



**Avoiding The "F" Word:
Promoting Health
Through Vaccination**

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**The Immune System
Weakens As We Get Older**

SERIOUS OUTCOMES OF SEASONAL INFLUENZA ↑

90% of influenza deaths occur in older people
For every influenza death,
there are 3–4 influenza hospitalizations

BUT for pH1N1 most hospitalizations and deaths occur in
young adults and children

**And The Immune Response To
Vaccination Is Not As Robust**

CURRENT INFLUENZA VACCINE

Prevents **70–90%** of influenza illness in healthy adults
and only **30 – 40%** in older people

BUT if you do get the flu,
your illness will be less severe

Influenza: Under The Microscope

Hemagglutinin

Lipid Membrane

M1 Protein

M 2 Protein

Neuraminidase

RNP Polymerase

Nucleoprotein

vRNA

How does influenza make you ill?

Major contributors

antibody

T-cell responses

interferon

Less frequent complications

aerosol → viral replication → loss of cells → **Influenza Syndrome**

Pneumonia ← secondary bacterial infection

Primary viral pneumonia

Heart attacks and strokes

Is It A Cold Or The FLU?

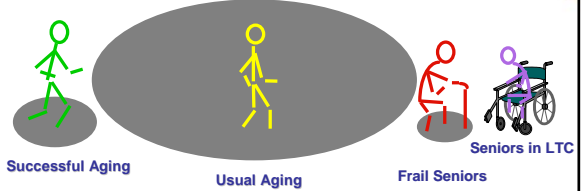


SYMPTOM	COLD	INFLUENZA	
		Young Adults	Older Adults
Fever	Rare	Common	Low Grade
Headache	Rare	Prominent	Uncommon
Myalgia	Slight	Often Severe	Mild to Moderate
Malaise	Mild	Extreme	Common
Stuffy Nose Sore Throat	Often	Sometimes	Common
Sneezing	Usual	Sometimes	Sometimes
Chest Discomfort Or Cough	Mild to Moderate Hacking Cough	Common Can Be Severe	Often Lasts 2-3 Weeks

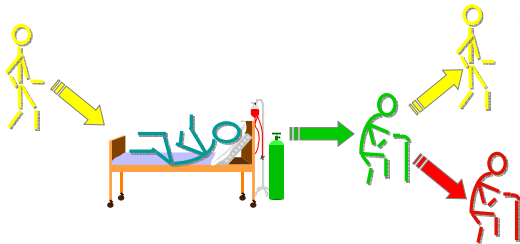
Influenza and Pneumonia in Older Adults: A Leading Cause of Catastrophic Disability



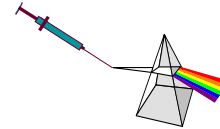
Chronic Diseases That Increase Risk A
For Influenza Are Very Common In Older Adults



Risk For Loss Of Independence



Summary



- ❖ The risk for influenza and loss of independence
- ❖ Get your regular flu shot!
- ❖ Older adults are relatively protected against pH1N1
- ❖ We need to keep working to improve protection against seasonal influenza in older adults