | No (√) | Don’t know (√)

4. POLICY IMPLEMENTATION

If no comments or comments are not available, indicate the policy ramifications (e.g., policy is currently written) for the determinants listed in Table 1 (see Table 1 for an explanatory model of the determinants). If Positive, Negative, or No Impact, please explain.

5. IMPACT SECTIONS ABOVE

Table 1: Explanatory Model for Conceptualizing Health Determinants

<table>
<thead>
<tr>
<th>“Very Vulnerable” Populations</th>
<th>Economic Opportunity</th>
<th>Built Environment</th>
<th>Environmental Quality</th>
<th>Social Factors</th>
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<tbody>
<tr>
<td>Children</td>
<td>Affordable housing</td>
<td>Displacement of</td>
<td>Clean air (dust,</td>
<td>Access to</td>
<td>Health Insurance</td>
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<td>(rental and</td>
<td>individuals/</td>
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<td>information</td>
<td>coverage</td>
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<td></td>
<td>ownership)</td>
<td>communities</td>
<td>pollutants)</td>
<td>(e.g., media,</td>
<td>Preventive care</td>
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<td></td>
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<td></td>
<td>Clean water (lakes,</td>
<td>internal)</td>
<td>Provider needed</td>
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<td></td>
<td>streams, groundwater)</td>
<td>Leadership,</td>
<td>care</td>
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<td>Natural climate and</td>
<td>political</td>
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<td>supply, food supply,</td>
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*Susceptible populations experience greater health risks from environmental pollution due to genetic, behavioral, and sociocultural factors. Examples include access to quality water supplies and sanitation systems, occupational diseases, and exposure to hazardous substances in the workplace. These populations are also more likely to experience health disparities and inequalities due to a lack of social and economic resources.
Eagle County Partnership

Purpose

• Established to learn how to better align internal and external resources.
• Focus programs on community needs.

Results

• Provided a “springboard” to dive into this work.
• Shared resources and experiences.
• Leveraged relationships.
Data Viewer

Adam Anderson
Priority Areas
We determine Priority Areas from census tracts using a combination of the Health Outcome Index and Socio-Demographic Index layers. Both layers calculate an Index Score from 1-5 based on the methods described below. These two scores are added together and census tracts with a score of 10 (in the highest quantile for both Health Outcomes and Socio-Demographics) are determined to be Priority Areas.

Health Outcome Index
We calculate a Health Outcome Index score based on six selected health outcomes for every census tract. Each health outcome in each census tract receives a score of: No Events (0), Higher than State Avg (5), Lower than State Avg (1) or Within 95%CI of State Avg (3). These six values were then added up for each census tract as a Cumulative Score ranging from 6-30. Finally, the Health Index Score (1-5) was determined based on which Quantile interval the Cumulative Score falls into, when comparing all tracts.

Socio-Demographic Index
We calculate a Socio-Demographic Index score for each census tract based on quantiles for each of the seven socio-demographic variables. These seven values were added up and assigned to each census tract as a Cumulative Quantile Score ranging from 7-35. Finally, the SDoH Index Score (1-5) was determined based on which Quantile interval the Cumulative Quantile Score falls into.

Basemap
*See Appendix A for an example project using a similar methodology.
<table>
<thead>
<tr>
<th>Socio-Demographic Variables</th>
<th>Health Outcome Variables</th>
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</thead>
<tbody>
<tr>
<td>• Race/Ethnicity</td>
<td>• Crude Rate of Low Birth Weight</td>
</tr>
<tr>
<td>• Income/Poverty</td>
<td>• Age-Adjusted Diabetes Hospitalizations</td>
</tr>
<tr>
<td>• Education</td>
<td>• Crude Rate of Live Births to Teenage Female Population</td>
</tr>
<tr>
<td>• Age</td>
<td>• Age-Adjusted Rate of Preventable Hospitalizations</td>
</tr>
<tr>
<td>• Employment</td>
<td>• Age-Adjusted Rate of Asthma Hospitalizations</td>
</tr>
<tr>
<td>• Language</td>
<td>• Age-Adjusted Heart Disease Mortality Rate</td>
</tr>
<tr>
<td>• Disabilities</td>
<td></td>
</tr>
</tbody>
</table>

*Data sets compiled from 2010 Census and American Community Survey 2009-2013

*Data Sets compiled from Colorado Hospital Association and CDPHE Vital Records
**Environmental Facilities Variables**

- Concentrated Animal Feeding Operations (CAFOs)
- Permit Violations (Facilities)
- Colorado Discharge Permit Systems (CDPS) Facilities
- Permitted Stationary Air Sources - Major and Minor
- Selected Resource Conservation and Recovery Act (RCRA) Facilities
- Solid Waste Permitted Facilities
- Toxic Release Inventory (TRI) Facilities

*Data Sets compiled from ACS 2009-2013, EPA EJ Screen and CDPHE

**Requested Variables**

- Population Density
- Poverty and Income Levels
- Traffic Proximity/Volumes
- % of Housing Built before 1960
- Sensitive Receptors (Hospitals, Nursing Homes, Schools)

*Data Sets compiled from ACS 2009-2013, EPA EJ Screen and CDPHE

*Facility locations were collected in 2014 and are maintained CDPHE Environmental Divisions
• Is this a good platform to distribute and consume data?
• How do you see your program using these data and maps in your work and how can we tailor this to be more useful?
Employee Self-assessment

Sarah Hernandez
Who, What, Why, When?

- Establish baseline
- Inform training and workforce development
- Administered in 2013 and 2015
RESULTS
In your opinion, how much does CDPHE focus on addressing health inequities and environmental injustice?

- There is no focus on health inequities and environmental injustices at all: 1.8% (2013) vs. 19.5% (2015)
- There is not enough focus on health inequities and environmental injustices: 34.0% (2013) vs. 37.9% (2015)
- There is about the right amount of focus on health inequities and environmental injustices: 7.6% (2013) vs. 7.6% (2015)
- There is too much focus on health inequities and environmental injustices: 5% (2013) vs. 5% (2015)
- I don't know: 19.5% (2013) vs. 19.5% (2015)
Agency Culture

Staff are encouraged to learn about ways to address the environmental, social, and economic conditions that impact health.

I am familiar with the major health inequities and environmental injustices affecting the communities/stakeholders CDPHE serves.
Part of my job is to bring the stakeholder’s/community’s voice into CDPHE’s decision-making processes.
Community Engagement

Strategies are in place to minimize barriers to stakeholder participation (e.g., providing money for child care to residents attending community meetings.)

CDPHE makes deliberate efforts to build the leadership capacity of stakeholders to advocate on environmental, social, and economic issues that impact health.
Workforce Diversity

CDPHE actively recruits culturally diverse management and leadership staff members.

![Graph showing workforce diversity trends from 2013 to 2015. The graph indicates an increase in agreement with diversity efforts over the years.](image-url)
Workforce Diversity

When appropriate, position requirements allow for relevant community experience in place of educational degrees.

Staff of diverse groups are equitably promoted throughout CDPHE.

Graph showing the percentage change in agreement levels from 2013 to 2015 for different responses:
- Don't know: 27.60% to 29.20%
- Agree: 24% to 26%
- Disagree: 19.60% to 16%
- Neutral: 16% to 16%
- Strongly Agree: 5.10% to 6%
- Strongly Disagree: 7.30% to 6%

Graph showing the percentage change in agreement levels from 2013 to 2015 for different responses:
- Don't know: 34.0% to 29.2%
- Agree: 17.1% to 17.1%
- Disagree: 14.73% to 14.4%
- Strongly Disagree: 13% to 11%
- Strongly Agree: 5.10% to 6%
"isms"

Staff I interact with at CDPHE are comfortable talking about sexual orientation, gender identity, and homophobia.

Staff I interact with at CDPHE are comfortable talking about race and racism.
Initial conclusions

• Overall no major changes from 2013 to 2015, but we see mostly positive movement

• Potential areas for improvement in workforce diversity and talking about “isms”, especially race and racism

• Assessment results are good indication of agency culture
Eagle County Public Health

- Administered same survey in 2014
- 75% response size
- Identified strengths and areas of improvement
- Used data to drive action
Future Direction

• Primer course

• Address opportunities for improvement based on employee self-assessment

• Department is committed to learning from our partners
Questions?

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