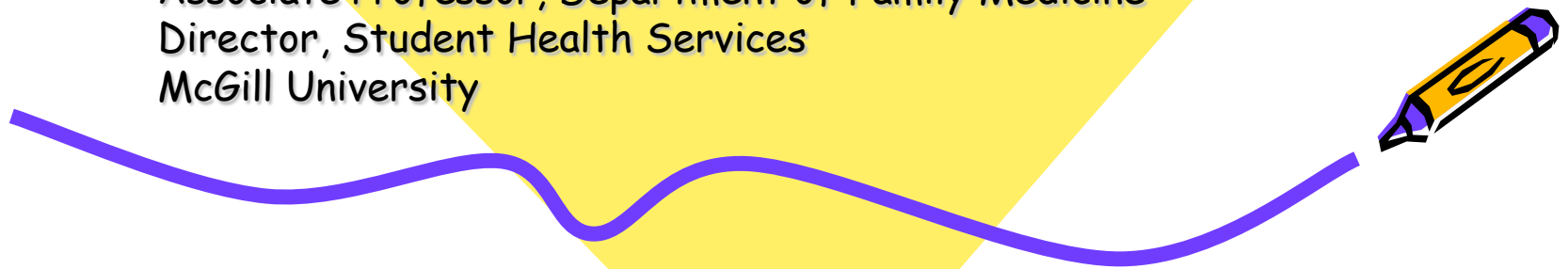
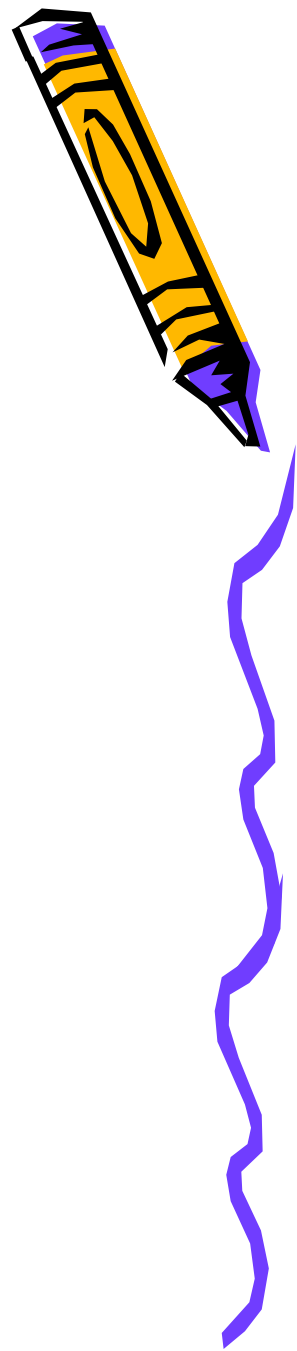


The flu what is it?

Pierre-Paul Tellier MD, CCFP
Associate Professor, Department of Family Medicine
Director, Student Health Services
McGill University



Seasonal Influenza vs Influenza Pandemic

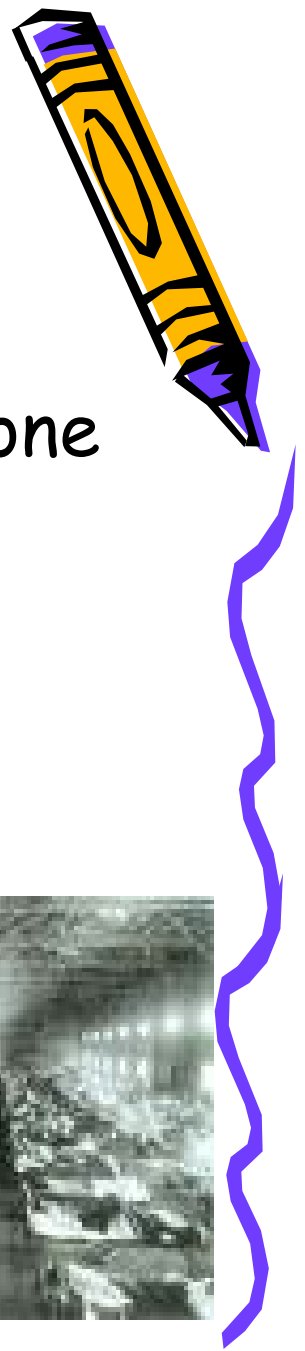


- Seasonal influenza
 - Peaks usually December through March in North America
 - Frail, elderly and very young - U shaped distribution
 - ~ 8,000 deaths in Canada/year
 - Usually vaccine available
 - Medication effective in preventing or decreasing impact
- Pandemic influenza
 - Rapid, global spread among humans
 - No seasonal preference
 - 78 deaths in Canada as of October 1
 - Comes in waves
 - Currently no vaccine available, in preparation
 - Tamiflu or oseltamivir effective (few cases resistance reported)



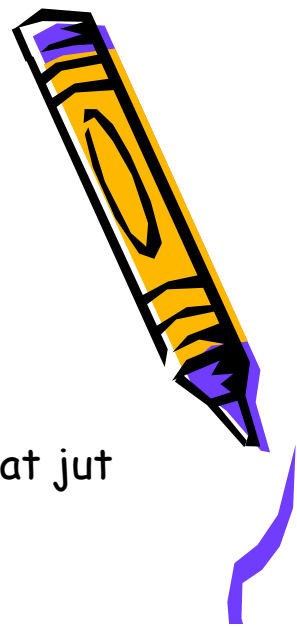
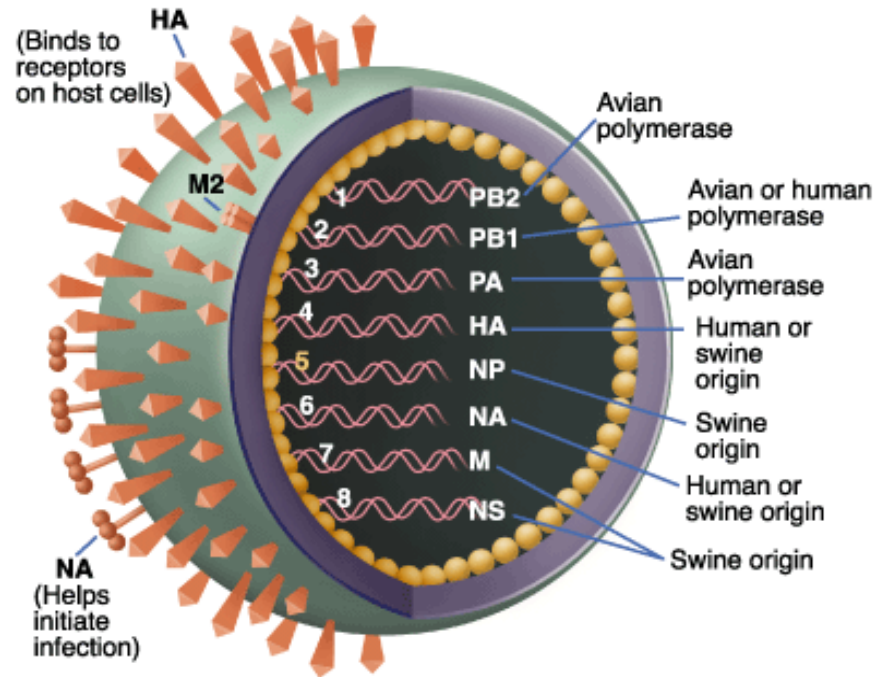
History

- Usually three to four pandemics every one hundred years
- Unfortunately not every 33 1/3 to 25 years
- Last century
 - 1967-68 - Asian Flu
 - 1957-58 - Hong Kong Flu
 - 1918-20 - Spanish Flu



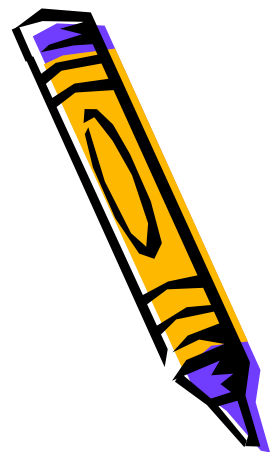
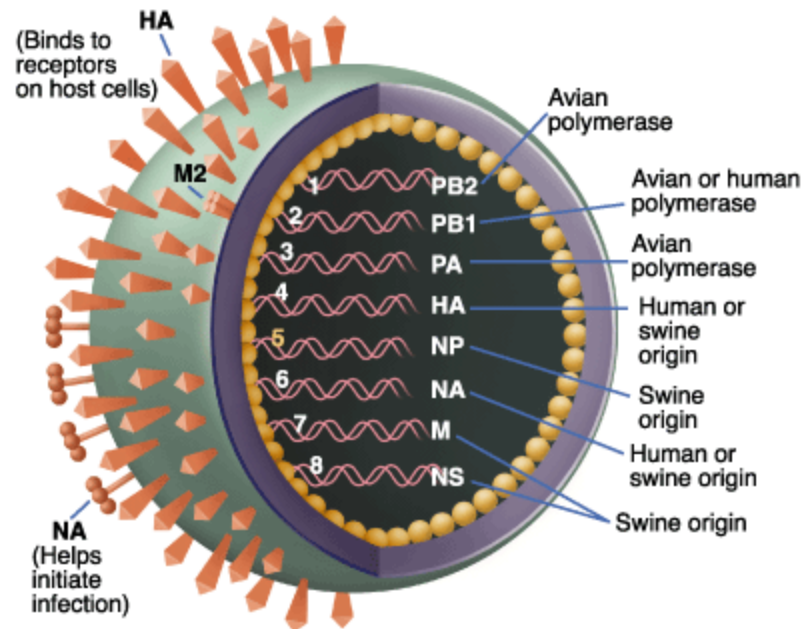
What does H1N1 mean and what is concerning about it?

- Influenza viruses get their name from two types on protein spikes that jut from the outer surface
- Hemagglutinin or HA (binding and entry)
 - 15 HA types H1 to H15
- Neuramidase or NA (release of new virus from cell)
 - 9 NA types N1 to N9
- All detected in birds
- Can be transmitted to humans, swine
- In humans only H1, H2, H3 have circulated freely

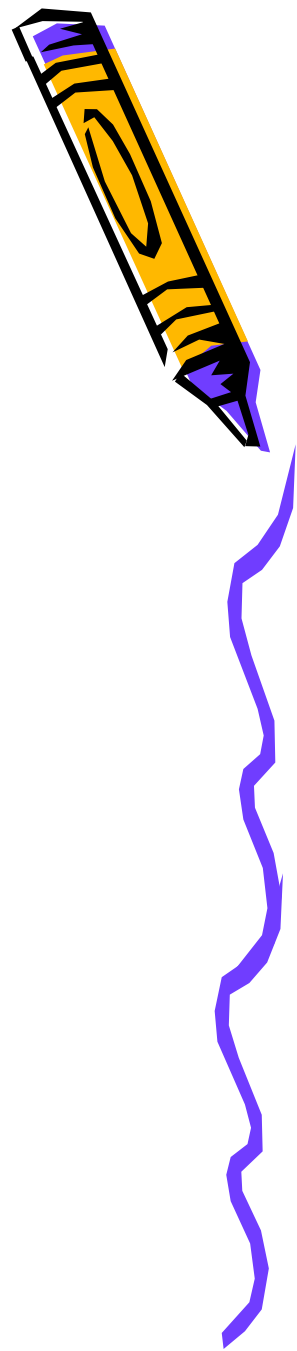


H1N1 Influenza Today

- RNA
- Quadruple reassortment
 - One human
 - One Avian
 - Two swine
- Not genetic mutation



H1N1 in Canada

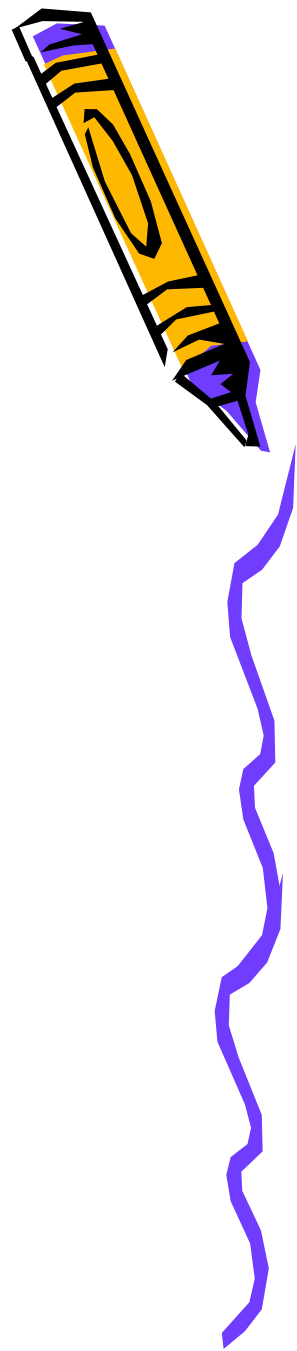


- Canada July 15, 2009 (latest report)
 - **10156** cases
 - Median age of cases
 - All cases 18 years of age
 - Hospitalized 23 years of age
 - ICU 40 years of age
 - Deaths 51 years of age
 - Percentage of cases with chronic medical problems (not including pregnancies)
 - All cases 35.4%
 - Hospitalized cases 54.3%
 - ICU 65.6%
 - Deaths 81.3%



H1N1 Canada

- Percentage of cases of pregnant women among all women 15 to 44
 - Hospitalized 27.7%
 - ICU 19.2%
 - Deaths 28.6%



H1N1 in Humans



- Symptoms
 - Fever $> 38\text{ }^{\circ}\text{C}$
 - Respiratory symptoms 77% of people
 - Productive cough
 - Chest Pain
 - Shortness of breath
 - Sore throat
 - Runny nose
 - Conjunctivitis
 - Gastrointestinal symptoms 30%
 - Nausea, vomiting, diarrhea
 - General symptoms 32%
 - Headaches, malaise, aches and pains, chills



H1N1 in Humans

- Those at greatest risk
 - people age 65 years or older
 - children younger than 5 years old
 - pregnant women
 - people of any age with conditions like asthma, diabetes, obesity, heart disease, HIV/AIDS or other conditions that weaken the immune system



H1N1 in Humans

- Transmissibility
 - Virus produced in nasopharynx
 - Virus shed 1 day before infection
 - Transmitted by droplets
 - Droplets transmitted a meter at most
 - Inanimate objects several days
 - Door knobs
 - Computer key boards
- What does this mean?



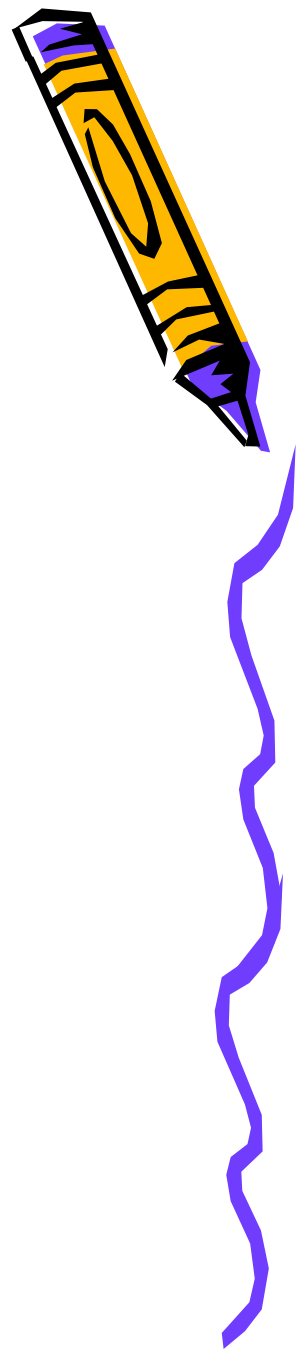
H1N1 in Humans

- Management (treatment)
 - Sick person
 - Antivirals
 - Persons at risk who have been exposed to documented case of H1N1
 - Antiviral



H1N1 In humans

- Management (Prevention)
 - Non-pharmaceutical and hygiene
 - Vaccine

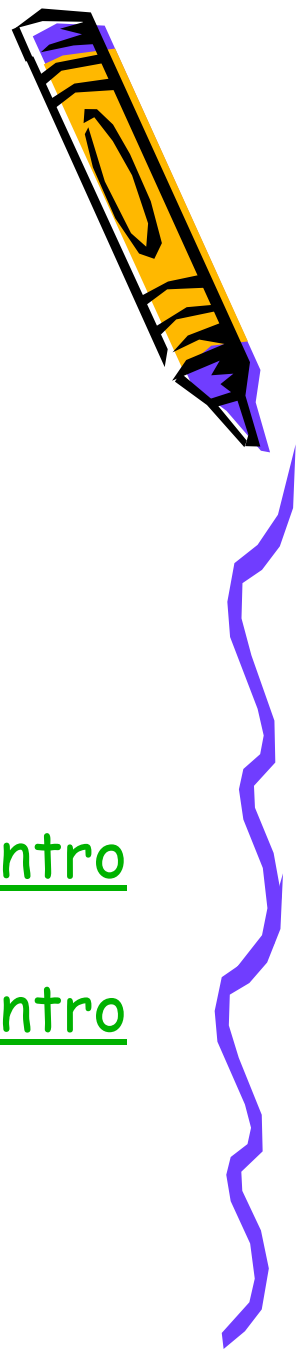


What can we do?

- Get familiar with good hygiene techniques

- Hand washing or hand sanitizers

- <http://www.mcgill.ca/health/infectioncontrol/handwashing/>
- <http://www.mcgill.ca/health/infectioncontrol/sanitizing/>



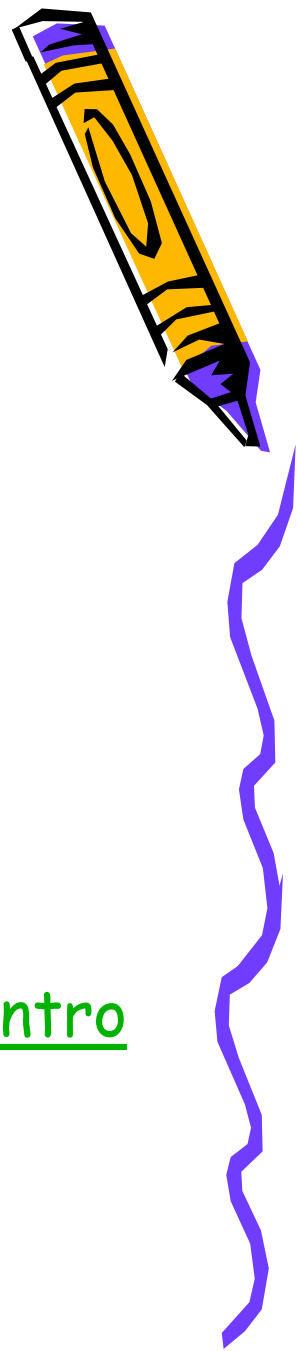
What can we do?

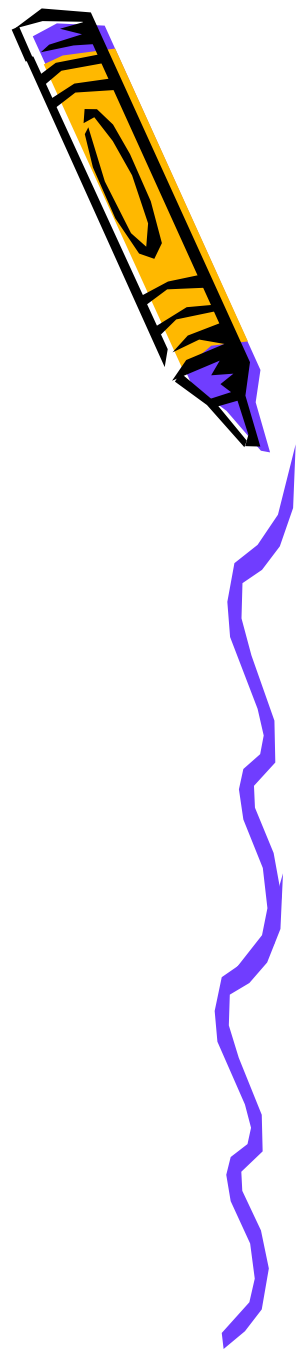
- Get familiar with good hygiene techniques

- Hand washing or hand sanitizers

- **Cover your mouth when sneezing or coughing**

- <http://www.mcgill.ca/health/infectioncontrol/sleeve/>





What can we do?

- Get familiar with good hygiene techniques
 - Hand washing
 - Cover your mouth when sneezing or coughing
 - **If you are sick stay at home and take care of yourself**



Caring for Yourself

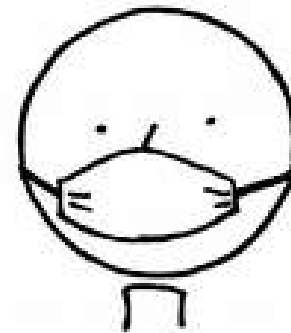
- Stay at home and rest
- Treat your fever (acetaminophen or ibuprofen)
- Decongestants
- Cough suppressants?

- Lots of fluids, chicken soup



What can we do?

- Get familiar with good hygiene techniques
 - Hand washing
 - Cover your mouth when sneezing or coughing
 - If you are sick stay at home and take care of yourself
 - **Wear a mask if you need to go out**



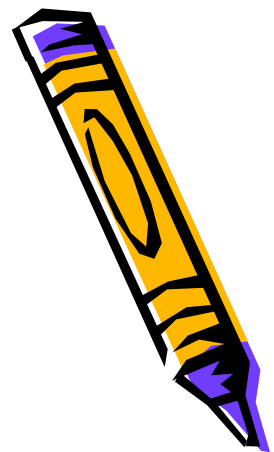
What can we do?

- Get familiar with good hygiene techniques
 - Hand washing
 - Cover your mouth when sneezing or coughing
 - Wear a mask
 - **Vaccination**



Vaccine

- Being developed
- To be available Mid-November
- Special vaccination sites
- Canada has ordered enough for everyone
- Everyone in Canada will get it if they want it



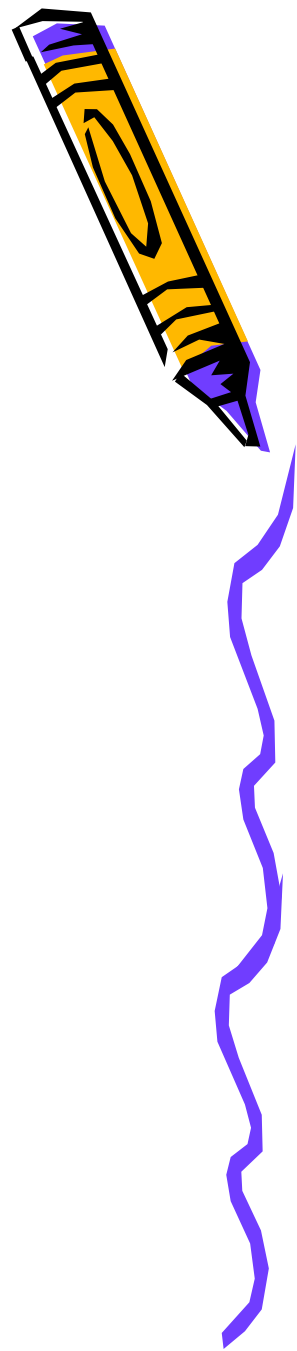
Vaccine

- Priority groups
 - Chronically ill under 65
 - Pregnant women
 - Children > 6 monts and < 5 years
 - Individuals living in isolated or remote areas
 - Health care workers
 - People living with those at increased risk but unable to be immunized (infants < 6 monts, immunocompromised individuals)



Vaccine

- Seasonal influenza vaccine now delayed to January
- Why?
 - Most of the influenza isolated H1N1
 - Last week 99.1% of cases



What Can You Do?



- Familiarize yourself with McGill Website
 - <http://www.mcgill.ca/health/>
 - Encourage everyone to buy own hand sanitizer and thermometer
- Take care of yourself first if you are sick!
- Prepare a self-care emergency kit
- Get a flu buddy



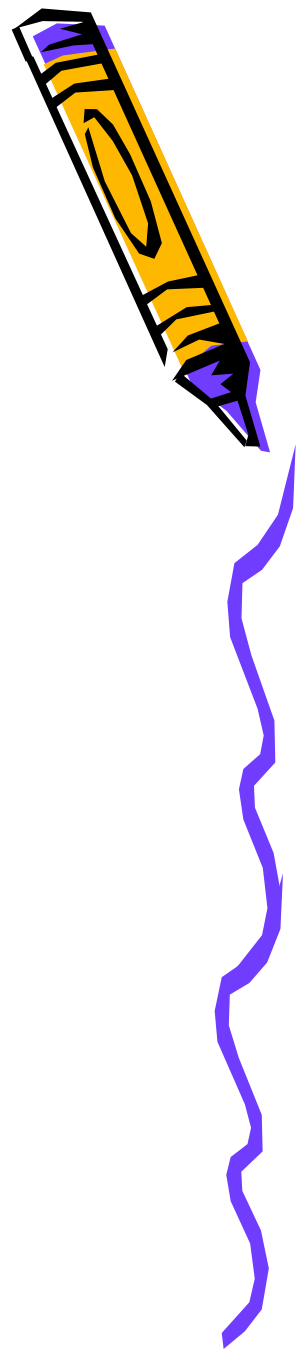
Self-Care Emergency Kit

- Thermometer
- Soap and water or hand sanitizer
- Antifever medication: Acetaminophen and Ibuprofen
- Decongestants or saline nasal spray

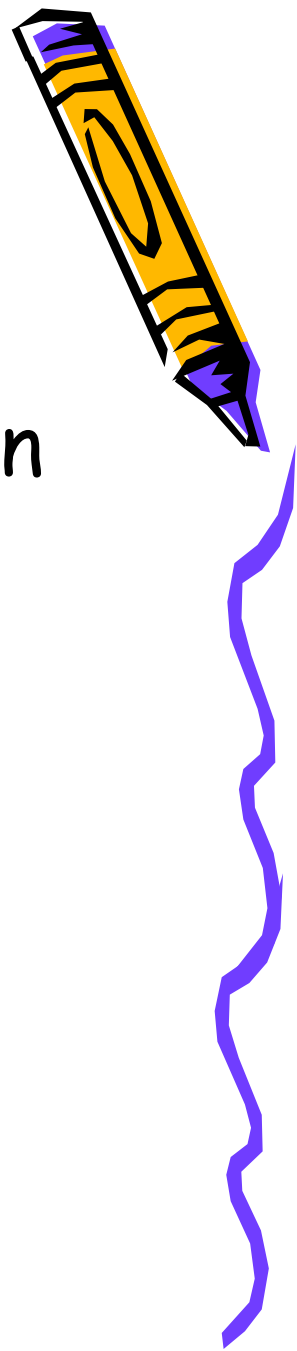


Self-Care Emergency Kit

- Supplies for two weeks
 - Facial tissues
 - Food for two weeks
 - Extra medical supplies for regular medical problems
 - Flashlights, batteries, portable radio
 - Manual can opener
 - Masks and gloves



Flu Buddy

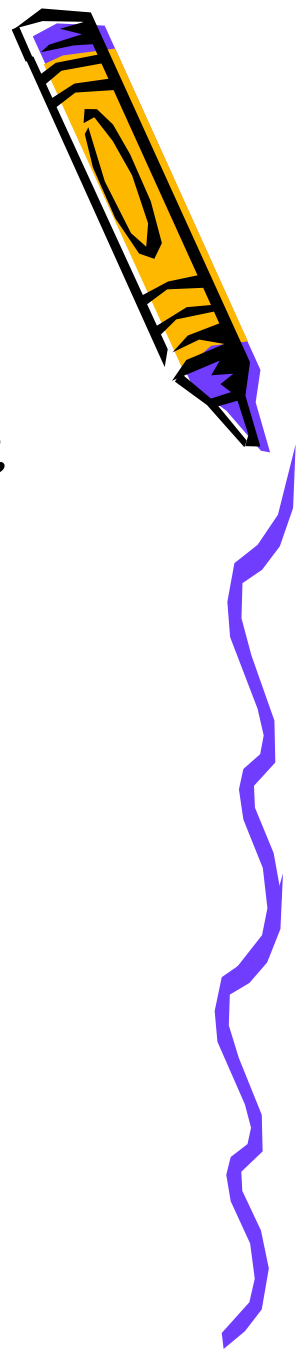


- One preferably two people that can be available
 - To check on you
 - Get you supplies
- Not someone who is in a risk group



Final Words

- Check our website for up - to date information
- www.mcgill.ca/health



PREVENT DISEASE



CARELESS
SMILING, COUGHING, SNEEZING,
SPREAD INFLUENZA
and TUBERCULOSIS.

