

# 2009 H1N1 Pandemic Challenges for Loyola University Health System

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## Major Strengths

- An Incident Management Team was implemented
- Ongoing communication was established and maintained
- A Communication Plan was activated
- A Mandatory Seasonal Flu Vaccine program implemented for all employees
- Temporary plan for alternate care sites (trailer) outside ER for patients presenting with flu-like illness



## Areas for Improvement

- Employees unable to wear N-95 respirator need other needs
- Tracking system needed to manage employee exposures
- Review peak patient census to determine what plans need to be implemented



## Timeline

- April 26, 2009- CDC declared a public health emergency
- April 27, 2009- infection control announcement made to all staff regarding our preparedness
- May 5, 2009- An Incident Management Team formed
- "Flu Central Website" created on loyola.wired



## Timeline

- The world sees its first pandemic declaration in over 40 years
- LUHS Senior management Team approves mandatory seasonal flu vaccination September 1<sup>st</sup>
- Flu team implemented and starts planning and deadline is December 1st



## Timeline

- We had a 36 hour emergency exercise and vaccinated over 2,000 vaccines for seasonal flu October 15-16
- We had a consent form and portal based tracking system
- October 22- we receive first 1,000 doses of flu mist, then 10,000 doses end of month
- November- mobile trailer purchased- to improve patient flow in ER- only ones with flu like symptoms
- Wide spread publicity in local media and throughout health system- (Safety Dance Flu Video)



# Safety Dance Lyrics



S-s-s-A-a-a-F-f-f-E-e-e T-t-t-Y-y-y  
Safety, dance!

Ah, we wash our hands cause we have to,  
so we can leave those germ behind.  
'Cause your friends don't wash, or if they won't wash  
Well they're no friends of mine.  
I say, we get the shot cause we have to,  
In places that.. aren't hard to find.  
And we can act like we come from out of this world  
Leave the H1 far behind  
And we can dance



We vaccinate cause we have to,  
It's for safety, yours and mine.  
And we can dress real neat from our hands to our feet  
And with your help, the flu will die.  
I say, wear the mask when you "achoo"  
If you don't, you will get ill.  
Don't act real rude, and sneeze on me dude  
You know, that's not right to do.



I say, we can dance, we can dance  
Influenza's out of control  
Wear your mask, wear your mask  
The signs are on the walls  
Wash your hands, wash your hands  
Everybody wash your hands  
We can dance, we can dance  
Nobody should take the cha-a-a-ance

Safety dance  
Patient safety dance  
Employee safety dance



## Timeline

- Peak flu in our area in November and by December trending down
- Mandatory seasonal flu vaccines done- 99.3%!
- Incident Commander terminates incident for our health system January 12, 2010
- We lift visitor restrictions for children in February


## Analysis of Capabilities

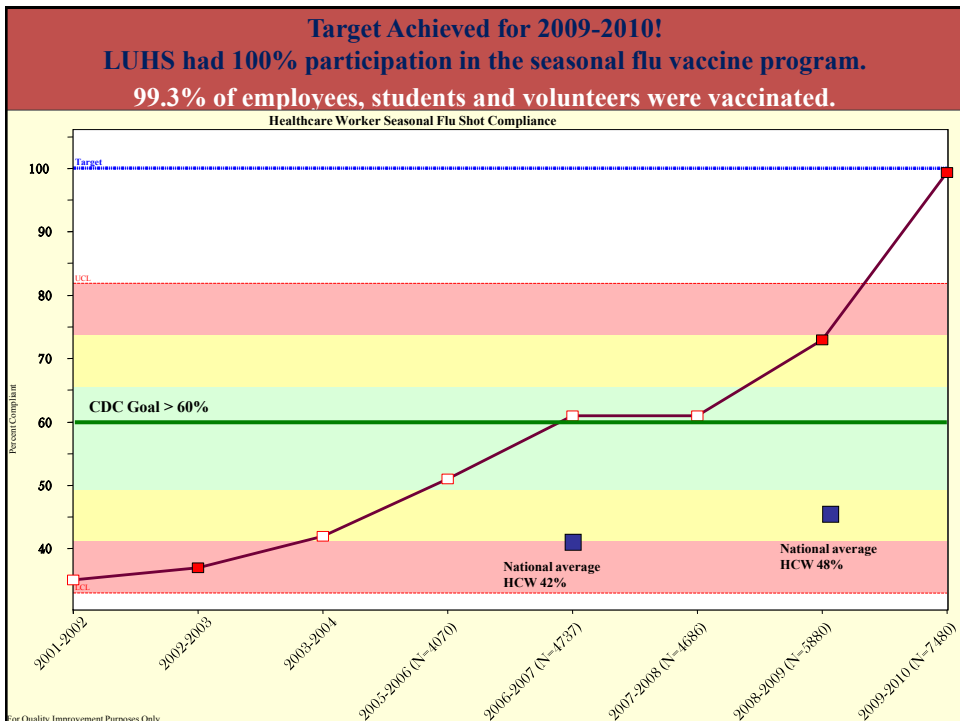
- Flu central posted on Loyola home intranet page
- Weekly emails from our CEO- posters in all entrances with up to date info and flat screens throughout
- All staff had to participate in module on N-95 mask
- Children and infants restrictions
- Stay at home for all sick employees
- Nurses did superb job in triage in our clinics



## *Swine flu paranoia!*



		Dr. Name _____ NPI# _____ Date of Birth _____	
<b>Emergency Standing Order</b> <b>Adult H1N1 Live Attenuated and Inactivated Influenza Vaccination</b> Complete for individuals meeting criteria during an appropriate visit <b>LUHS employees, please return this form to Occupational Health</b>			
<b>H1N1 Live Attenuated Trivalent Vaccine (LAIV) (Nasal Spray)</b> Vaccine IS INDICATED if any of the following are met: ☐ Are from 2 through 24 years of age ☐ Are from 25 through 49 years of age and - live with or care for infants younger than 6 months of age - are health-care or emergency medical personnel ☐ Patient does not meet criteria stop assessment Vaccine IS NOT indicated if any of the following are met: ☐ Allergy to eggs, gelatin, gentamicin, neomycin, or gelatin ☐ Pregnant women ☐ Children younger than 2 and adults 50 years or older ☐ Anyone with a severe immune compromise ☐ Anyone with a long-term health problem such as: - heart disease - lung disease - diabetes - cancer and other blood disorders ☐ Children younger than 5 years with asthma or 21 episodes of wheezing in the last year ☐ Anyone with asthma or severe asthma (with an asthma plan) that can lead to hospital or emergency department ☐ Anyone in close contact with a person with severely weakened immune system (requiring care in a protected environment, such as a bone marrow transplant unit) ☐ Children or adolescents on long-term aspirin treatment ☐ Guillain-Barre syndrome (a severe paralytic illness also known as GBS) ☐ Infused per patient If any of the above items are checked, give the assessment and allow give the vaccination <b>Patient Information</b> ☐ H1N1 Live Attenuated vaccine information statement given (CDC, 8/2/09 edition) <b>Standing Order</b> ☐ Administer H1N1 live attenuated vaccine (LAIV) to each nasal 0.2		<b>H1N1 Inactivated Vaccine (IIV)</b> Vaccine IS INDICATED if any of the following are met: ☐ Frequent contact ☐ Anyone from 6 months through 24 years of age ☐ Health-care and emergency medical personnel ☐ Anyone from 25 through 49 years of age with certain chronic medical conditions or a weakened immune system ☐ Anyone whose age 50 years or older ☐ Patient does not meet criteria stop assessment Vaccine IS NOT indicated if any of the following are met: ☐ Allergy to eggs or formaldehyde ☐ Guillain-Barre syndrome (a severe paralytic illness also known as GBS) ☐ Allergy to polymer latex or neomycin ☐ Allergy to thimerosal If any of the above items are checked, give the assessment and allow give the vaccination <b>Patient Information</b> ☐ Patient informed that this vaccine contains thimerosal ☐ H1N1 Inactivated Vaccine information statement given (CDC, 8/2/09 edition) <b>Standing Order</b> ☐ Administer H1N1 inactivated vaccine (IIV) 0.5 mL	
Nurse/Signature: _____ Date: _____ Manufacturer: _____ Lot#: _____ ☐ Other: _____ (Expiration: _____)		Nurse/Signature: _____ Date: _____ Manufacturer: _____ Lot#: _____ ☐ Other: _____ (Expiration: _____)	



## Survey

- **Flu Survey Result Totals**
- I received the H1N1 vaccination at Loyola as intranasal mist 181
- I received the H1N1 vaccination at Loyola as a shot 508
- I received the H1N1 vaccination at Hines as a shot 32
- I received the H1N1 vaccination outside of Loyola and Hines as a intranasal mist 6
- I received the H1N1 vaccination outside of Loyola and Hines as a shot 62
- I plan on getting the H1N1 flu vaccine but I have not been able to get it yet. 135
- I declined to get the H1N1 vaccination 513
- **Total Number Of Surveys 1437**



## Survey

- The email was sent to all 1-29-10 and you can see that from the 4 time frames below, most responded by 2-5-10
- According to today's results - 55% got vaccinated, 36% declined, and 9.4% said they planned on getting it.
- $RR = 1437 / \sim 7800 = 18\%$
- MMWR April 2, 2010 published vaccination rate for HCW Aug 09 to mid January 2010 and HCW rate for H1N1 was 37.1% ( and 61.9% for seasonal flu for HCW)
- We beat them!



## Challenges

1. Vaccine arrived mid October
  - A. 6 different flu vaccines
    - Never knew which company's vaccine we're getting
    - Varying allergies, age restrictions for each vaccine
    - Questionnaire developed including all variables
2. Peak flu activity: end of Oct/early November




## Challenges

- Outside of the institution was not guided by CDC- schools, etc.
- Hard to give the info to the parents
- Supply of vaccine
- Which version of vaccine- multiple ones
- Allergies
- Patients had to be asked or fill out questionnaire





 **LOYOLA MEDICINE**  
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**LOYOLA UNIVERSITY HEALTH SYSTEM**  
**2009-2010 H1N1 INACTIVATED INFLUENZA VACCINE (SHOT) CONSENT FORM**

Name (Print): \_\_\_\_\_ DOB: \_\_\_\_\_ MR #: \_\_\_\_\_

I have read the 2009-2010 H1N1 INACTIVATED INFLUENZA vaccine (shot) information provided to me. I have been given the opportunity to ask questions that were answered to my satisfaction. I understand the risks and benefits of the vaccination. I understand that I should not receive this vaccine at this time if I answer yes to any of the following questions:

YES NO

1. Do you have an allergy to eggs?

2. Are you ill today?

3. Have you ever had a severe reaction to flu vaccine shot?

4. Have you had Guillain-Barre Syndrome?

5. Do you have an allergy to Neomycin?

6. Do you have an allergy to latex?

7. Do you have an allergy to gelatin?

8. Do you have an allergy to Benzocaine?

9. Do you have an allergy to Polymyxin?

10. Do you have an allergy to Faramide/lysine?

11. Do you have an allergy to Gelatin?

12. Do you have an allergy to Arginine?

\_\_\_\_\_

I hereby REQUEST the H1N1 INACTIVATED INFLUENZA vaccine for the 2009-2010 flu season.

I hereby DECLINE the H1N1 INACTIVATED INFLUENZA vaccine for the 2009-2010 flu season.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Vaccine	Lot#	Exp.	Cost	Class	Route / DTY	Signature
Influenza					IM / Deform - QR - D L	Date

**LOYOLA MEDICINE**  
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## Challenges

- Surgical mask- not enough N-95 to go around
- High risk groups- ER, etc. used them otherwise regular masks
- Our nurses triaged patient over the phone
- We tried to keep the “healthy” patients at home
- Only if needed were they seen in clinic or ER or if could not get good history

Loyola University Health Systems Statement  
2009 H1N1 (Svine Flu) at Loyola  
March 5, 2010

Loyola University Health System has been on alert for suspected of 2009 H1N1 (Svine Flu) and distributed guidelines to all Loyola physicians.

Date	# of Respiratory PCR Tests Performed	# (%) of Tests Positive for Influenza A	# (%) of Tests Confirmed as H1N1 (of all specimens positive for Influenza A)	# (%) Failed to Type (of all specimens positive for Influenza A)	# (%) RSV	# (%) Positive for Influenza B
April 2009	147	9 (6%)	4 (44%)	0	8 (5.5%)	12 (8%)
May 2009	182	29 (16%)	29 (100%)	2	2 (1.1%)	0
June 2009	154	38 (24.5%)	37 (97%)	1	1 (0.6%)	0
July 2009	81	7 (9%)	7 (100%)	0	0	0
August 2009	83	1 (1.2%)	1 (100%)	0	0	0
September 2009	131	7 (5.3%)	7 (100%)	0	1 (0.8%)	0
October 2009	278	78 (28%)	78 (100%)	3	6 (2%)	0
November 2009	210	68 (32%)	68 (100%)	0	7 (3%)	1
December 2009	220	9 (4%)	9 (100%)	0	88 (39%)	0
January 2010	191	2 (1%)	2 (100%)	1	79 (41%)	0
February 2010	117	0	0	0	34 (29%)	0

Please remember to follow the CDC guidelines on what type of patients should be tested.

The CDC guidelines for testing are:

Acute febrile respiratory illness or sepsis-like syndrome (does not include testing of mild-to-moderately ill patients). Certain groups may have atypical presentations including infants, elderly and persons with compromised immune systems. Priority for testing includes persons who a) require hospitalization or b) are at high-risk for severe disease. Groups at highest risk for seasonal influenza complications include:

- Children less than 5 years old;
- Persons aged 65 years or older;
- Children and adolescents (less than 18 years) who are receiving long-term aspirin therapy and who might be at risk for experiencing Reye's syndrome after influenza virus infection;
- Pregnant women;
- Adults and children who have chronic pulmonary, cardiovascular, hepatic, hematological, neurologic, neuromuscular, or metabolic disorders;
- Adults and children who have immunosuppression (including immunosuppression caused by medications or by HIV);

## Thanks

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