



What's a good salary in public health? A cross-section of 23,000 public health workers' salary and wages in 2014

Presentation at Keeneland, 2015

JP Leider, PhD de Beaumont Foundation

Rivka Liss-Levinson, PhD *ASTHO*

Kiran Bharthapudi, PhD *ASTHO*

Brian Castrucci, MA de Beaumont Foundation

Katie Sellers, DrPH CPH

ASTHO

Overview for today's talk

- Describe salary ranges at state and local level
- Examine correlates of earnings





Background

- Workforce shortages have been predicted for decades
 - Salary shown as important in recruitment and retention efforts
- Relatively fewer graduates are joining state and local public health¹
 - Especially challenging competition with better-paying clinical sectors
- Limited salary information is available, except for by position type at state level (ASTHO Profiles)
- Questions remain what drives a good salary?





Methods

- Nationally-representative sample of State Health Agency central office staff
 - Stratified by 5 regions (paired HHS region)
 - $\sim 10,250$ respondents (46% response rate)
 - Advanced statistical weighting used to account for complex sampling
- Large pilot of LHD staff, including members of the Big Cities Health Coalition
 - $\sim 13,000$ respondents
 - Used a variety of fielding/sampling approaches to gather information for a future iteration of PH WINS





Methods

- In demographics section, respondents were asked about:
 - Earnings
 - Part-time vs full-time
 - Race/ethnicity
 - Gender
 - Supervisory status
 - Program area and role
 - Educational attainment
 - Tenure in public health
- We present descriptive statistics and results of a linear regression





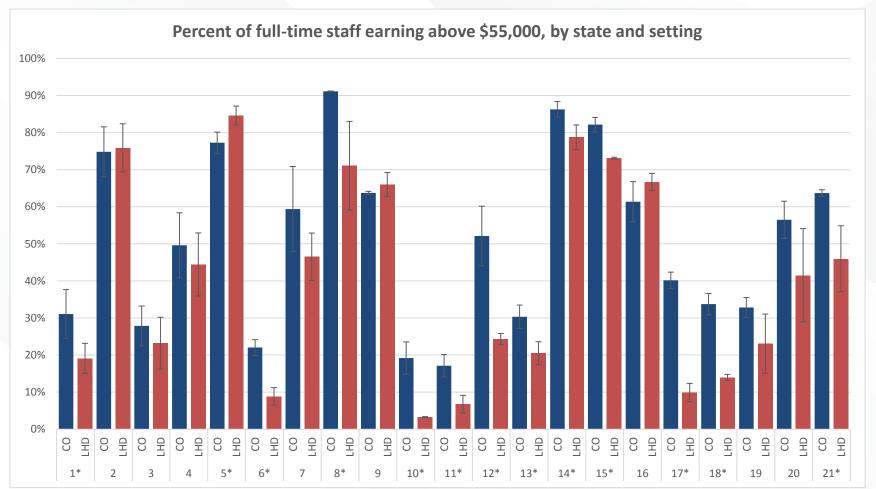
Approximate, average earnings among full-time employees (unweighted)

	SHA Central Office	sd	LHD/RHD	sd
Non- supervisor	\$52,000	\$17,000	\$47,000	\$16,000
Team leader	\$59,000	\$18,000	\$53,000	\$17,000
Supervisor	\$66,000	\$20,000	\$54,000	\$19,000
Manager	\$78,000	\$19,000	\$64,000	\$19,000
Executive	\$99,000	\$22,000	\$79,000	\$23,000





Quick tangent: Comparing state to local SHA employees



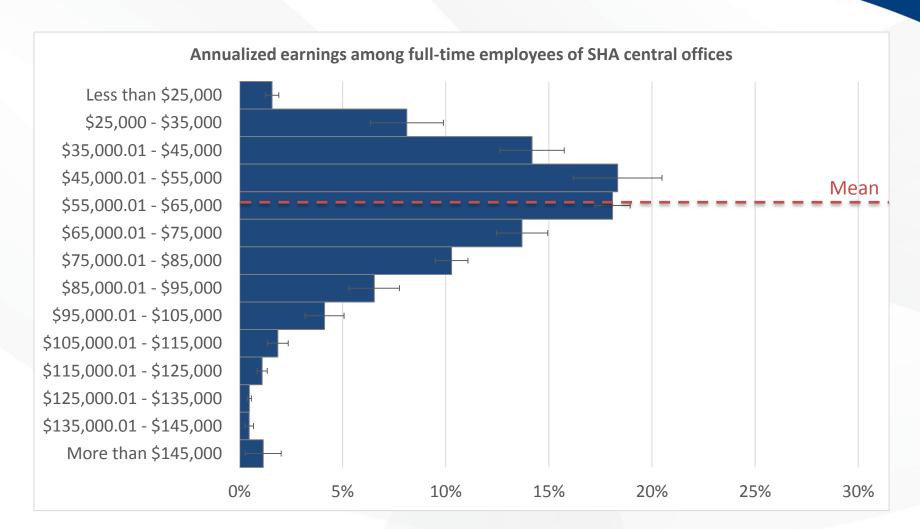




National results

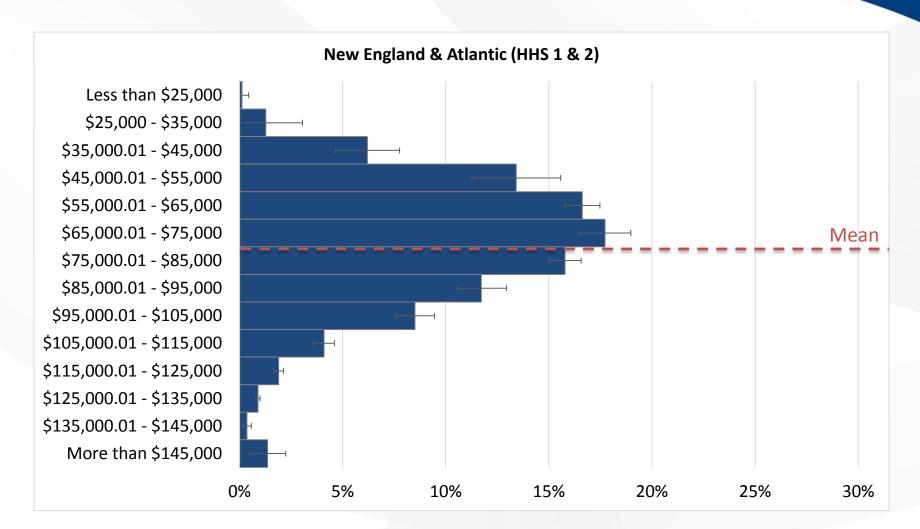






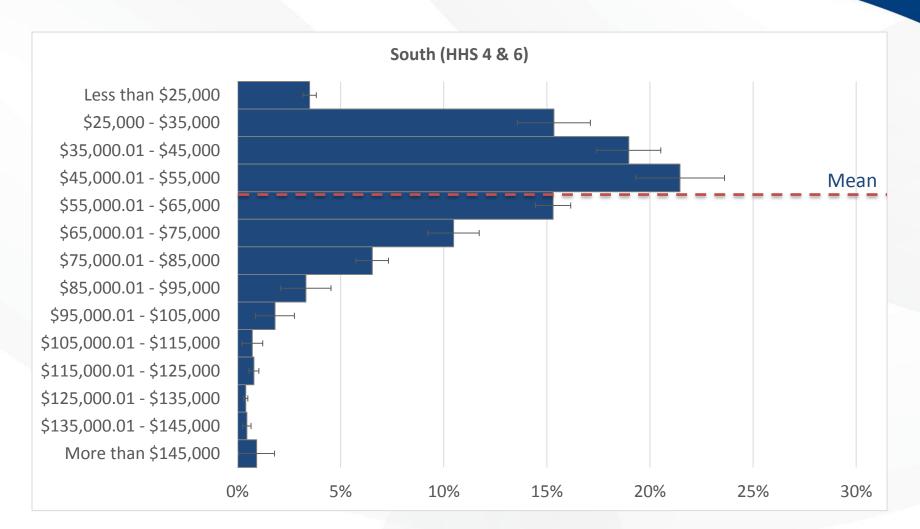






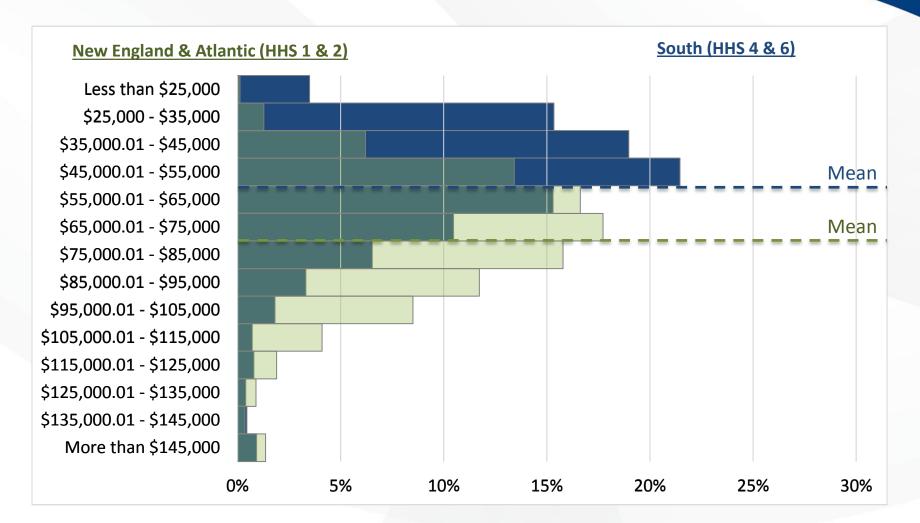






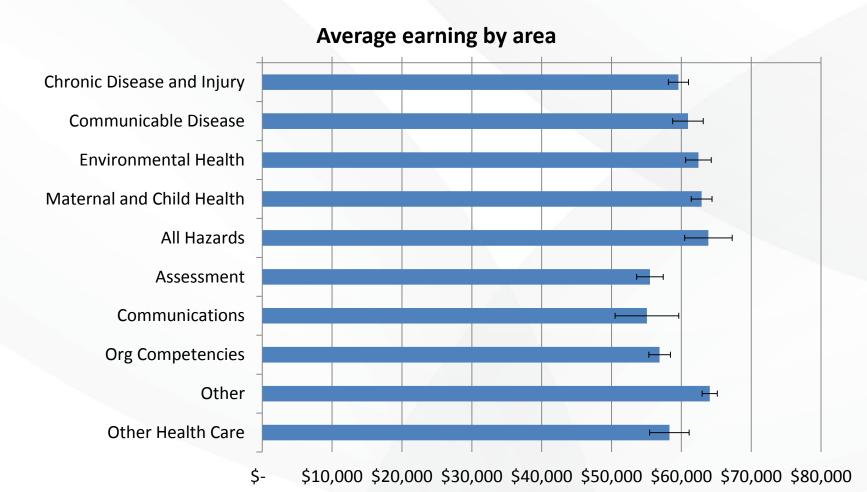
















Linear regression results

	Coefficient	95% Confidence interval	p-value
Supervisory status			
Non-supervisor (reference)			
Team leader	\$4,958	(\$3,249, \$6,667)	<.0001
Supervisor	\$9,469	(\$7,792, \$11,145)	<.0001
Manager	\$20,843	(\$18,808, \$22,878)	<.0001
Executive	\$40,128	(\$37,549, \$42,707)	<.0001
Gender			
Male (reference)			
Female	-\$3,021	(-\$4,303, -\$1,739)	<.0001
Additional earnings per year in public health	\$383	(\$338, \$428)	<.0001
Educational attainment			
No bachelors degree or higher indicated (reference)			
Bachelors only	\$7,399	(\$5,993-\$8,805)	<.0001
Bachelors and doctoral degree	\$23,319	(\$18,022-\$28,617)	<.0001
Bachelors and Masters degree	\$11,653	(\$10,270-\$13,036)	<.0001
Bachelors, Masters, and Doctoral degree	\$23,276	(\$20,607-\$25,946)	<.0001





	Coefficient	95% Confidence	p-value
		interval	
Paired HHS region			
New England & Atlantic (HHS 1 & 2) (reference group)			
Mid-Atlantic & Great Lakes (HHS 3 & 5)	-\$8,417	(-\$9,624\$7,210)	<.0001
South (HHS 4 & 6)	-\$15,741	(-\$16,829\$14,652)	<.0001
Mountain/Midwest (HHS 7 & 8)	-\$16,229	(-\$17,509\$14,949)	<.0001
West (HHS 9 & 10)	-\$2,375	(-\$3,865\$884)	0.003
Position type			
Administration (reference)			
Clinical and Lab	\$4,000	(\$2,731-\$5,269)	<.0001
Public Health Science	\$2,694	(\$1,567-\$3,821)	<.0001
Race/Ethnicity			
Non-Hispanic White (reference)			
Asian	\$65	(-\$2,591-\$2,721)	0.9610
Black or African American	-\$3,718	(-\$5,471\$1,966)	<.0001
Hispanic or Latino	-\$3,326	(-\$4,889\$1,763)	<.0001
Paid as			
Salary (reference)			
Hourly wage	-\$3,688	(-\$4,723\$2,654)	<.0001
Constant	\$53,028	(\$51,334-\$54,722)	<.0001

Disparities

- Further examination of salary differences between individuals of different genders and race/ethnicity show significant salary disparities
 - 90 95 cents on the dollar
 - Disparities worsen at higher levels of education and supervisory status
- Gaps appear less than private industry, but still significant





Discussion and implications

- Women account for three quarters of the workforce, but make less than men with the same experience and education
- Similar issues faced by people of color compared to non-Hispanic White staff
- Value of masters vs. bachelors attainment is unclear from an earnings perspective
 - Degree may be needed for position type, but earnings differentials are small compared to bachelors
 - Clear financial benefit from doctoral degrees





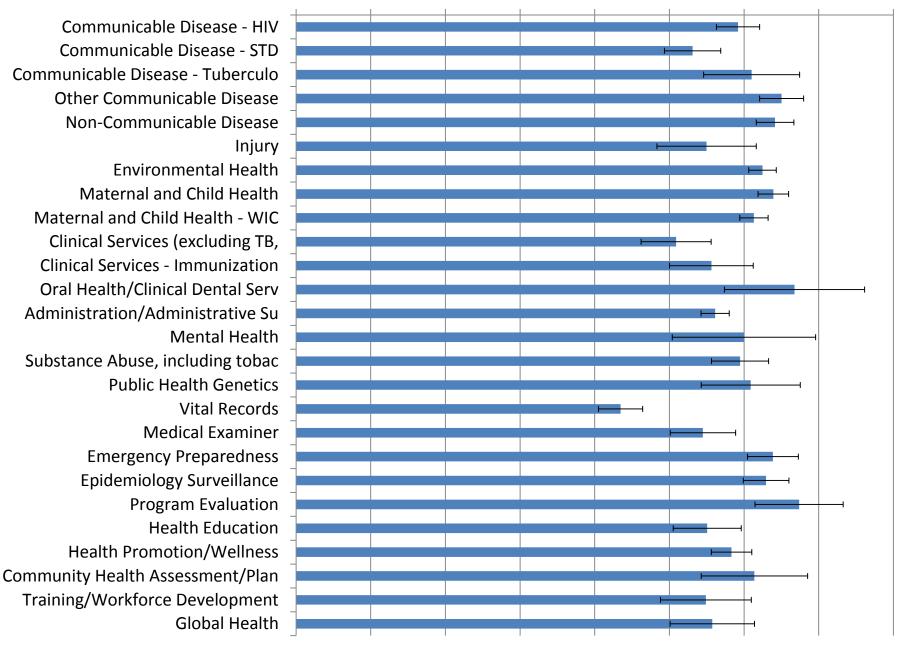
Questions?

- Data will become available to the public in April
 - http://www.astho.org/phwins/





Average earning by position type



\$10,000 \$20,000 \$30,000 \$40,000 \$50,000 \$60,000 \$70,000 \$80,000