Who is doing Informatics in Public Health Settings? Results from PH WINS Survey

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BACKGROUND

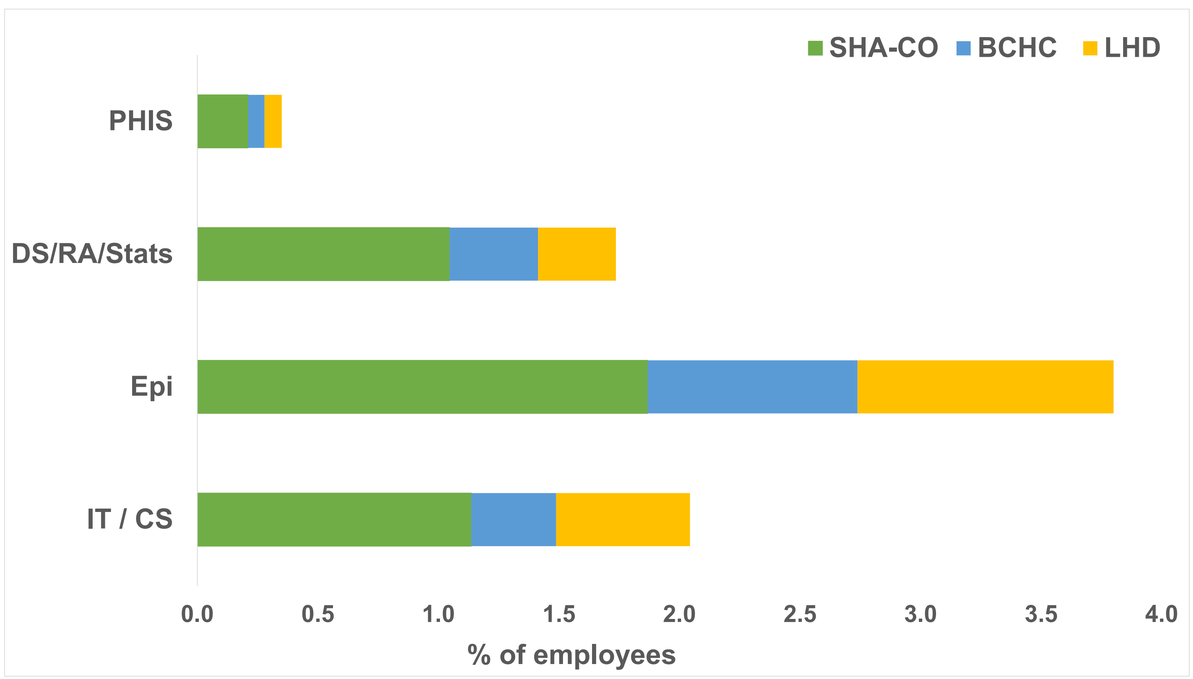
- Data is the backbone of public health. Public Health Data Strategy (PHDS) from the Centers for Disease Control and Prevention (CDC) aims to improve the collection and exchange of timely, actionable data for decision making.
- A data- and technology-skilled workforce is key to PHDS success. Prior studies show informatics work is often done by roles other than Public Health Informatics Specialists (PHIS), as PHIS positions are not well established.
- The Public Health Workforce Interests and Needs Survey (PH WINS) provides insight into data-related roles across public health settings.

METHODS

- **Data Source:** 2024 *Public Health Workforce Interests and Needs Survey (PH WINS)*.
- **Sample:** Consists 56,595 responses from 48 state health agencies and approximately 1,200 Local Health Departments including Big City Health Coalitions and Rural Health Departments across US.
- **Settings Grouped Into:**
  - State Health Agency – Central Office (SHA–CO),
  - Big Cities Health Coalition (BCHC) and local health departments and
  - Other local or regional health departments (LHDs).
- **Positions Analyzed:** Nine data and informatics-related positions (from 77 workforce classifications) were grouped into four categories:
  - Public Health Informatics Specialists (PHIS)
  - Data Scientists / Research Analysts / Statisticians (DS/RA/Stats)
  - Epidemiologists (Epi)
  - Information Technology / Computer Science (IT/CS)
- **Program Areas Analyzed:** Informatics, epidemiological surveillance, and IT services.
- **Data Analysis:** Conducted using SAS version 9.4.

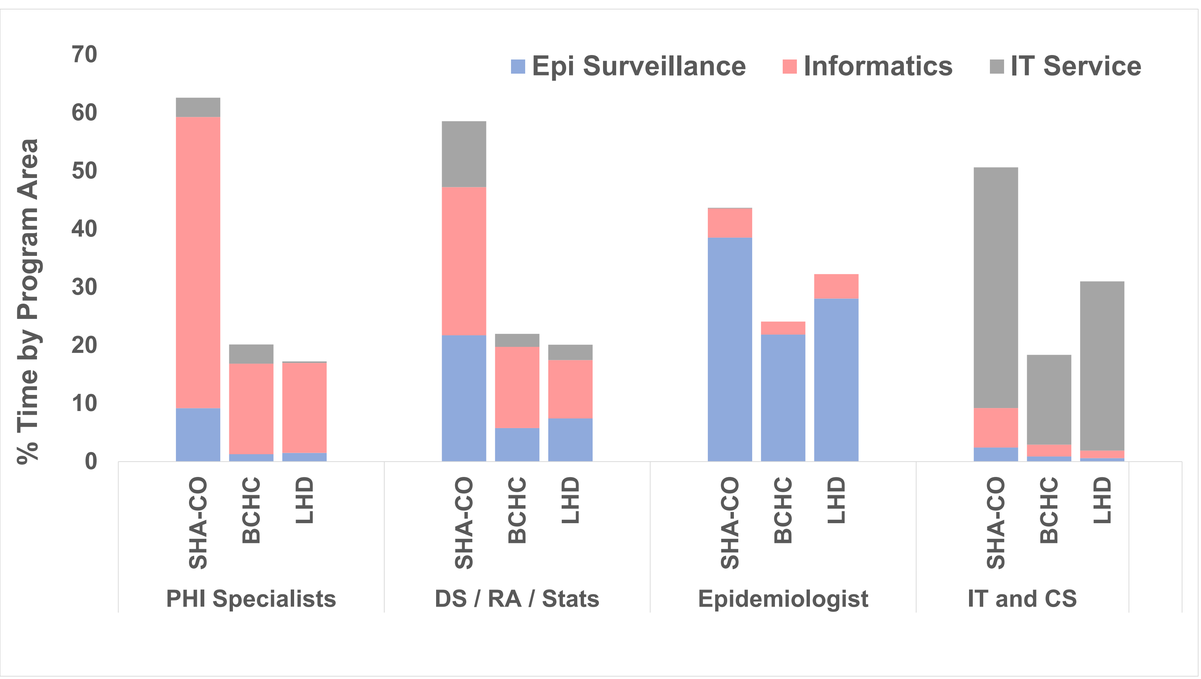
RESULTS

Fig 1: Data-related Job Roles in Public Health



- Figure 1 summarizes data-related job roles across different settings.
- PHIS is the smallest segment of the workforce at 0.35%.
- This was followed by DS/RA/Stats at 1.74%, IT/CS at 2.04%, and Epidemiologists at 3.80%, with most PHIS located in SHA-CO settings.

Fig 2: Job Roles by Program Areas and Settings



- Figure 2 summarizes Informatics functions by role. Informatics work is performed across all data-related roles, not limited to PHIS.
- DS/RA/Stats show highest engagement in informatics program areas (49.6%) followed by Epidemiologists (11.42%) and IT/CS (10.15%).

CONCLUSION + ACKNOWLEDGEMENT

- Data + informatics roles are a small share **(~4,700 positions)** of the PH workforce, with PHIS unchanged (n=234) since 2021 PH WINS survey.
- This study reflects the **interdisciplinary nature** of **informatics workforce** and highlights the urgent need to strengthen and expand the data-related workforce to advance public health data infrastructure and modernization under the PHDS initiative.

Acknowledgement

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References

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