

# Immunizations for Health Care Workers 2010

Michael Parry

Director of Infectious Diseases & Microbiology

Stamford Hospital

Professor of Clinical Medicine, Columbia University



*Affiliate* Columbia University-College of Physicians & Surgeons  
*Member* NewYork-Presbyterian Healthcare System  
A Planetree Hospital

# CDC Recommended vaccinations for adults 2010

FIGURE 1. Recommended adult immunization schedule, by vaccine and age group — United States, 2010

VACCINE ▼	AGE GROUP ►	19–26 years	27–49 years	50–59 years	60–64 years	≥65 years
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>		Substitute one-time dose of Tdap for Td booster; then boost with Td every 10 years				Td booster every 10 years
Human papillomavirus <sup>2,*</sup>		3 doses (females)				
Varicella <sup>3,*</sup>		2 doses				
Zoster <sup>4</sup>					1 dose	
Measles, mumps, rubella <sup>5,*</sup>		1 or 2 doses		1 dose		
Influenza <sup>6,*</sup>		1 dose annually				
Pneumococcal (polysaccharide) <sup>7,8</sup>		1 or 2 doses				1 dose
Hepatitis A <sup>9,*</sup>		2 doses				
Hepatitis B <sup>10,*</sup>		3 doses				
Meningococcal <sup>11,*</sup>		1 or more doses				

\* Covered by the Vaccine Injury Compensation Program.

For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection)

Recommended if some other risk factor is present (e.g., based on medical, occupational, lifestyle, or other indications)

No recommendation



# CDC Recommended vaccinations for adults with special circumstances

FIGURE 2. Vaccines that might be indicated for adults, based on medical and other indications — United States, 2010

INDICATION ▶	Pregnancy	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) <sup>3-5,12</sup>	HIV infection <sup>3-5,12,13</sup> CD4+ T lymphocyte count		Diabetes, heart disease, chronic lung disease, chronic alcoholism	Asplenia <sup>13</sup> (including elective splenectomy and persistent complement component deficiencies)	Chronic liver disease	Kidney failure, end-stage renal disease, receipt of hemodialysis	Health-care personnel
			<200 cells/ $\mu$ L	$\geq$ 200 cells/ $\mu$ L					
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>	Td	Substitute one-time dose of Tdap for Td booster; then boost with Td every 10 years							
Human papillomavirus <sup>2,*</sup>		3 doses for females through age 26 years							
Varicella <sup>3,*</sup>	Contraindicated	2 doses							
Zoster <sup>4</sup>	Contraindicated	1 dose							
Measles, mumps, rubella <sup>5,*</sup>	Contraindicated	1 or 2 doses							
Influenza <sup>6,*</sup>	1 dose TIV annually								1 dose TIV or LAIV annually
Pneumococcal (polysaccharide) <sup>7,8</sup>		1 or 2 doses							
Hepatitis A <sup>9,*</sup>	2 doses								
Hepatitis B <sup>10,*</sup>			3 doses						
Meningococcal <sup>11,*</sup>	1 or more doses								

\* Covered by the Vaccine Injury Compensation Program.

For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection)

Recommended if some other risk factor is present (e.g., based on medical, occupational, lifestyle, or other indications)

No recommendation



# Health Care Worker Vaccination

- Hepatitis B
- Hepatitis A
- MMR
- Varicella Zoster
- Td-Tdap
- Meningococcal
- Influenza



# Hepatitis B Vaccine

- All HCW in clinical departments
- 3 dose series
- Confirm anti-HBs after vaccination
- Controversial issues
  - Screen prior to (re)vaccination?
  - How to handle non-responders
    - Test for HBsAg
    - Revaccinate with the same vaccine schedule?
    - Revaccinate with dialysis strength vaccine?
    - Revaccinate using intradermal route?
    - Do nothing – remain susceptible?
  - Should refusers have work modification program?



# Hepatitis A

- No formal CDC recommendations for HCW
- 2 dose series
- Potential value for health care institutions
  - Dietary employees
  - Engineering employees
- Consider screening employees with high prevalence backgrounds?



# MMR

- Require proof of immunity if born 1957 or after:
  - Two doses of MMR after 12mo of age
  - Serologic proof of immunity
- Controversial issues
  - Screen those born prior to 1957 and vaccinate
  - 1 dose of rubella / 2 doses of MM (default to MMR)
  - How to handle seronegative employees
    - Measles and rubella
    - Mumps
  - No requirement for re-testing after proof of adequate vaccination



# Varicella

- Require evidence of immunity:
  - Reliable history of varicella or zoster
  - Positive serology
  - Documentation of 2 doses of vaccine
- Controversial issues
  - What to do about seronegative employees?
  - Zostavax administration for employees >60?



# Td / Tdap

- Should all employees be vaccinated with tetanus toxoid as a routine?
- Tdap deployment for HCW
  - Is this an employee health function?
  - All employees?
  - All clinical employees?
  - Selected areas (peds, ED)?



# Meningococcal vaccine

- Meningococcal conjugate vaccine (MCV-4)
- Recommendations for microbiology staff
- Revaccination at 3 year interval
  - Once or every three years?



# Influenza vaccination 2010-2011

## Overview

- ACIP new recommendations were unanimous for 2010-2011
- Expanded to include all adults over 18years
- All individuals over 6 months of age
- Still target traditional high risk groups
- Vaccine for 2010-2011 trivalent (TIV and LAIV)
  - A California/7/2009 (H1N1)
  - A/Perth/16/2009 (H3N2)
  - B/Brisbane/60/2008
- Complex 2 dose decision tree for 6mo to 8yrs
- New high dose influenza vaccine
  - ACIP made no recommendation for use



# Stamford Coalition for Flu Vaccination

- Stamford Health System and the City of Stamford DOH
- The coalition has increased the public's awareness and enhanced vaccine delivery:
  - ✓ Joint advertising
  - ✓ Joint kickoff involving Mayor and Hospital CEO
  - ✓ Joint senior health fair / community projects
  - ✓ Common electronic database
  - ✓ Arrangements made to vaccinate homebound individuals
  - ✓ Identical fee charged by the health department and hospital
    - ✓ Accepted Medicare as full payment; no insurance accepted
  - ✓ Developed several vaccination clinics at the health department and hospital staffed with several volunteers and cross-over staffing.
  - ✓ Used as drill for mass vaccination clinic
  - ✓ Employee campaign is part of the greater community campaign



# Seasonal Flu Shots

## Seasonal Campaign

Beginning on September 22.  
Three locations, one near you.



The City of Stamford's Health & Social Services Department and Stamford Hospital are proud to partner in this year's "Fight the Flu" campaign.

Flu immunization is highly recommended for people 50 years and older; adults and children at high risk due to heart disease, lung disease, disorders of the immune system, and other chronic conditions. It is also important for women who will be pregnant during the flu season, children age 6 months to 18 years, and those in close contact with people at high risk for complications of the flu.

Fee: \$30 (per flu shot)

For more information please call our flu hotline:  
**(203) 276-4948**

*This is not the H1N1 (Swine Flu) campaign.  
Details for H1N1 (Swine Flu) will be posted  
on the hotline when it becomes available.*

### When and where to get your flu shot:

**Tully Health Center**  
32 Strawberry Hill Ct.  
Every Mon, Weds & Fri, 8 am - 2 pm  
Tues & Thurs evenings, 4 pm - 8 pm  
Saturdays from 8 am - 12 pm.

**Stamford Plaza**  
2701 Summer Street  
**Senior Health Fair**  
October 20th - 9 am - 1 pm

**Stamford Government Center Lobby**  
888 Washington Boulevard  
Tues, 10 am - 12 pm  
Thurs, 12 pm - 2 pm  
September 22 - December 15

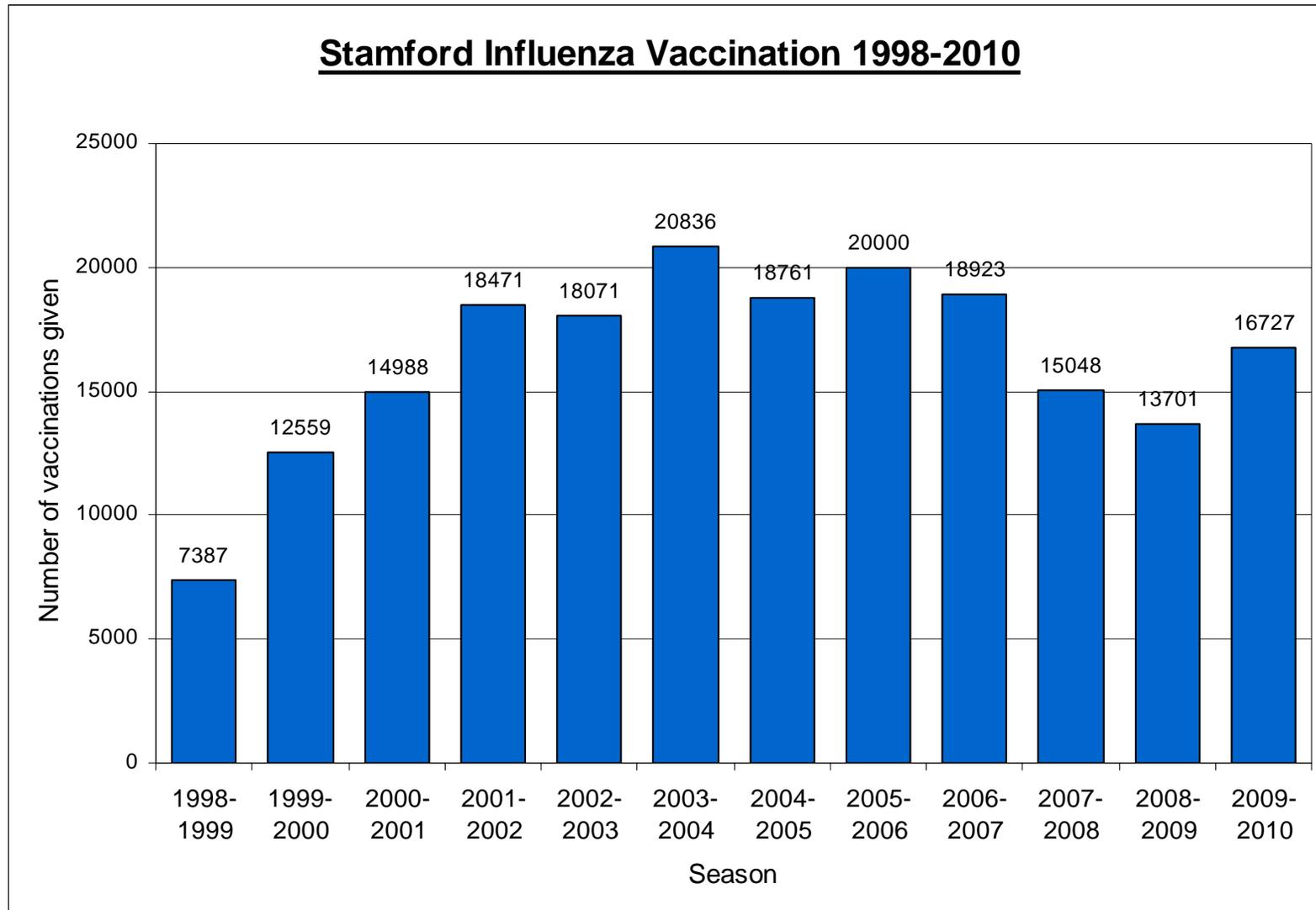
 **STAMFORD HOSPITAL** | Discover More  
The Regional Center for Health  
Affiliate: Columbia University College of Physicians & Surgeons  
Member: New York-Presbyterian Healthcare System  
A Penetec Hospital



[www.stamfordhospital.org](http://www.stamfordhospital.org)



# Total Community Vaccinations Given



# Stamford Hospital

## Employee Influenza Vaccine Program

- One month ramp-up time, coincides with community campaign
  - Flyers, education, promotions, hospital newspaper, etc
- Kickoff day
- CEO leadership
- Free vaccine (TIV and LAIV offered)
- Roving cart (staff by RN float pool)
- Extended to allied services (EMS, MD and offices, volunteers)
- Employee perks
  - Raffle, stickers, candy
- Data feedback (vaccination rates and flu prevalence rates to depts)
- Mandatory program introduced 2006-07 with signed “declination”
- Mandatory program redefined 2008-09; written “refusal” required; (with consequences for performance review and raises)
- “Administrative leave” policy introduced in 2009-10



# Declination (Refusal) Form



## INFLUENZA VACCINATION DECLINATION 2006/2007

I understand that due to my occupation in healthcare, I may be at risk of acquiring influenza. In addition, I may be at risk of spreading influenza to my patients, other healthcare workers, and my family, even if I have no symptoms. This can result in a serious infection, particularly in hospitalized patients and other persons at high risk for influenza complications.

I have received education about influenza and its complications, and the effectiveness of influenza vaccination, including its potential adverse effects. I have also been given the opportunity to be vaccinated with influenza vaccine at no charge to myself. However, I decline influenza vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring influenza, potentially resulting in transmission to my patients.

If in the future I want to be vaccinated with influenza vaccine, I can receive the vaccine at no charge to me as long as it is still available.

The reasons I have for declining vaccination at this time are:

- I already had the flu vaccination this season
- I'm allergic to eggs, egg products, or have had Guillain-Barré syndrome after flu vaccine
- I'm afraid of getting side effects from the vaccine
  - What side effects concern you? \_\_\_\_\_
- I never get the flu, so I don't think I need it
- I don't like vaccinations
- Other \_\_\_\_\_

PRINTED NAME \_\_\_\_\_ DEPARTMENT \_\_\_\_\_

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_

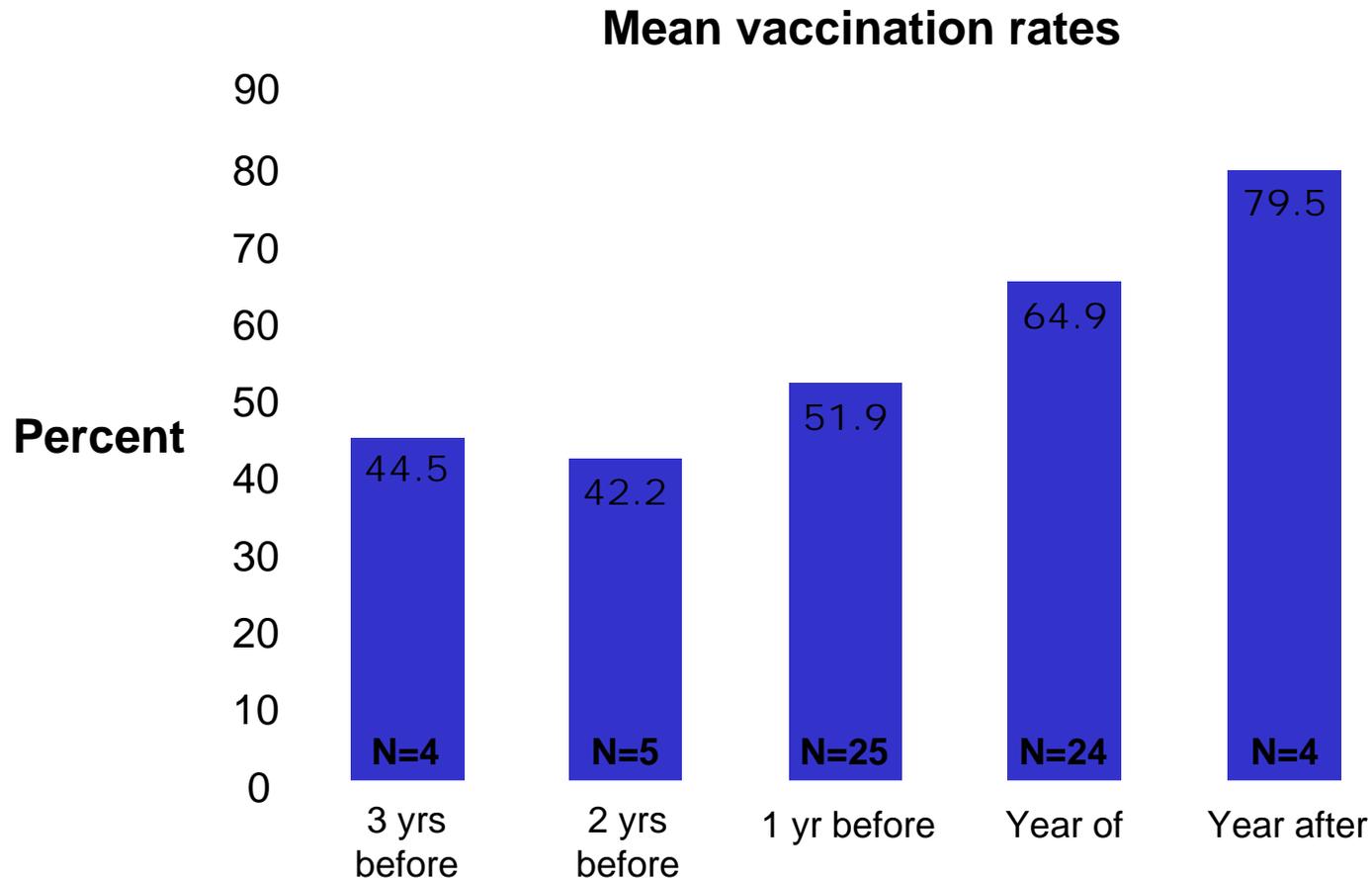
9-22-06 mp:ko'c

**I understand that due to my occupation in healthcare, I may be at risk of acquiring influenza. In addition, I may be at risk of spreading influenza to my patients, other healthcare workers, and my family, even if I have no symptoms. This can result in a serious infection, particularly in hospitalized patients and other persons at high risk for influenza complications. ....**

**I decline influenza vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring influenza, potentially resulting in transmission to my patients.**

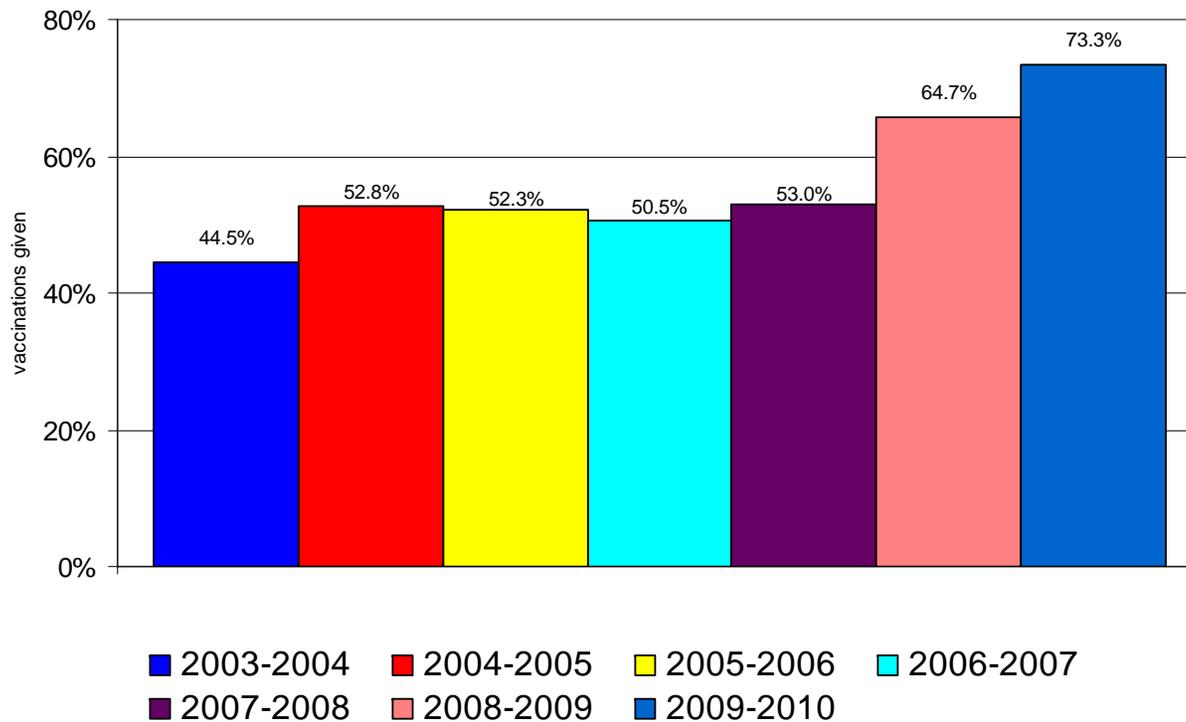


# Effect of implementation of vaccine declination policies in 31 hospitals

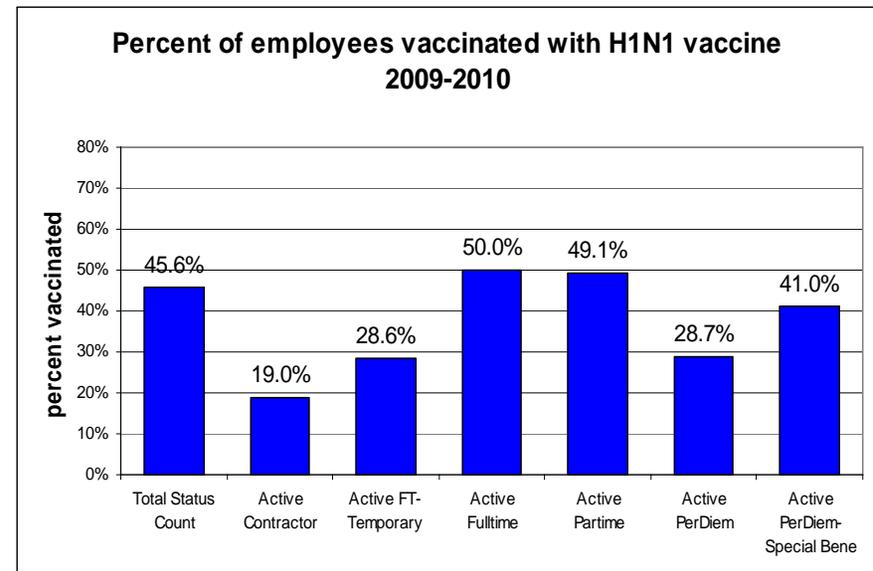
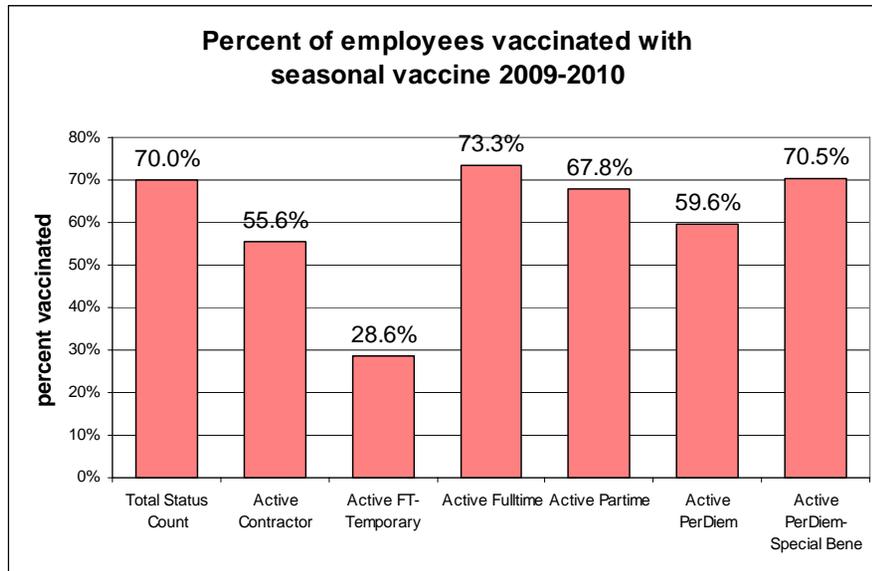


# Annual Stamford Hospital Employee Vaccination Rates

## Stamford Hospital Employee Influenza Vaccination 2003/4 to 2009/10



# Vaccination Rates Stamford Hospital Employees 2009-2010



Thank you!

Questions?

