

# Practical Aspects of Antiviral Prophylaxis in Hospitals during the Next Pandemic

*Allison McGeer, MSc, MD, FRCPC*

*Director, Infection Control, Mount Sinai Hospital*

*Professor, Laboratory Medicine/Public Health Sciences*

*University of Toronto, Toronto, Canada*

# Background

- Toronto hospital care
  - Single provincial payer, individual hospital budgets
  - 17 acute care hospital corporations
    - 5 are part of TAHSN (U Toronto network)
- SARS transmission at 3/4 acute and 1/2 chronic care adult TAHSN hospitals

# Pandemic Planning re Antivirals

- TAHSN committee formed in 2004
  - hospitals, local public health, province
- Unifying initial planning target was purchase of antiviral stockpile

# Principles

- During the peak weeks of the pandemic, hospitals will be expected to provide care for 25% more patients with 25% fewer staff
- Antivirals less expensive than PPE, effective not just at work

# Stockpiles

- Oseltamivir
  - Prophylaxis only (F/P to cover treatment)
  - 7 weeks
  - 50-120% hospital staff
  - 2 hospitals with patient prophylaxis stockpiles
- Zanamivir – 15% of oseltamivir

# Delivery

- Stockpile controlled by pharmacy
  - Drug managed as per controlled drugs
- Single database of all staff (persons required to be in the hospital)
- Medical directive for orders

# Staff education

- On-line modules?
- Q&A/information forms?
- ? Attempt to refer staff with precautions or needing dosage reductions to family MD or occupational health
- ?Encourage staff to get information/ask questions before dispensing

# Distribution - I

- Staggered over 3-4 days
  - By priority department/area; alphabetically
- In 5-10 day increments
  - Refills ad-lib (up to 3-5 days prior)
  - Refills on defined days (set or booked)

# Distribution - I

Station	Function	Personnel
1	Check name on master list (re-direct if needed)	Admin/ Security
2	Provide checklist/Review checklist questions (if all answers no, go to #4)	Admin
3	Secondary review for “yes” answers; book MD as needed	Nursing Pharmacy
4	Confirm consent, dispense & sign for medication	Nursing

# Checklist for Staff Chemoprophylaxis

- Do you have an allergy to oseltamivir (Tamiflu®) or zanamivir (Relenza®)?
- Have you ever had an adverse reaction to oseltamivir (Tamiflu®) or zanamivir (Relenza®)?
- Are you or might you be pregnant?
- Are you planning on becoming pregnant in the next three months?
- Are you breastfeeding a child under the age of one year?
- Do you have kidney disease?
- Do you have liver disease?

# Issues - I

- Lost/missing doses
  - ?replace x1
  - Replace, but limit to 7 weeks per person
- Refills for zanamivir
- Pregnant/breastfeeding staff
  - ?move to low risk areas
  - Recommend zanamivir; offer choice
  - ?no prophylaxis if stay home

# Issues - II

- Triggers to start
- Security of antiviral supply
- Large numbers/long duration scripts
- Ethics of HCW vs others
- Staff who work at multiple sites
- Have and have-not hospitals
- Options if stockpile insufficient