

# Influenza Vaccine Distribution Data and Use of Data During the 2006-07 Season

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# Overview

- Background
- Brief overview of findings at the national level
- Preliminary results of data use evaluation
- Conclusions, next steps



# Background

- Distribution data tracking began during the 2004-05 season following the Chiron vaccine shortfall
  - Included data from single manufacturer only
  - Data tracking incorporated into centralized vaccine ordering system
- Tracking system enhancements for 2005-06 and 2006-07
  - Data from other manufacturers/major distributors included
  - Data collection/posting period extended
  - Small amount of pre-book data included



# Purpose, Format of Distribution Data

- **Purpose**
  - Provide information to enhance visibility of influenza vaccine distribution for state and local health officials to assist in their management of influenza vaccine availability issues and challenges
- **Data were mapped to the following variables**
  - State where flu vaccines are distributed
  - Zip code where flu vaccines are distributed
  - National Drug Code (NDC) of vaccine distributed
  - Number of doses distributed
  - Type of provider where vaccines are distributed



# Provider Types

Values for the facility type variables from each participant were recoded into one of the following categories:

- Corporation/Occupational Health
- Corrections
- Distributors
- Federal Government
- Hospitals/EDs/Dialysis Centers
- Long Term Care
- Military
- Other Private
- Other Public
- Pharmacy
- Private Providers
- State/Local Health



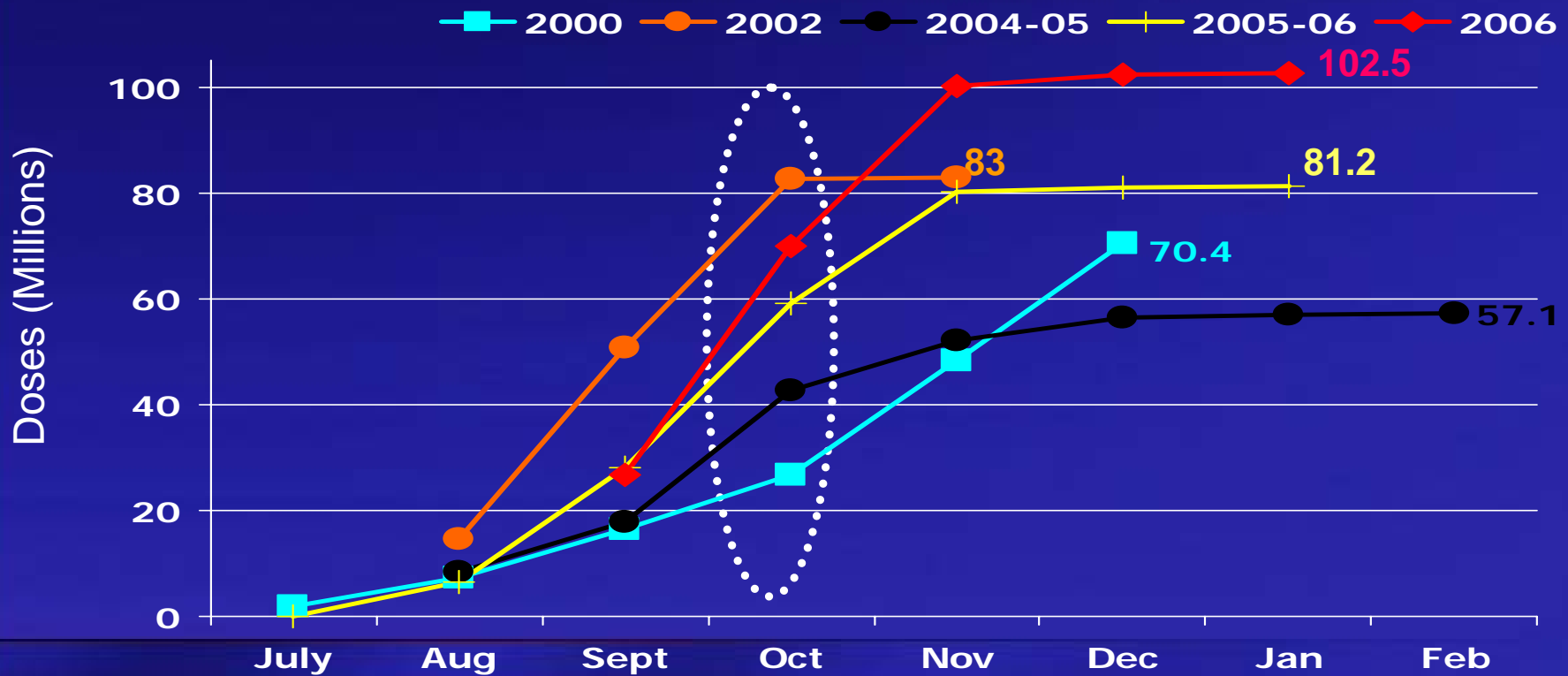
# Participants

- ASD Healthcare
- Cura Script
- FFF Enterprises
- Henry Schein/GIV
- McKesson
- Physician Sales and Service (PSS)
- Seacoast Medical
- GSK
- MedImmune
- Novartis
- Sanofi pasteur



# Cumulative Monthly Influenza Vaccine Distribution

(01/12/2007)

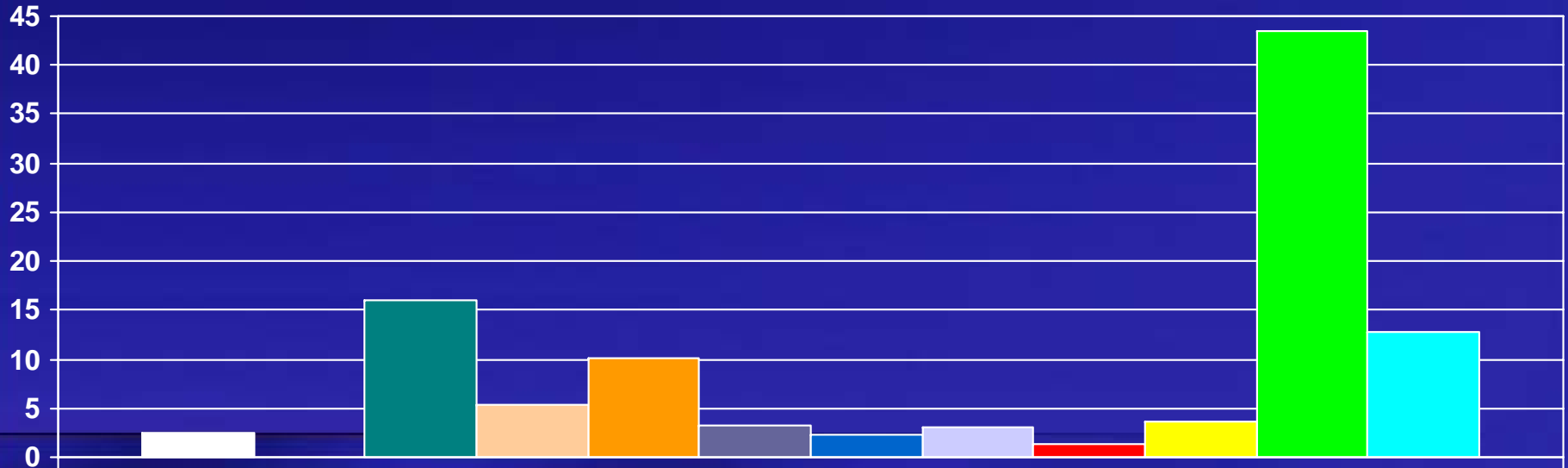


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# Influenza Vaccine Distribution by Provider Type

- Corporation/OCC Health
- Distributors
- Hospitals/Eds/Dialysis Centers
- Military
- Other Public
- Private Providers, Outpatient Clinics/Facilities
- Corrections
- Federal Government
- Long Term Care
- Other Private
- Pharmacy
- State/Local HD/Govt

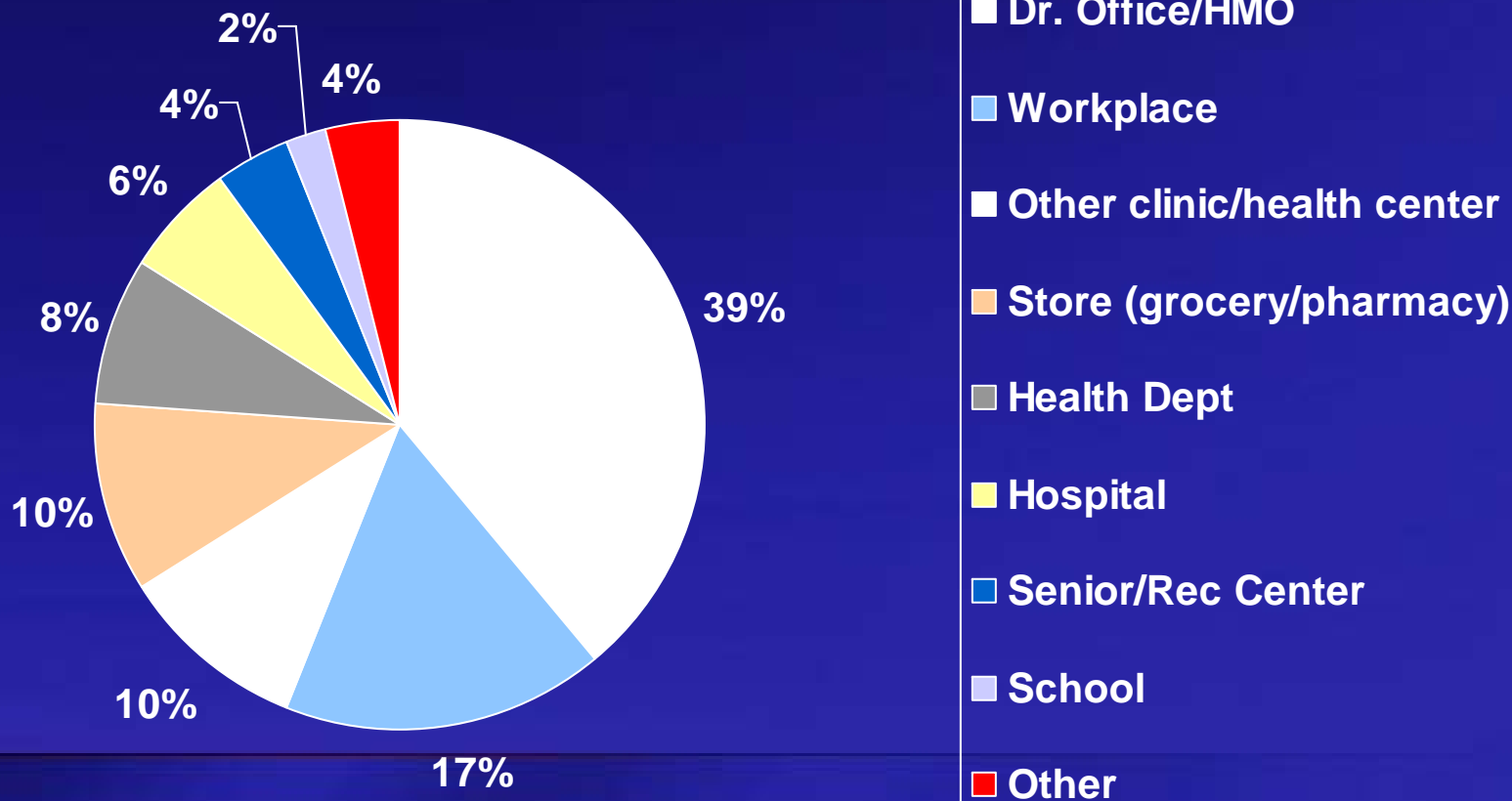
Million



Provider Type Category



# Where do Adults Receive Influenza Vaccination?



Source: Unpublished data from a Gallup telephone survey conducted on behalf of CDC in 2005.



**How about the timing of vaccine distribution by provider type?**



Provider Type	29-Sep-06	20-Oct-06	10-Nov-06	1-Dec-06	22-Dec-06	12-Jan-07
Corporation/Occ Health	2.2%	2.5%	2.6%	2.5%	2.5%	2.5%
Corrections	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distributors	24.9%	16.2%	18.3%	16.0%	15.7%	15.6%
Federal Govt	1.1%	3.9%	3.3%	5.1%	5.0%	5.1%
Hosp/Eds/Dialysis	9.2%	12.9%	10.4%	9.8%	9.9%	9.9%
Long Term Care	4.7%	4.0%	3.7%	3.2%	3.1%	3.1%
Military	0.6%	1.0%	0.8%	2.2%	2.2%	2.2%
Other Private	3.4%	2.9%	2.7%	2.6%	2.8%	2.9%
Other Public	1.3%	1.1%	1.1%	1.1%	1.4%	1.4%
Pharmacy	5.0%	5.1%	3.8%	3.5%	3.5%	3.5%
Priv Prov/Clinics	41.0%	43.2%	43.1%	42.1%	42.3%	42.3%
State/Local Health	6.6%	7.2%	10.1%	11.9%	11.6%	11.6%



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# Influenza Vaccine Production and Distribution, US, 1980-2006

	Doses Produced (millions)	Dose Distributed (millions)	Difference (millions)
1980	15.7	12.4	3.3
1990	32.3	28.3	4.0
1995	71.5	54.9	16.6
1999	77.2	76.8	0.5
2000	77.9	70.4	7.5
2001	87.7	77.7	10.0
2002	95.0	83.0	12.0
2003	86.9	83.1	3.8
2004	61.0	57.0	4.0*
2005	86.0	81.2	7.0*
2006	120.9	102.5**	18.4*



# Evaluation of Data Use

- Objective: Determine how grantees used influenza vaccine distribution data during the 2006-07 season.
- Methods: Two-step process
  - Workshop at NIC to gather qualitative data about how grantees used data and what benefits/limitations they reported
  - Email survey to quantify data use/benefits/limitations among all those who accessed FluFinder application

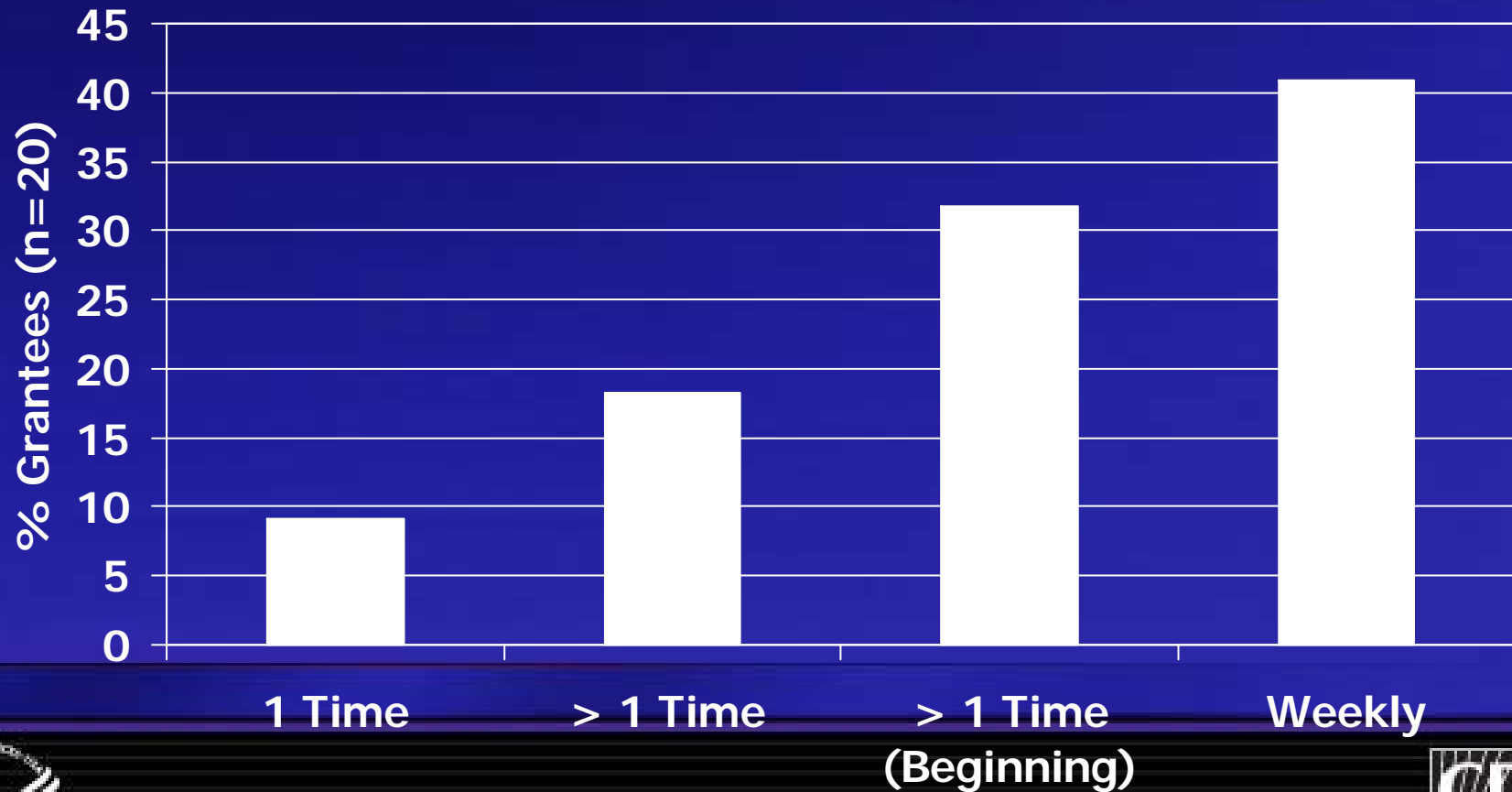


# Preliminary Results

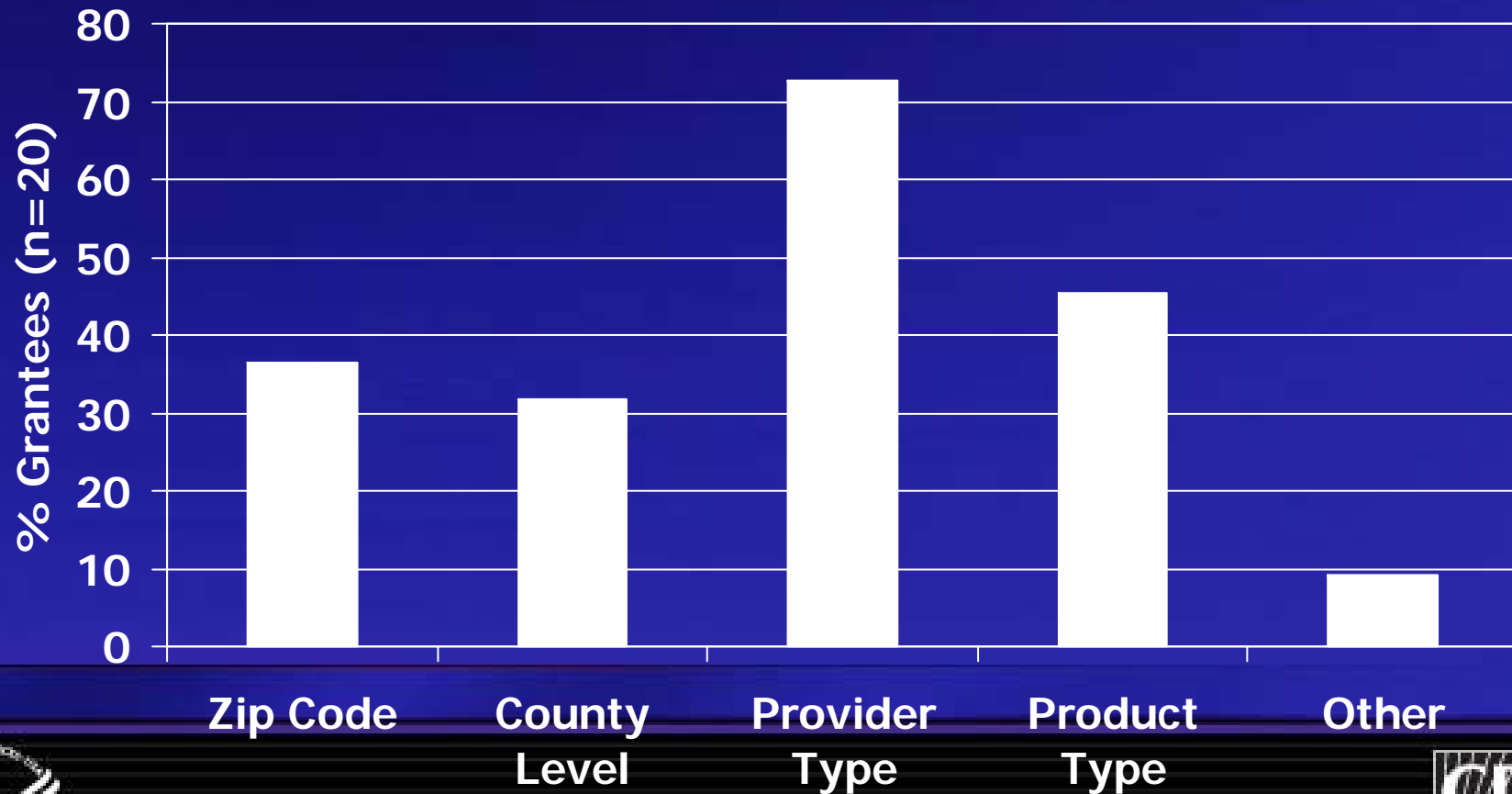
- Grantees granted access to FluFinder: 40
- Grantees responding the survey: 24
- Response rate:  $24/40 = 60\%$
- % respondents using FluFinder:  $22/24 = 92\%$   
(Sample size for survey = 22)
- One survey user indicated trouble accessing data; one non-user cited difficulty with certificate as reason for not accessing the system



# Frequency of Access to FluFinder (n= 22)



# Types of Analyses Carried Out (n = 22)

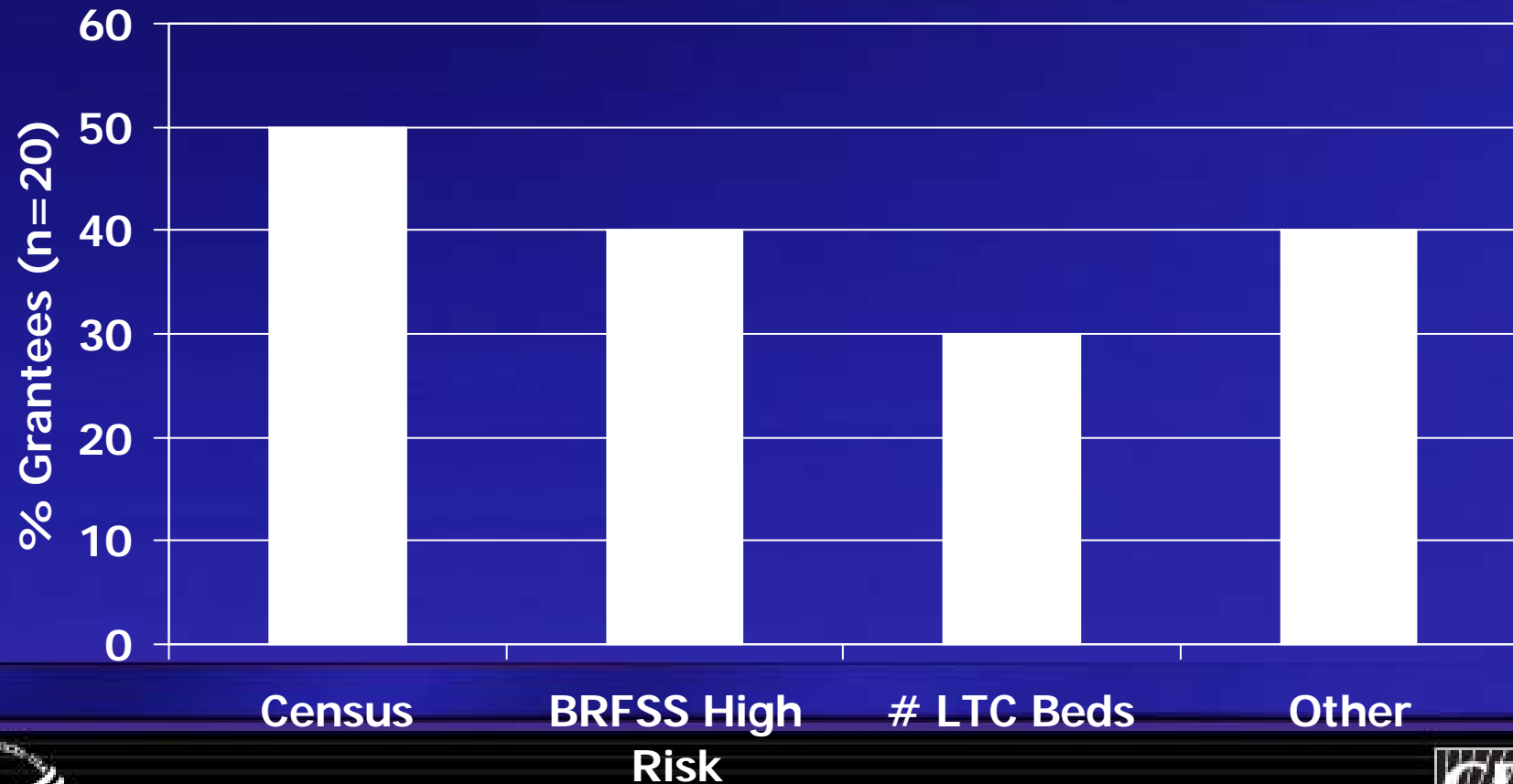


# Use of Data to Redirect Doses or Patients

- Two grantees reported using data to redirect patients
- One grantee reported using data to redistribute doses (explanation not provided)



# Comparison of SDN Data with Other Data Sources (n=10)

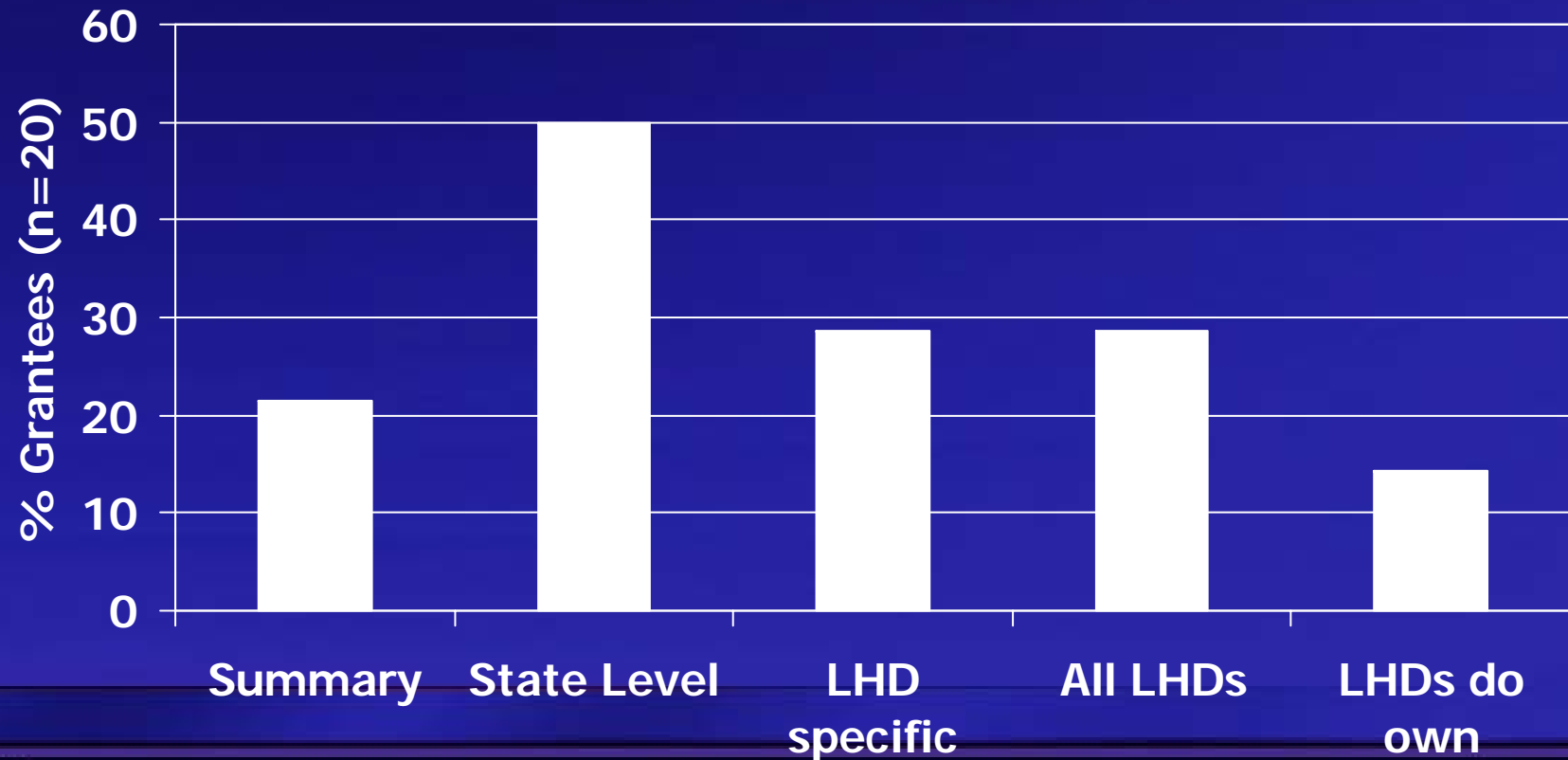


# Data Used to Communicate with Selected Groups

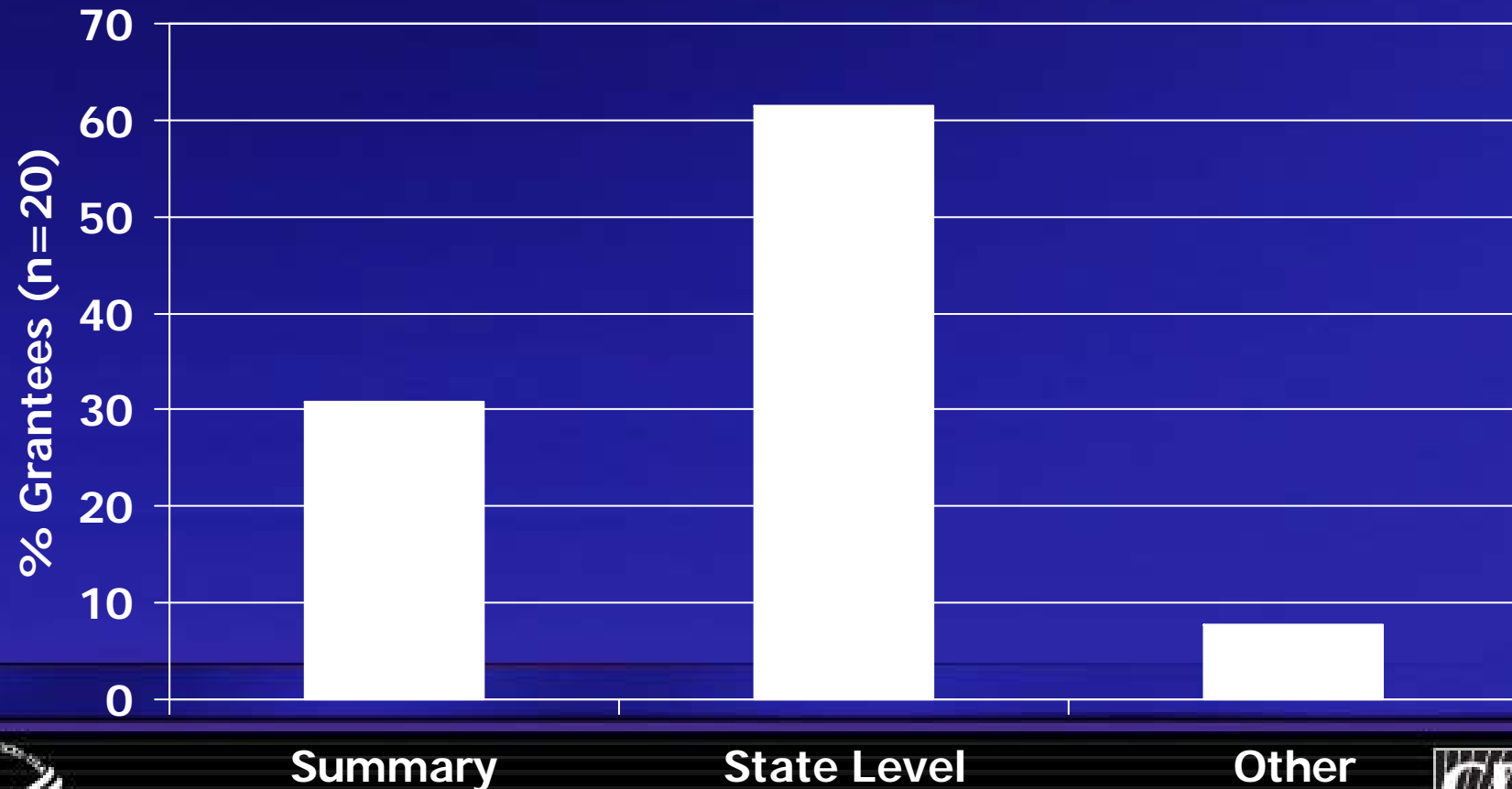
Group	# (%) of grantees
LHDs	14 (63%)
Other providers	13 (59%)
Media	13 (59%)
Others (Coalitions, Medical Advisory Board, Infection Control Practitioners, PHIO, AAP/AAFP chapter, local/state medical society, state legislature, etc)	10 (45%)



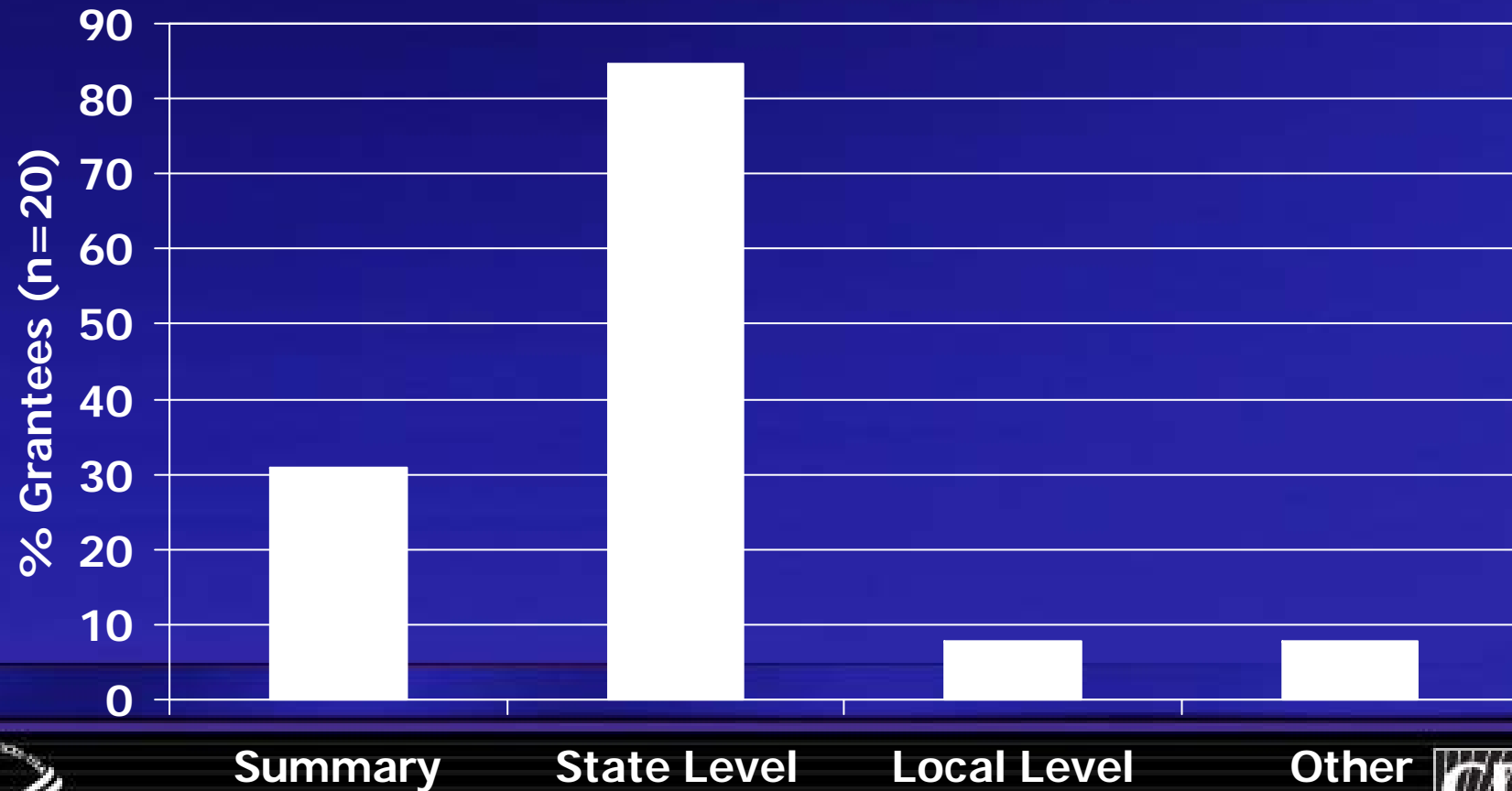
# Level of Data Used to Communicate with LHDs (N=14)



# Level of Data Used to Communicate with Other Providers (N=13)



# Level of Data Used to Communicate with Media (N=13)



# Other Uses of Distribution Data

- Used it to communicate with a provider who was concerned about vaccine going to community vaccinators
- Monitored available vaccine for hospitals, LHDs
- Used data to calculate total flu need for adults immunization program (future season planning)
- Attempted to locate provider following vaccine adverse event



# Use of PreBook Data

- Grantees using this data 4 (18%)
- Use of data (n=2):
  - To anticipate where it might be important to schedule additional clinics with community partners in the state (e.g., VNA, HAA),
  - Data presented to local health director to provide additional information about where vaccine was located



# Additional Suggestions

- More specific provider data would be helpful, esp for redistributing vaccine
- I would have used these data more if I'd known some possible approaches to take
- If CDC could provide county level data, that would be helpful (?high risk population numbers)



# Conclusions

- Influenza vaccine distribution data accessed by less than half of NCIRD immunization grantees
  - First year with complete, full-season data
  - Small number of access problem bear further follow up
- Most (91%) used the data more than once throughout the season (41% used data weekly)
- Most common analysis was vaccine distributed by provider type; product type, county level and zip code level analyses also conducted



# Conclusions (Continued)

- About half of grantees who used the data compared it with other data sources and used it to communicate with LHDs, other providers, media
- Little experience gained with use of pre-book data this season
- Guidance around using influenza vaccine distribution data may help increase the number of grantees using these data to assist in their management of seasonal influenza



# Acknowledgements

- Lisa Galloway, Eddie Wilder
- Jim Harrison
- Greg Wallace
- Julie Morita, Debbye Rosen, Vincent Sacco,  
Lane Wake

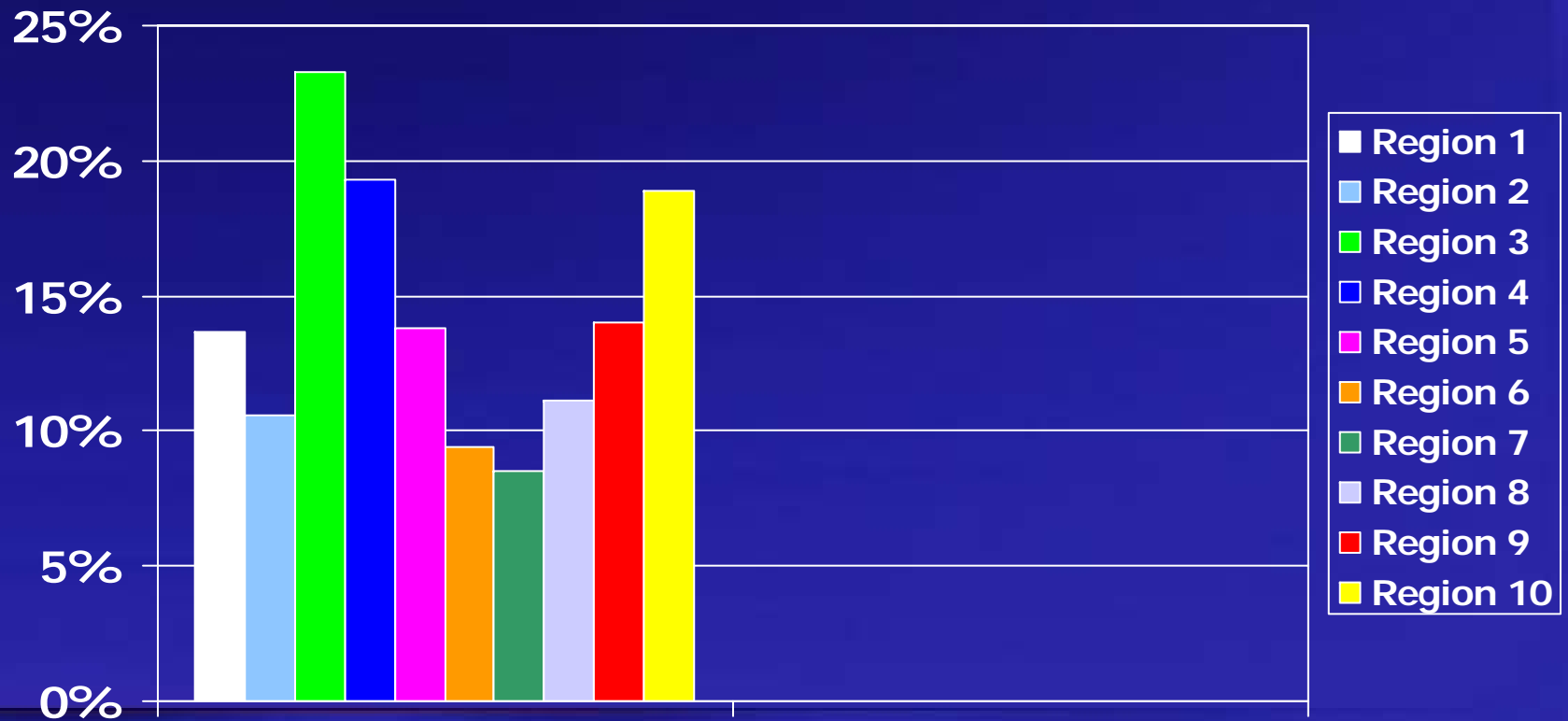


# Extra slides



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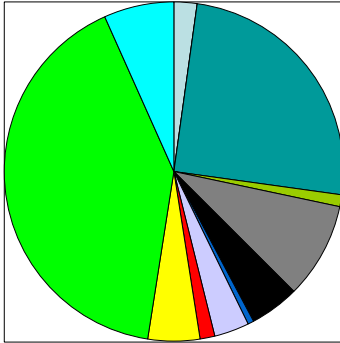
# Percentage of Influenza Vaccine Doses Received by a Distributor by HHS Region



HHS Region

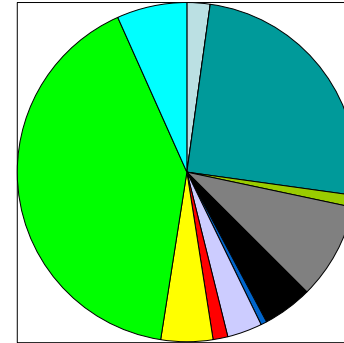


29-Sep-06

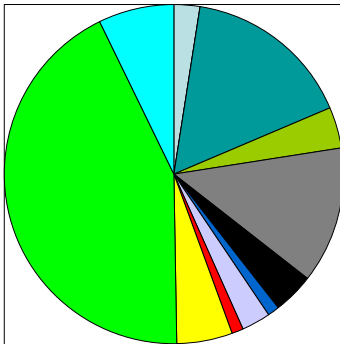


### Influenza Vaccine Distribution Data by Time and Provider Type

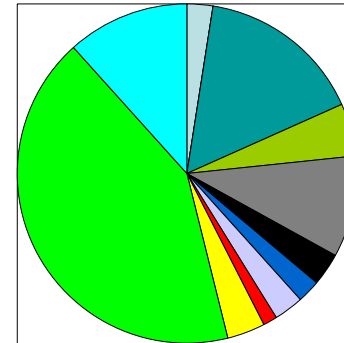
1-Dec-06



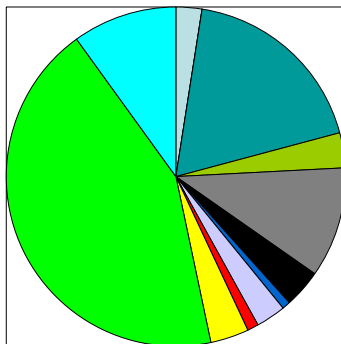
20-Oct-06



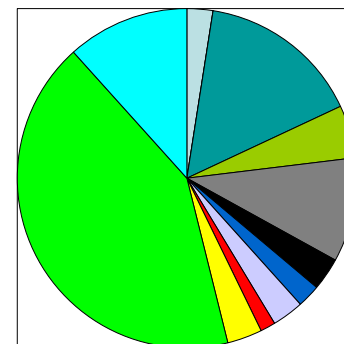
22-Dec-06



10-Nov-06



12-Jan-07



- Corporation/Occ Health
- Corrections
- Distributors
- Federal Govt
- Hospitals/Eds/Dialysis Ctrs
- Long Term Care
- Military
- Other Private
- Other Public
- Pharmacy
- Private Providers/Clinics
- State/Local Health