Problems with Use of "Physician-documented Diagnosis" in HIV Surveillance:

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Presentation to HIV/AIDS Surveillance Coordinators
at Monthly CSTE Conference Call
9 December 2009

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.

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Overview

- Definition and History of Physician Diagnosis (PD) in HIV Surveillance
- Initial Data Runs/Results
- Discussions with Sites
- Further Analyses
- Questions for Discussion

Definition and History

"Physician Diagnosis" in the 2008 HIV Infection Surveillance Case Definition

"Other Criterion (for Cases that Do Not Meet Laboratory Criteria):

HIV infection diagnosed by a physician or qualified medical-care provider **based on the laboratory criteria** and documented in a medical record.* Oral reports of prior laboratory test results are not acceptable."

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*See footnote on next slide

"Physician Diagnosis" in the 2008 HIV Infection Surveillance Case Definition

Footnote to previous slide:

"An original or copy of the laboratory report is preferred; however, in the rare instance the laboratory report is not available, **a description of the laboratory report results** by a physician or qualified medical-care provider documented in the medical record is acceptable for surveillance purposes. Every effort should be made to obtain a copy of the laboratory report for documentation in the medical record."

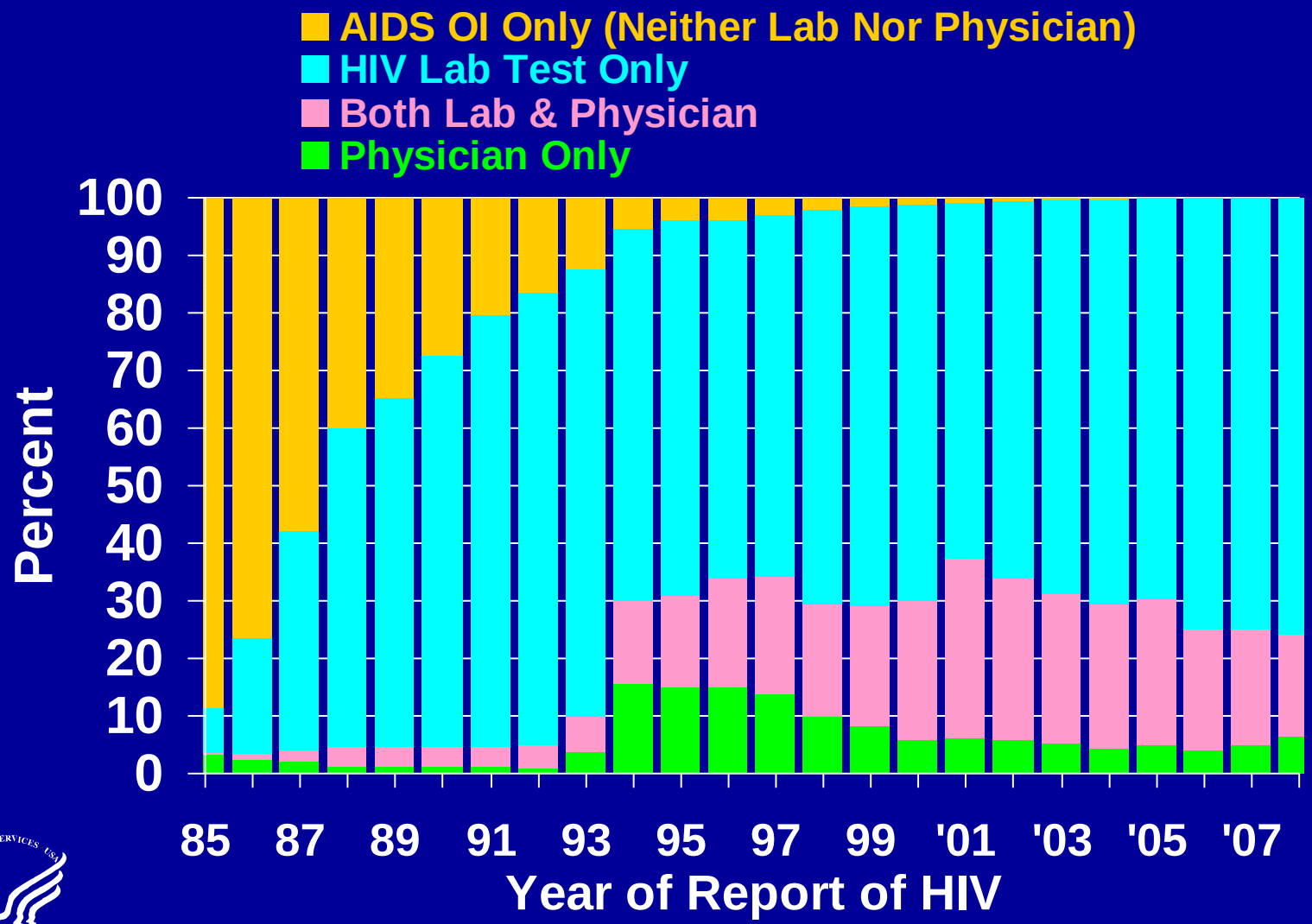
Analysis of cases reported as based only on physician diagnosis (without positive results on confirmatory HIV tests)

We defined a case based on **Physician Diagnosis Only** as one that:

- Lacked confirmatory lab test data in HARS/ eHARS (e.g., Western Blot, viral load), but
- Had "Yes" entered for diagnosis documented by a physician.

Step 1: Initial Data Runs

Percentage Distribution of HIV Infection Cases by Type of Documentation of Diagnosis, 1985 - 2007



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Physician Diagnosis Data Runs: Results

- Associations found with
  - Age
  - Reporting site
- Large range in percentage of cases based only on physician diagnosis among reporting sites: 0 – 23%
  - Decided to interview staff of several health departments to gain insight into reasons.

Step 2: Listening to Reporting Sites

Next Stage: Speaking with the Sites

- Step 2: Conference calls with five sites with highest percentage of Physician-Diagnosis-Only cases, plus one large site with low PDO percentage
  - Participation of WG members, HICSB TA site epidemiologist, site personnel
- Discussed: HIV reporting transitions, staff training, and surveillance practices

Results from the Sites: Many factors Affect Physician Diagnosis

- Implementation of HIV reporting laws
- Implementation of name-based HIV reporting
- Changes in CD4 and viral load reporting laws
- Electronic lab reporting (ELR)
- Electronic medical records (EMR)
- Difficulty in finding older medical records (archiving > 3 yrs., destruction > 7 yrs)
- Emergency room reports

Physician Diagnosis: More Results from Reporting Sites

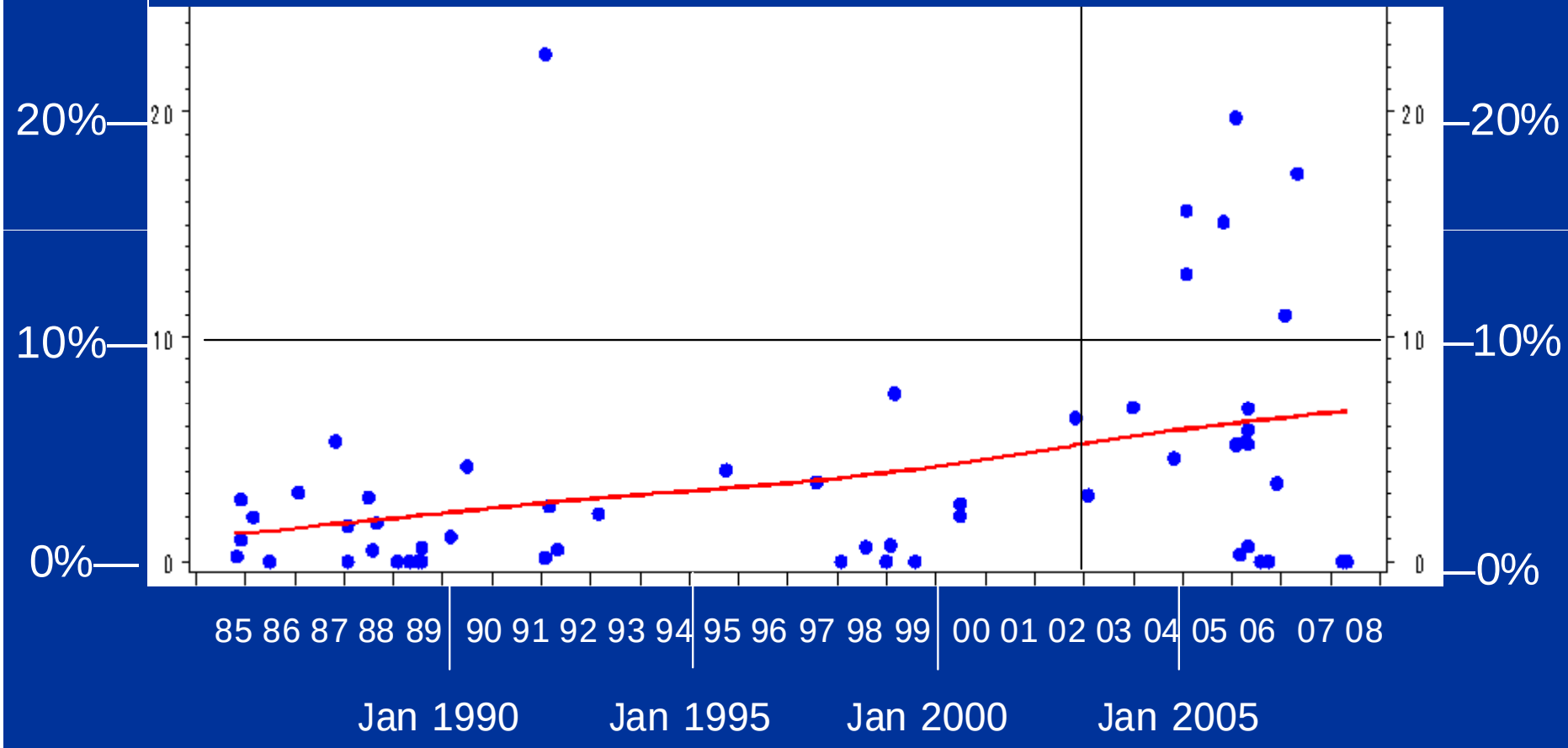
- Electronic medical records help in finding confirmatory lab reports
- Difficulty with reporting from Veterans Affairs facilities
- Electronic lab reporting could help
- State D: Most Physician-Dx-Only cases were diagnosed a long time ago (according to content of note)

Reasons Why HIV Laboratory Reports Are Not Found

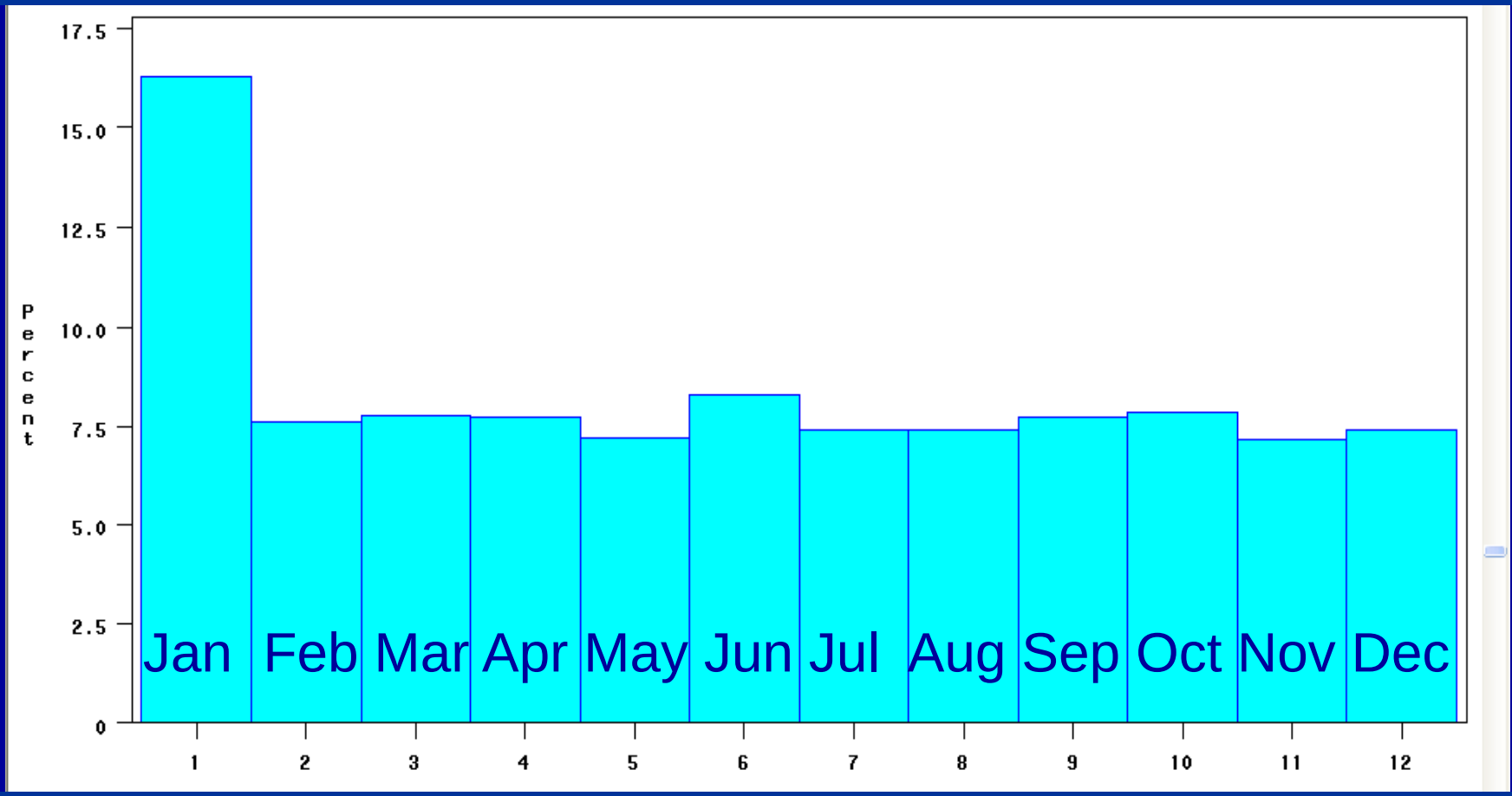
- Long time between diagnostic lab reports and other data sources
  - Hospital/clinic records
  - Death certificates
  - AIDS Drug Assistance Program file
- Lab reports located in other state
- ER records do not specify location of old lab reports

Step 3: Further Analyses

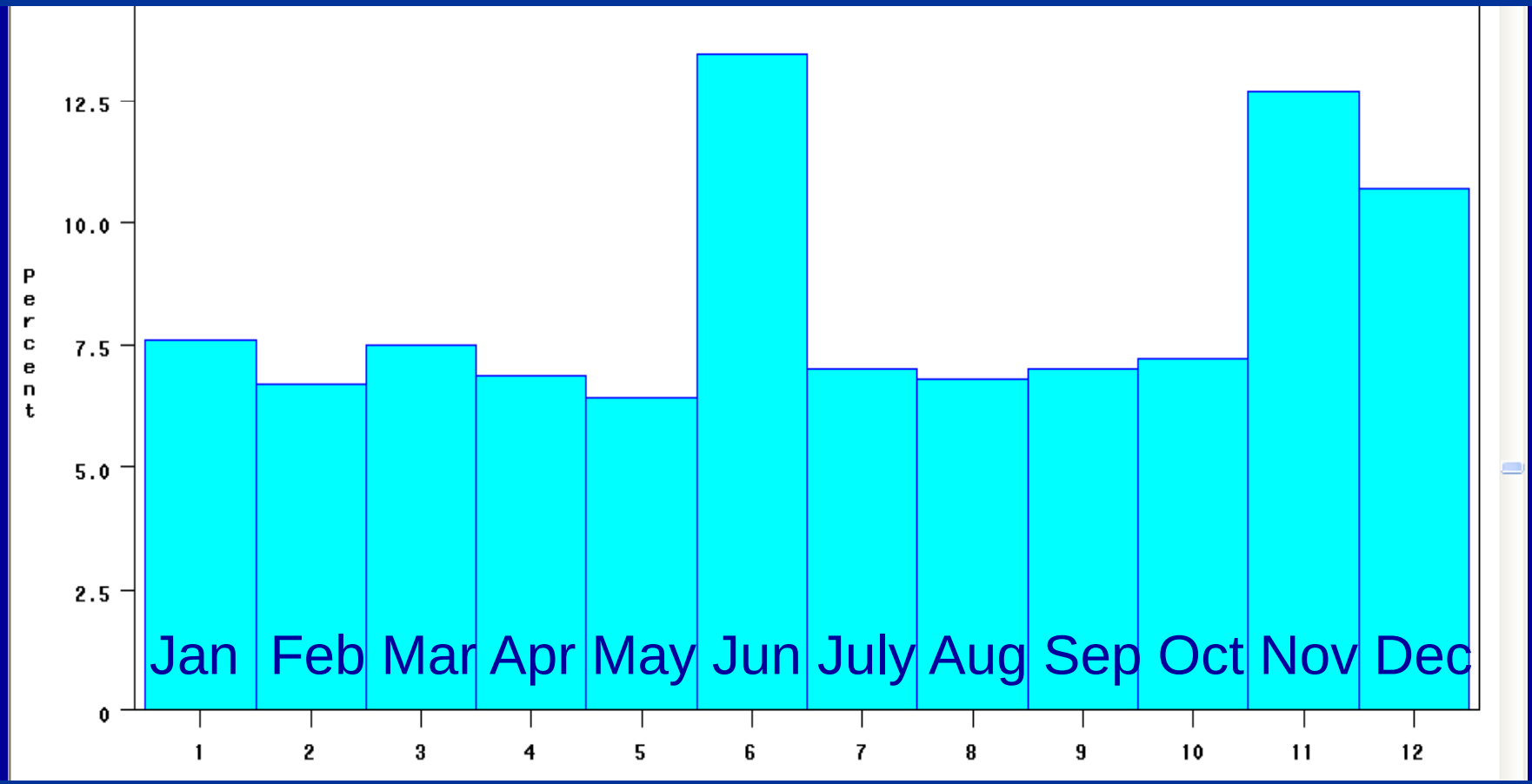
Correlation of Percentage of Cases having Only Physician Diagnosis with Date of Implementation of Name-based HIV Infection Reporting



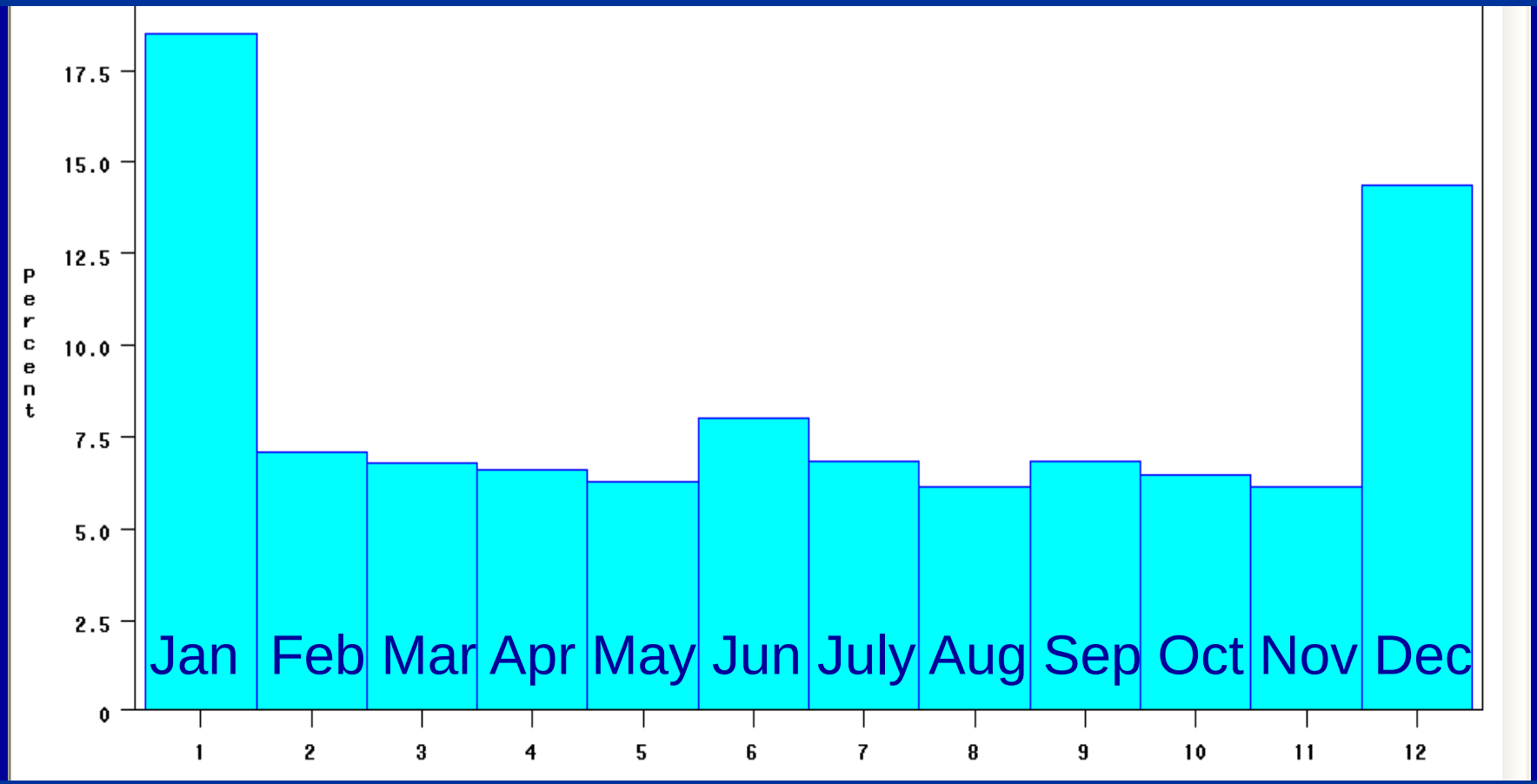
Percentage Distribution of Cases Reported by State B, by Month of Physician-Documented Diagnosis (excluding cases with unknown month of diagnosis)



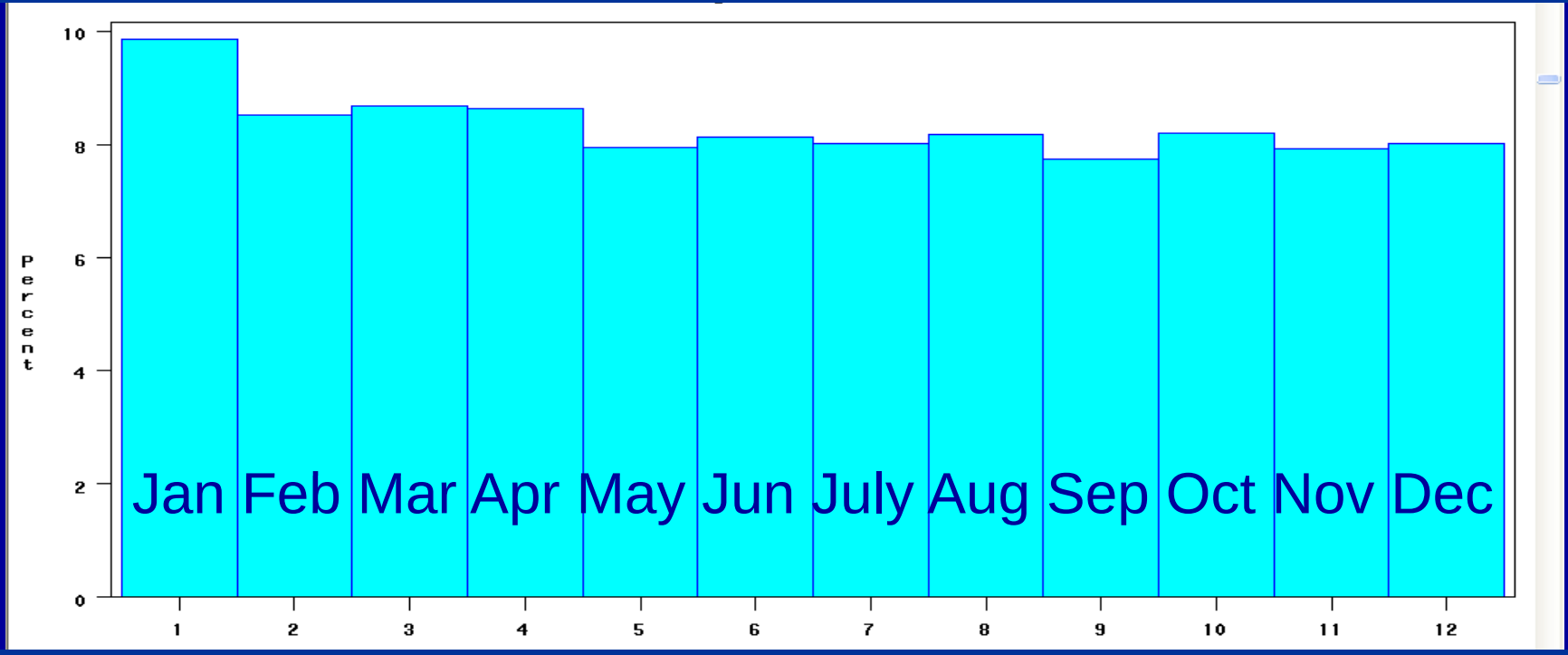
Percentage Distribution of Cases Reported by State C, by Month of Physician-Documented Diagnosis (excluding cases with unknown month of diagnosis)



Percentage Distribution of Cases Reported by State D, by Month of Physician-Documented Diagnosis (excluding cases with unknown month of diagnosis)



Percentage Distribution of Cases Reported during 1995-2008 by State A, by Month of Physician-Documented Diagnosis (excluding cases with unknown month of diagnosis)



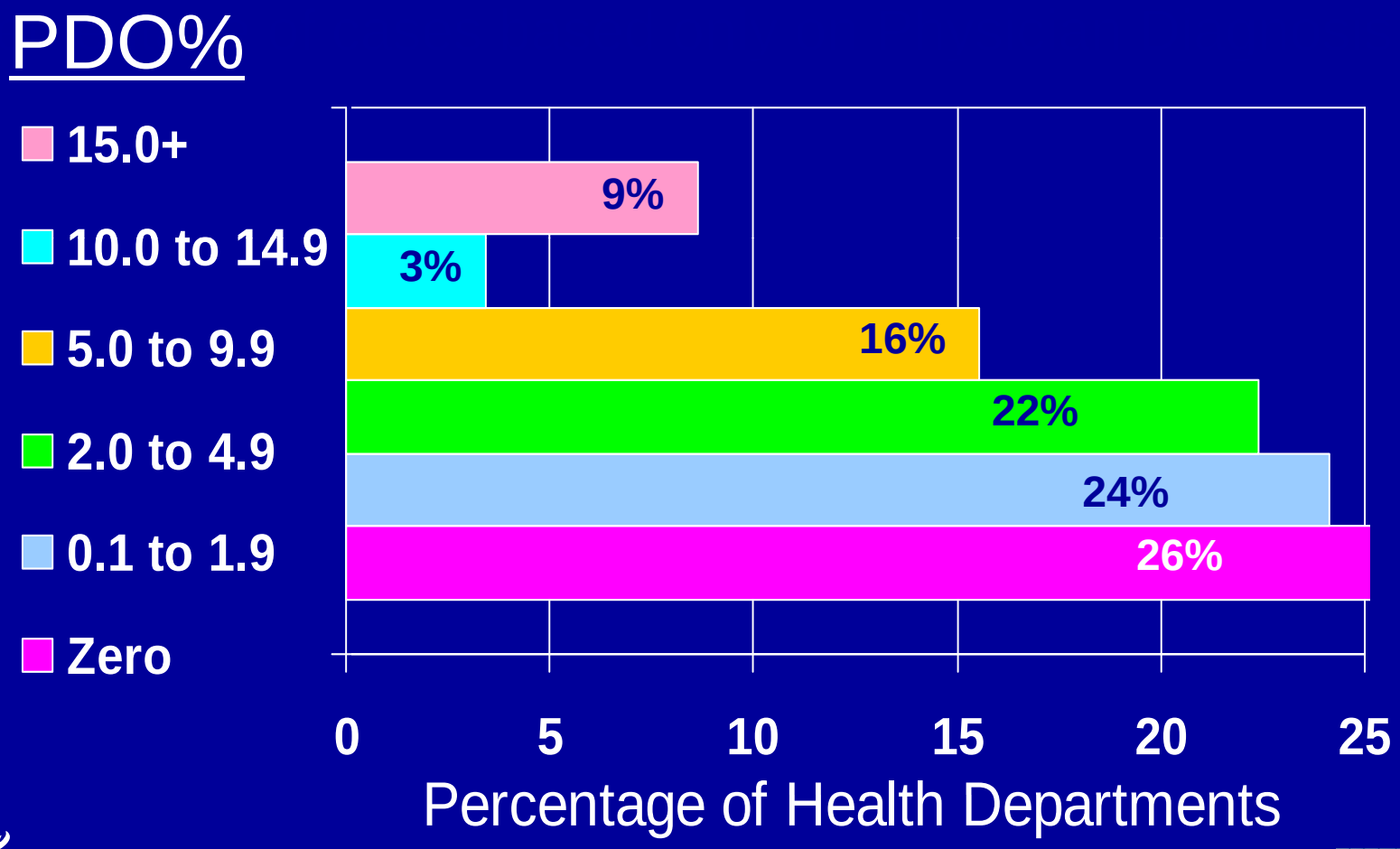
Replacing missing month of diagnosis with fabricated month of diagnosis introduces errors that mess up analyses of:

- Estimated HIV incidence date
- Interval between HIV infection diagnosis and AIDS diagnosis
- Interval between HIV infection diagnosis and death

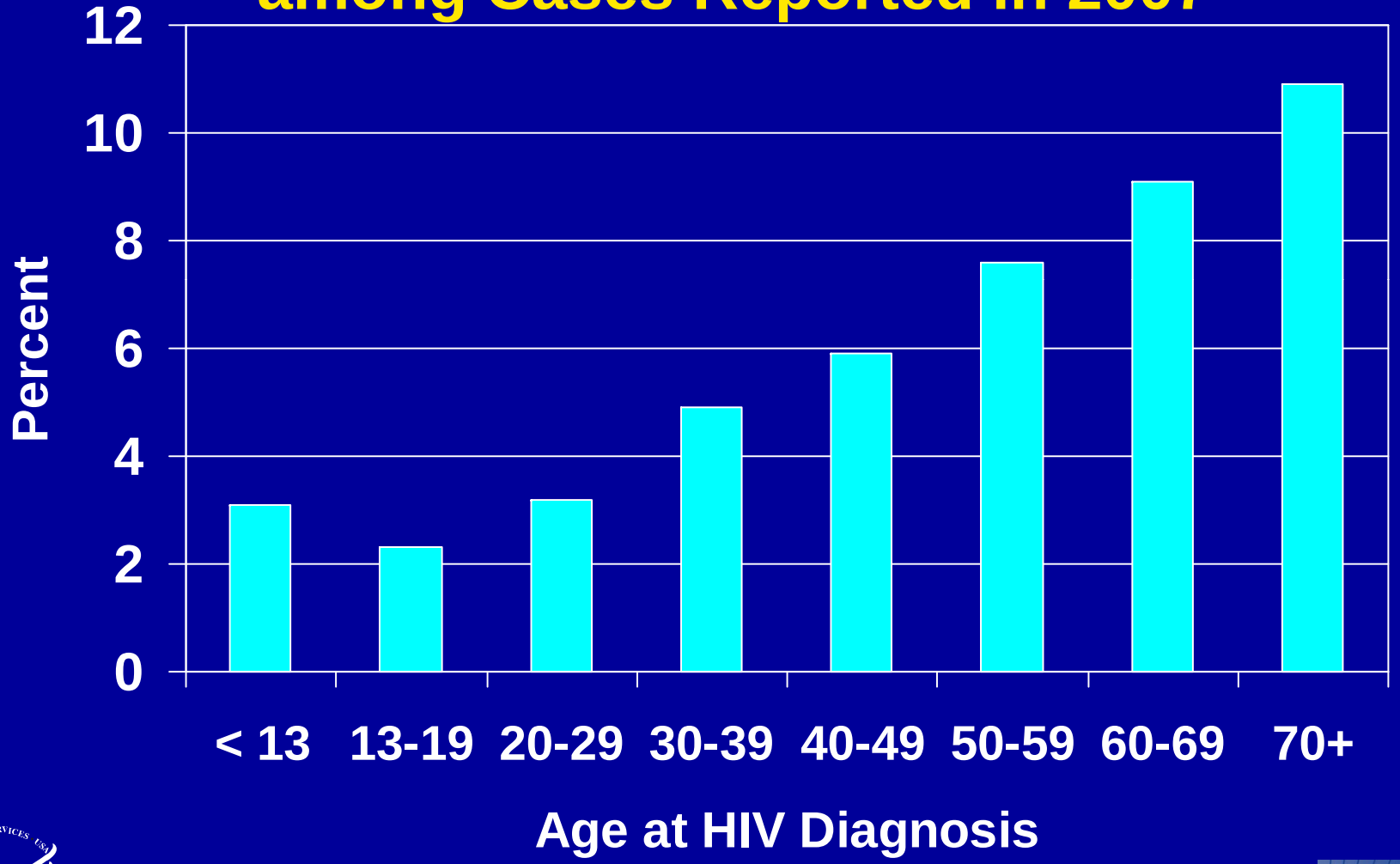
Should Physician-Documented Diagnoses No Longer Be Accepted?

- Disproportionate impact on some health departments and some demographic groups

Percentage Distribution of 58 Health Departments by the Percentage of their Cases Reported Based on "Physician Diagnosis Only" (PDO) in 2007



Variation in Percentage of Cases Based only on Physician Diagnosis with Age at HIV diagnosis, among Cases Reported in 2007

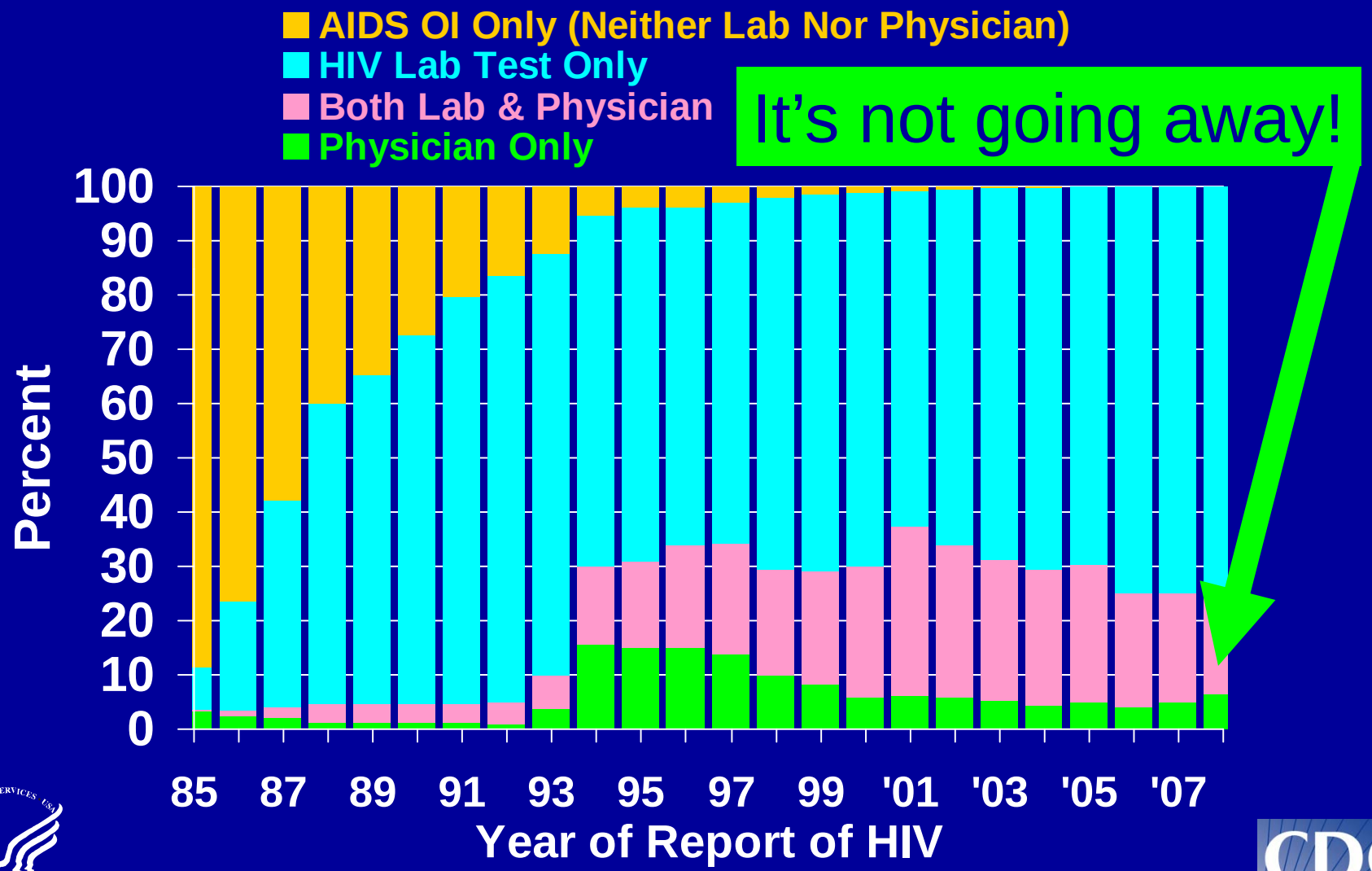


Questions for Discussion

Should physician-documented diagnosis be eliminated as a way to meet the case definition for HIV infection?

Our analyses suggest that the percentage of cases reported with only a physician diagnosis may be too high for us not to count such cases.

Percentage Distribution of HIV Infection Cases by Type of Documentation of Diagnosis, 1985 - 2007



What must the physician's note in the medical record describe?

- Positive result on specified type of HIV test (e.g., Western blot, viral load)?
- Positive HIV test, but not necessary to specify type of test?
- HIV infection diagnosis, but not necessary to specify that HIV test was positive?
- Note: Antiretroviral therapy alone should not be considered proof of HIV infection (may be used for prophylaxis against HIV or to treat other diseases, such as viral hepatitis)

More Questions Regarding "Physician Diagnosis" Criteria

What is the date of "physician's diagnosis"?:

- Date physician wrote note about diagnosis?
- Or, date note says patient had positive HIV test?

Thank You!