



# Prevention and Management of Influenza

NYC Department of Health and Mental Hygiene

# Learning Objectives

## Identification of:

- prevention strategies, to keep residents healthy;
- strategies to best manage and contain an outbreak;
- steps facilities must take to report an outbreak; and,
- protocols you should put in place for staff and visitors during flu season, to help keep your residents safe and healthy.

# Epidemiology

- **Incubation period:**  
1-5 days
- **Viral shedding**  
(adults vs children)
- **Transmission**
  - Mainly large droplets that can land on person's face-eyes, nose, mouth
  - Less commonly by contaminated objects or direct touching
  - Contagious prior to onset of symptoms



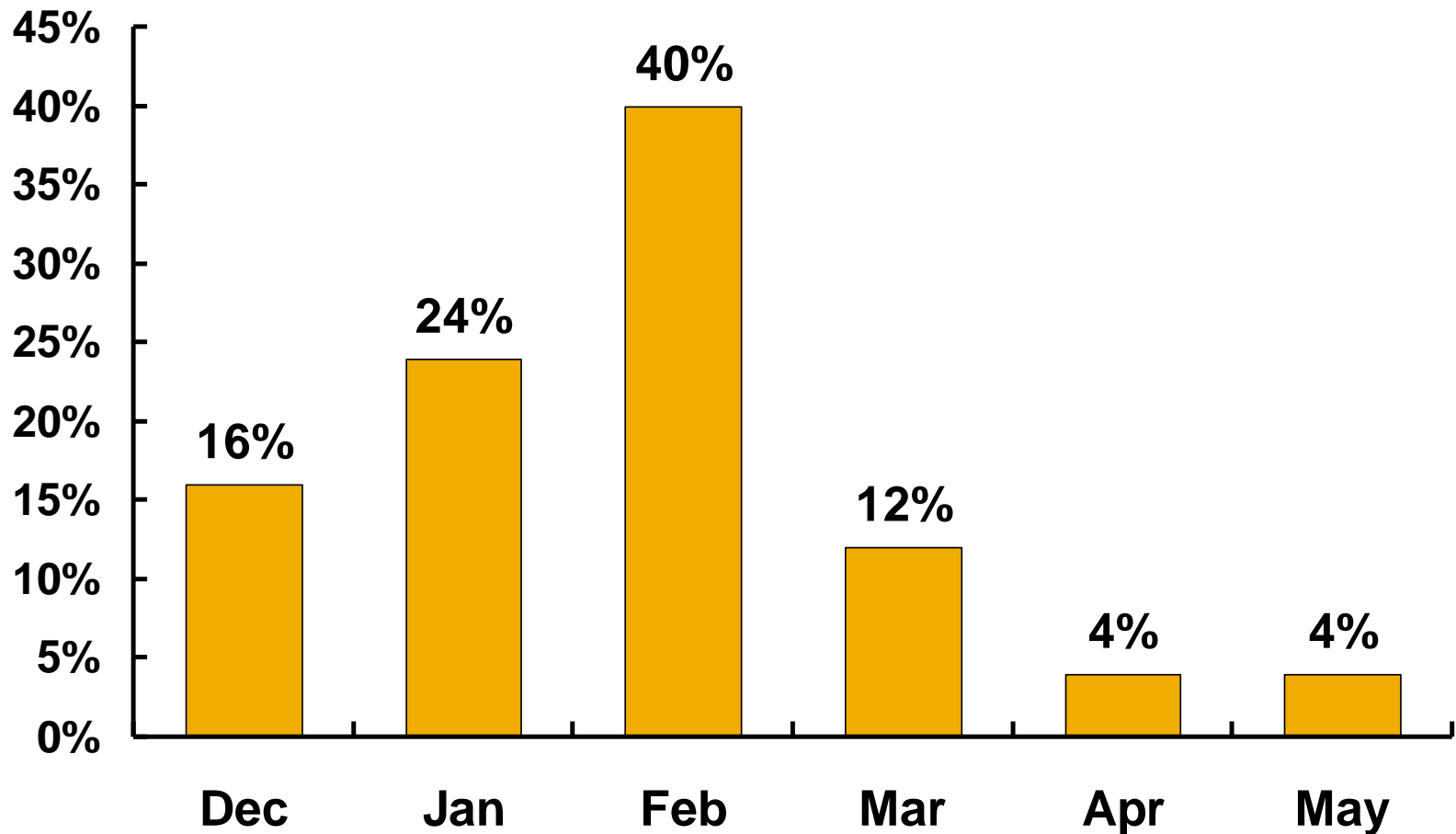
# Public Health Implications

- Annual epidemics and potential for pandemics
- Significant morbidity- from 20,000 to >200,000 flu-associated hospitalizations yearly, per epidemic, many due to post-infection bacterial pneumonia nationwide.
- Attack rates of 5-20% in general population.
- Nursing home attack rates of 25-60%, case fatality rates 10-20%..

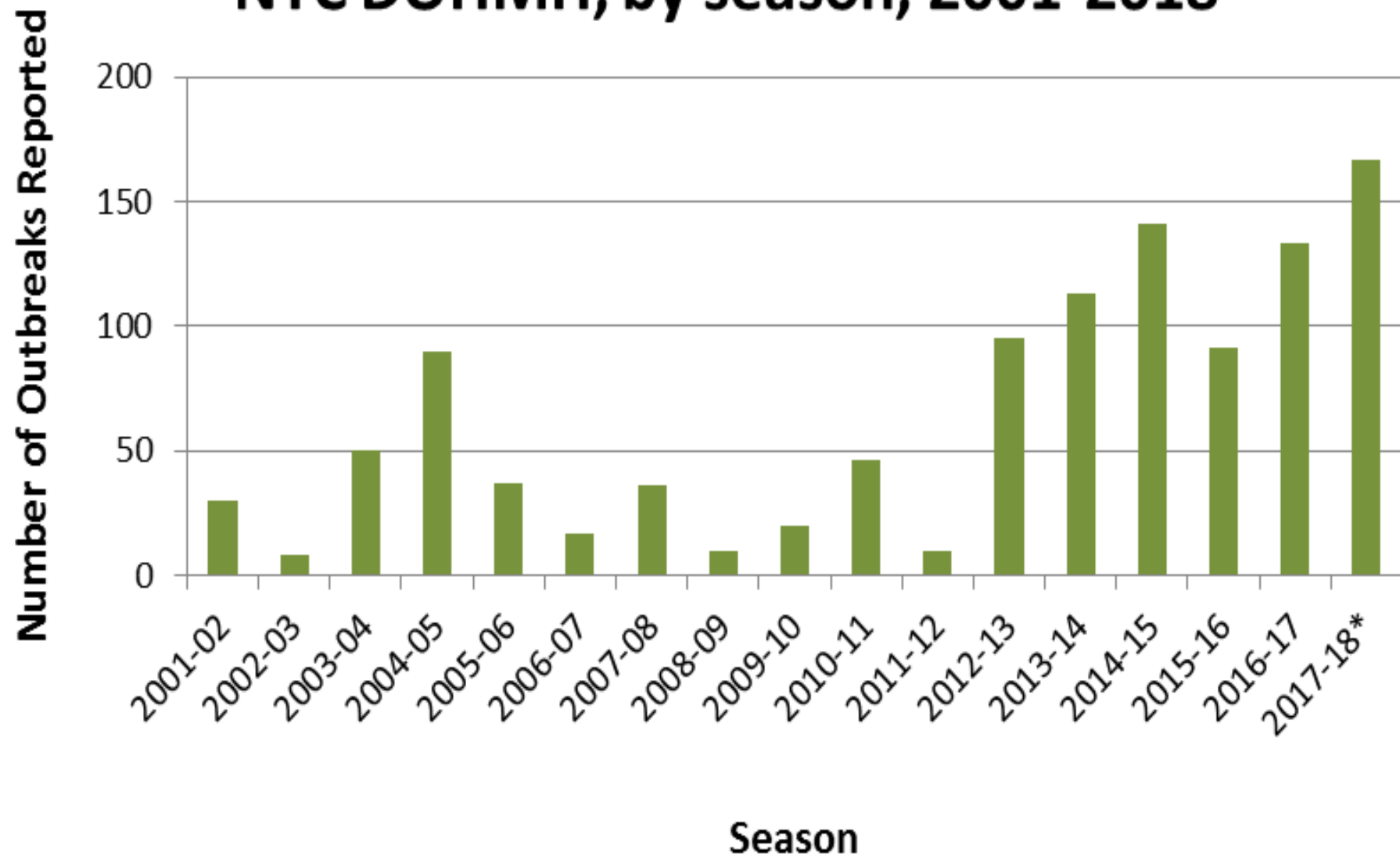
# More Public Health Implications

- Tens of thousand of deaths yearly in US.  
(motor vehicle accident - 40,000 deaths yearly).
- Highest rates of hospitalization among young children and persons > 65 years old.
- Over 90% of mortality in persons aged 65 and older during influenza season.
- Costs in excess of \$12,000,000,000 for a severe epidemic.

# Month of Peak Influenza Activity United States, 1976-2001



# LTCF Influenza Outbreaks reported to NYC DOHMH, by season, 2001-2018



# How Are Outbreaks Identified?

- Phone calls/reports from LTCF/ACF staff
- Hospital ICN informs us (DOHMH then informs LTCF/ACF)
- Active lab surveillance: calls made to labs that service LTCFs primarily
- Building Identification Number: match between LTCF/ACF addresses and electronic laboratory reporting (ECLRS) of positive influenza results.



# How does BIN Match work?

- Daily e-mail with matches of positive flu results and LTCF/ACFs addresses.
- Many of the matches are of LTCF/ACF residents that were diagnosed after hospital transfer.
- In many cases, the hospital does not inform the facility of resident's flu diagnosis so we may be the first to call the LTCF/ACF with that information.
- We call LTCFs as soon as we get one match; ACFS are two matches or as time allows.

# There are many ways to minimize influenza disease and transmission

- Influenza prevention and control plan may include:
  - Vaccination- residents and staff
  - Infection Control Measures
  - Respiratory Etiquette
  - Hand Hygiene

# Why Vaccinate

- Influenza vaccination is best way to prevent influenza infection
- Much of influenza illness (morbidity) and deaths (mortality) can be prevented by annual vaccination

# Flu is an Issue for Employees

- Exposed to flu at work
- Can bring flu home to their families, many of whom may also be at high risk.
- Can be protected by vaccination
- Many are in priority groups for vaccination
  - Age  $\geq 50$
  - Medical condition (e.g., asthma, diabetes, sickle cell, kidney disease, pregnancy, etc.)
  - Live with persons at high risk

# Flu as an Issue for Employees

- Unvaccinated workers can transmit influenza to clients/residents
  - before they even know they are infectious
  - before they show symptoms
  - even without showing symptoms at all.

# Three Most Common Myths About Flu Vaccine

- Flu is no big deal
  - Flu can be very tragic-think 1918 pandemic, and tens of thousands of deaths yearly in US.
- Vaccine can make you sick
  - Virus in the vaccine is “killed” and cannot cause infection
- I don't need it- I never get the flu
  - 25-50% of people infected with influenza may not show symptoms, but they can infect others.

# Infection and Exposure Control Strategies

# Surveillance for Influenza-Like Illness

- Need rapid case identification for prompt initiation of control measures
  - Defined as fever over 100F with cough and/or sore throat-sudden onset.
  - **Deviation from baseline- your resident is different than usual self**
  - General weakness
  - Joint and muscle pain
  - Don't rely just on fever- people over 65 may have atypical presentation
- **Who do residents tell if they feel ill?**



# Source Control

- Goal is to limit contact between ill person (Residents, Staff and Visitors) and other residents and staff.
  - Restricting visitors
  - Excluding ill staff
- Vaccination is key to source control.

# Control Measures-Residents

- Restrict resident movements- if must be out of room consider surgical mask for either resident and transporter.
- Stay in room 24 hours after symptom resolution.
- In room meals- consider disposables.
- No out of room social activities.
- Frequent hand washing, tissues, hand sanitizer, waste basket close to bed.
- Surface cleaning high touch areas.

# Vaccine Effectiveness

- CDC estimates vaccines 36% effective overall against all influenza A and B viruses.
- Vaccine reduced a vaccinated person's risk of getting sick and having to go to the doctor for flu by about one-third.
- Effectiveness varied by virus type, subtype and even by the age of the people being vaccinated in some cases.
- People over 65 not so well protected.

# Control Measures-Staff

- If staff develop symptoms of influenza-like illness while on duty- they should report to a supervisor so that they can go home.
- Ill staff should stay home until they feel better and 24 hours with no fever and no antipyretics (e.g. Tylenol).
- What are your sick leave policies like?

# Control Measures- Visitors

- Large signs at all entrances asking visitors NOT to visit if they have any symptoms of influenza-like illness.
- Observe visitors while they are in facility to see if they are ill.
- If visitor must visit- offer them a mask
- Encourage frequent hand-washing

**VISITORS are welcome...  
but GERMS are NOT!**

**STOP**



**To protect our patients/residents,  
PLEASE DO NOT VISIT if you have:**

**Fever, Cough,  
Sore Throat, Runny Nose, Rash,  
Nausea, Diarrhea, or Vomiting**

**Stop the spread of germs that make you and others sick!**

# Cover your Cough



Cover your mouth  
and nose with a  
tissue when you  
cough or sneeze

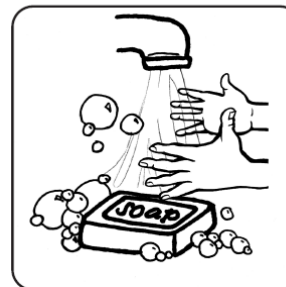
or  
cough or sneeze into  
your upper sleeve,  
not your hands.

Put your used tissue in  
a waste basket.



# Wash your Hands

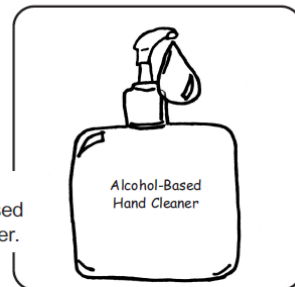
after coughing or sneezing.



Wash hands  
with soap and  
warm water

or

clean with  
alcohol-based  
hand cleaner.



# Control Measures- Visitors

- Designate someone in charge who can politely tell ill visitors to leave the facility
- If flu is in the community- send letters to families reminding them not to visit while ill.
- Restrict children? Under certain age?

# Managing Residents Ill With Flu

- If symptoms are mild, generally no need to send to ER, but should check with patient's medical provider.
- Contact resident's medical provider for recommendation regarding antiviral treatment.
- Residents with severe symptoms, such as difficulty breathing, should go to ER. If possible, offer mask to resident if tolerated.
- Ambulette personnel, transporters should be notified of possible contagious illness.



# Administrative Controls

- Signage- for visitors, residents and staff
- Communication- who do residents tell if they are ill.
- Who is responsible for carrying out elements of influenza control plan?
- Staff education?
- Vaccination for staff?- Offering? Monitoring?
- What is your visitor policy?
- Sick leave policy? Punitive?
- Maintenance schedule- surface disinfection during flu season? During an outbreak?

# Educating Staff

- Vaccination
- Respiratory etiquette-cover coughs and sneezes with tissue or sleeve.
- Wash hands with soap and water before and after each resident encounter, contact with articles used in resident care, touching soiled articles.
- If no sink available, use alcohol based sanitizer.
- Keep ALL hand washing facilities well stocked with soap and paper towels.
- Staff should be routinely trained in safe use of cleaning and disinfectant products.
- Staying home when ill

# Maintenance

- Ensure surgical masks, tissues and alcohol based sanitizers are readily available for staff to use.
- Waste baskets should be available, visible and emptied regularly.
- Clean and disinfect high-touch surfaces- door knobs, elevator control panels, phone receivers, TV remotes.

# Common Areas

- Provide adequate ventilation.
- Stagger meal times if not possible to offer in-room meals.
- Increase frequency of surface disinfection.
- Ensure ample supply of wastebaskets, hand hygiene supplies, tissues.

# Major Themes

- Source control- separate the ill from the not exposed/not yet ill.
- Surface disinfection
- Dedicated equipment as much as possible
- On-going training of staff about infection control measures, esp handwashing
- Educate residents as to why you are doing what you are doing.

# What's In it for you

- A healthier environment for residents/staff.
- Cost containment- the sooner you implement effective control measures, the more limited disease spread, less disruption in running of the facility.
- Legal aspects of outbreaks
- Public relations- you show that you are proactive and your residents and their families benefit.

# How Can NYCDOHMH and NYSDOH Can Help

- If you think you have an outbreak- an increase in ill residents
  - In NYC- call 347-396-2600
  - In NYS-call 518-473-4439 or 518 408- 1133
  - No specific reporting requirements
  - Call the office of Adult Care Program 212-417-4440 to let them know that you have contacted DOH