Impact of Expanded Influenza Post-exposure Prophylaxis on Health Care Worker Absenteeism at a Tertiary Care Center during the 2017–2018 Season

Mireia Puig-Asensio, Margaret Douglas, Stephanie Holley, Mary Beth Kukla, Oluchi Aboyi, Lisa Mascardo, Brenda Cammody, Courtney Gent, Daniel Diekema, Patrick Hartley, Michael Edmond, and Jorge L. Salinas. University of Iowa Hospitals & Clinics, Iowa City, IA.

INTRODUCTION
- A severe 2017–2018 influenza season was expected for the United States.
- **HYPOTHESIS:** A surge in influenza cases paired with decreased vaccine effectiveness could increase health care worker (HCW) absenteeism.
- Because of a potential public health emergency during the 2017–2018 season, we offered oseltamivir post-exposure prophylaxis (PEP) to exposed HCWs regardless of their flu vaccination status.
- We aimed to describe PEP uptake, cost, and impact on HCW absenteeism at the University of Iowa Hospital & Clinics (UIHC).

METHODS
- **SETTING AND STUDY POPULATION:** The UIHC is an 811-bed tertiary care hospital that serves as a referral and safety net health system for Eastern Iowa.
- **Study period:** Influenza seasons 2016–2017 and 2017–2018.
- **Study population:** Staff nursing and clinical technicians who worked at UIHC during the study period. We selected this subgroup of HCWs because they were more likely to be exposed to patients with influenza.
- **Hospital policies:** Universal masking was routinely used during both influenza seasons in high risk units (i.e., hematology-oncology).
- Oseltamivir prophylaxis was recommended to all patients and HCW from units with influenza nosocomial transmission (i.e., a new case of influenza is detected in an inpatient >72 h from hospital admission).

INTERVENTIONS
- During the 2016–2017 season, oseltamivir PEP (75 mg/day for 7 days) was only recommended to unvaccinated HCWs who had been exposed to an influenza infected person.
- During the 2017–2018 season, PEP was expanded to all exposed HCWs regardless of vaccination status.

RESULTS
- **FLU VACCINATION RATES**
  - Flu season 2016–2017: 89.7%
  - Flu season 2017–2018: 90.9%
- **INFLUENZA SEASONS**
  - During the 2016–2017 and 2017–2018 seasons, we detected 373 and 427 confirmed influenza cases among patients at UIHC.

INFLUENZA SEASONS
- **PEP: post-exposure prophylaxis**
- **STRENGTHS**
  - Expanding PEP to all exposed HCWs, regardless of vaccination status, had moderate uptake and was costly.
  - Absenteeism rates remained similar during both seasons.
  - We do not recommend expanding PEP to all exposed HCWs.

CONCLUSIONS
- **LIMITATIONS**
  - We could not analyze absenteeism rates by vaccination status or whether absenteeism was caused by influenza.
- **CONCLUSIONS**
  - Expanding PEP to all exposed HCWs, regardless of vaccination status, had moderate uptake and was costly.
  - Absenteeism rates remained similar during both seasons.
  - We do not recommend expanding PEP to all exposed HCWs.