

Public Health Statistics at BLS

*and some thoughts on how to expand the
information available*

George Stamas
U.S. Bureau of Labor Statistics

Public Health Systems & Service Research
Keeneland Conference

April 8, 2009



How BLS Gathers Data

- Household and business surveys
- Business establishments—
 - Employment, hours and earnings, monthly, by industry, state and area.
 - Occupational employment and wage by industry, state and area, annually.
 - Occupational wages and benefits, by industry and area.
- Sample size and respondent burden



Industry data available

- Current Employment Statistics (CES) -- monthly
- Quarterly Census of Employment and Wages (QCEW) -- detailed industry classification— State and county data
- Neither provides occupational information

News

United States Department of Labor
Bureau of Labor Statistics Washington, D.C. 20212

Technical information:
Household data: (202) 691-6378 <http://www.bls.gov/cps/> USDL 09-0224
Establishment data: (202) 691-6555 <http://www.bls.gov/ces/>
Media contact: (202) 691-9902

Transmission of material in this release is embargoed until 8:30 A.M. (EST), Friday, March 6, 2009.

THE EMPLOYMENT SITUATION: FEBRUARY 2009

Nonfarm payroll employment continued to fall sharply in February (-651,000), and the unemployment rate rose from 7.6 to 8.1 percent, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. Payroll employment has declined by 2.6 million in the past 4 months. In February, job losses were large and widespread across nearly all major industry sectors.

Chart 1. Unemployment rate, seasonally adjusted, March 2008 - February 2009

Month	Unemployment Rate (%)
March 2008	7.6
April 2008	7.6
May 2008	7.6
June 2008	7.6
July 2008	7.6
August 2008	7.6
September 2008	7.6
October 2008	7.6
November 2008	7.6
December 2008	7.6
January 2009	7.6
February 2009	8.1

Chart 2. Nonfarm payroll employment, seasonally adjusted, March 2008 - February 2009

Month	Nonfarm Payroll Employment (Millions)
March 2008	132.5
April 2008	132.5
May 2008	132.5
June 2008	132.5
July 2008	132.5
August 2008	132.5
September 2008	132.5
October 2008	132.5
November 2008	132.5
December 2008	132.5
January 2009	132.5
February 2009	122.5

Unemployment (Household Survey Data)

The number of unemployed persons increased by 851,000 to 12.5 million in February, and the unemployment rate rose to 8.1 percent. Over the past 12 months, the number of unemployed persons has increased by about 5.0 million, and the unemployment rate has risen by 3.3 percentage points. (See table A-1.)

The unemployment rate continued to trend upward in February for adult men (8.1 percent), adult women (6.7 percent), whites (7.3 percent), blacks (13.4 percent), and Hispanics (10.9 percent). The jobless rate for teenagers was little changed at 21.6 percent. The unemployment rate for Asians was 6.9 percent in February, not seasonally adjusted. (See tables A-1, A-2, and A-3.)

Industry Data from the CES

Payroll employment, in thousands

Industry	October 2008	November 2008	December 2008	January 2008p	February 2008p
Total nonfarm payroll	136,352	135,755	135,074	134,419	133,768
Private industry	113,813	113,212	112,542	111,856	111,196
Health care	13,401.2	13,442.4	13,475.9	13,496.1	13,523.0
Ambulatory health care services	5,706.1	5,727.7	5,742.6	5,755.2	5,771.5
Hospitals	4,681.9	4,692.4	4,703.7	4,712.5	4,719.3
Nursing and residential care facilities	3,013.2	3,022.3	3,029.6	3,028.4	3,032.2



Occupational data

- Occupational Employment Statistics
 - Huge sample pooled across 3 years
 - Employment and wages for 801 occupations
 - 350 industries, every State, every Metropolitan area, up to 4 exhaustive nonmetropolitan areas in each State
- National Compensation Survey
 - Wages and Benefits by occupation, by industry and for over 150 selected areas
- Occupational Safety and Health Statistics



Current Population Survey

- Household survey conducted by Census Bureau
 - Monthly sample of 60,000 households
- Civilian population, not just payrolls
 - Includes self-employed
- Provides detailed demographic data
- Source of monthly unemployment rate
- Broader industry and occupation detail
- Census also conducts the much larger American Community Survey (ACS)



Occupation Examples

National employment by occupation,
selected health care occupations, May 2007

Healthcare practitioner and technical occupations	6,877,680
Chiropractors.....	27,190
Dentists, general.....	85,260
Oral and maxillofacial surgeons.....	5,040
Orthodontists.....	5,350
Prosthodontists.....	380
Dentists, all other specialists.....	4,490
Dietitians and nutritionists.....	52,800
Optometrists.....	24,900
Pharmacists.....	253,110
Anesthesiologists.....	31,030
Family and general practitioners.....	113,250
Internists, general.....	46,260
Obstetricians and gynecologists.....	21,340
Pediatricians, general.....	28,890
Psychiatrists.....	21,790
Surgeons.....	50,260
Physicians and surgeons, all other.....	237,400
Physician assistants.....	67,160
Podiatrists.....	9,320
Registered nurses.....	2,468,340
Audiologists.....	11,360
Occupational therapists.....	91,920

Many other “public health” occupations in other major groups.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics



Employment Growth Projections -- Industries

Table 2. The 10 industries with the largest wage and salary employment growth, 2006-2016¹
(In thousands)

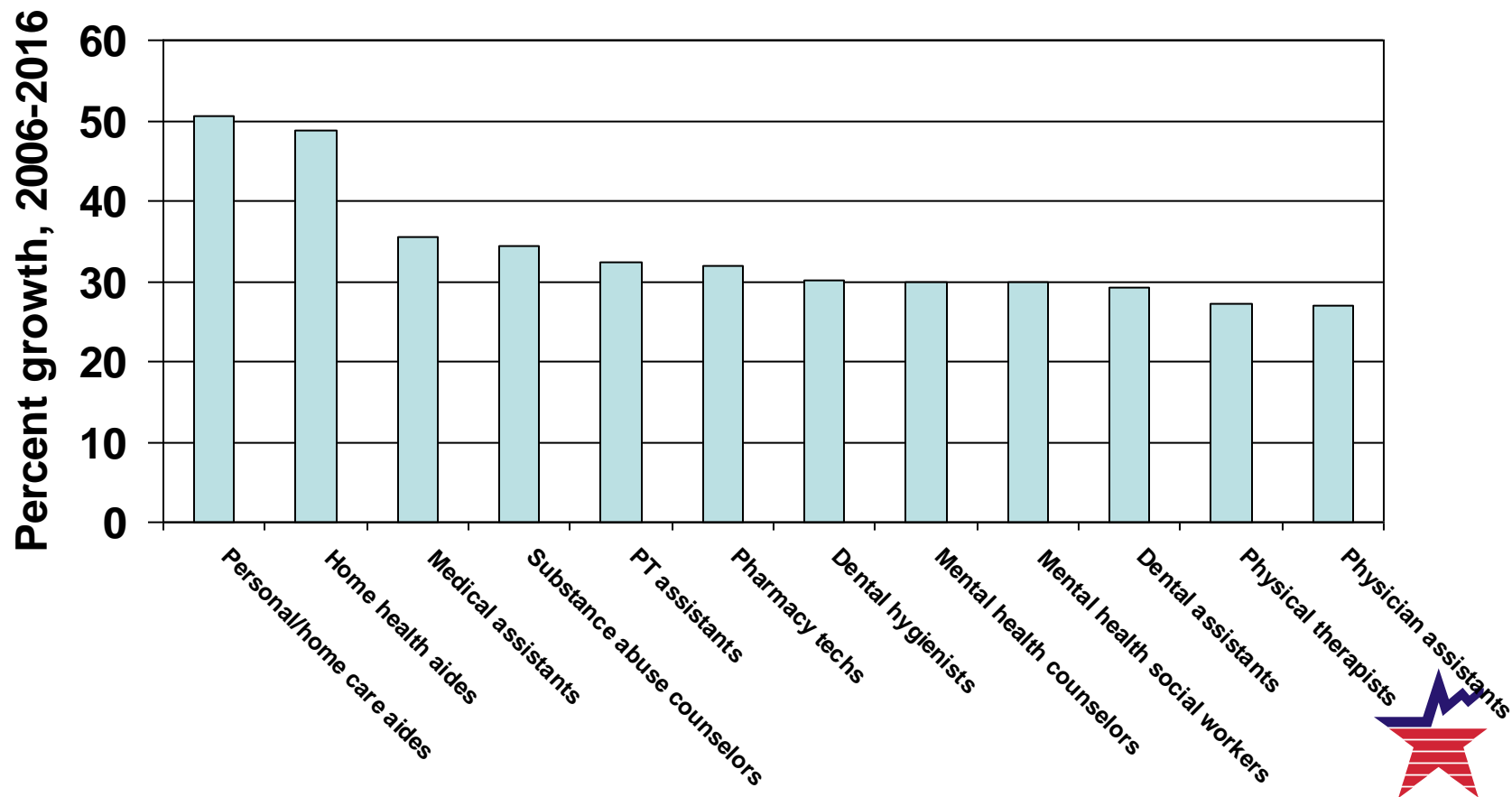
Industry	Employment		Change	
	2006	2016	Number	Percent
Management, scientific, and technical consulting services	921	1,639	718	77.9
Employment services	3,657	4,348	692	18.9
General medical and surgical hospitals, public and private	4,988	5,679	691	13.9
Elementary and secondary schools, public and private	8,346	8,983	638	7.6
Local government, excluding education and hospitals	5,594	6,206	612	10.9
Offices of physicians	2,154	2,687	534	24.8
Limited-service eating places	4,019	4,548	529	13.2
Colleges, universities, and professional schools, public and private ..	3,434	3,933	499	14.5
Computer systems design and related services	1,278	1,768	489	38.3
Home health care services	867	1,348	481	55.4

Source: U.S. Bureau of Labor Statistics, *Employment Projections*



Employment Growth Projections -- Occupations

12 of 30 fastest-growing occupations are in health-related fields



Source: U.S. Bureau of Labor Statistics, Employment Projections



An Industry Based Definition?

- BLS programs use the North American Industry Classification System (NAICS).
- Codes--6 digits with more granularity with each digit.
- Aside from health care and social assistance (62) some candidates might be—

525120	Health and welfare funds
541711	Research and development in biotechnology
813212	Voluntary health organizations
923120	Administration of public health programs



Industry Based Definition?

- Other industry groups might include public health along with other activities
 - Questions could screen for those in public health
 - Those in multiple activities could be asked about public health activities

611310	Colleges, universities and other professional schools
611519	Other technical and trade schools
813920	Professional organizations
926150	Regulations, licensing and inspections of misc. commercial sectors



Occupations

- BLS, Census and others use the Standard Occupational Classification (SOC).
 - To be in the SOC an occupation must be—
 - Clearly defined—tasks that uniquely describe.
 - Respondents must be willing and able to report.
 - Must have sufficient employment to be measurable.
- SOC is intended for statistical purposes
 - Promotes comparability in occupational analyses.



SOC in Federal Surveys

- Federal agencies are required to use SOC based occupational structure when publishing occupational statistics.
- SOC categories collapse into several suggested higher levels of aggregation.
- SOC detailed group can be broken into more detailed groups at agency discretion—add another digit to the 6-digit code.



Occupations in the Public Health Workforce

- Health specific occupations—there are about 90
- Many others work in public health--examples
 - Training and development specialists
 - Economists
 - Statisticians
 - Professors and other educator categories
 - Microbiologists
 - Secretaries, except legal, medical and executive
- There might be options to collect information on the ones in jobs in our scope. (Cross by industry and/or introduce more occupational detail.)



How to Address the Problem

Respond to calls for suggestions for federal statistical classification systems

- NAICS—*industry*—is under revision for 2012.
- SOC—*occupation*—2010 is being completed. Structure has been announced. Next revision for 2018
- Not always a satisfying experience
 - Limited lists—840 occupations; 1,175 industries
 - No immediate relief



SOC 2000

About 90 Health or Public Health Related Occupations

Suggested for SOC 2000		Suggested for SOC 2000	
Epidemiologist	√	Public health policy analyst	
Environmental engineer	√	Health service manager/administrator	√
Environmental engineering technicians and technologists	√	Public health and community social worker	√
Environmental scientist and specialist	√	Mental health and substance abuse social worker	√
Environmental science technician and technologist	√	Psychologist, mental health provider	√
Occupational safety and health specialist	√	Alcohol and substance abuse counselor	?
Occupational safety and health technician and technologist	√	Mental health counselor	√
Health educator	√	√ Found in SOC 2000	



Additional Health Detail for SOC 2010 Proposed

Proposed SOC 2010	From SOC 2000
Health care social workers	Medical and public health social workers
Community health workers	Community and social service specialists, all other* Health educators*
Exercise physiologists	Therapists, all other*
Nurse anesthetists	Registered nurses*
Nurse practitioners	Registered nurses*
Nurse midwives	Registered nurses*
Magnetic resonance imaging technologist	Radiologic technologist and technicians*
Ophthalmic medical technicians	Health technologists and technicians, all other*
Phlebotomist	Health support workers, all other*
*Title remains but excludes the additional workers covered by new title(s).	



More Options for Developing Data

- Use BLS (or other agency) data
 - A cross of industry/occupation to define the workforce.
- Expand programs
 - Even OES, with its large sample, does not survey relevant industries at desired detail.
- Pool data from across programs and agencies for analysis.



Public Health Workforce Surveys

- Special topic surveys conducted by survey research firms, BLS, Census, NCHS or other agencies.
 - Use standard classifications (NAICS & SOC) or more detail within those systems to promote useful comparisons across analyses.
 - Need a list of establishments in scope, or a list of questions to separate those in scope from others in related industry



www.bls.gov

www.bls.gov/oes

www.bls.gov/ncs

DISCUSSION, QUESTIONS
OR
COMMENTS?

Now

or

email stamas.george@bls.gov

