

Why Hospital Staff Catch the Flu: Assessing Modes of Transmission – FY13 (939ZNRW)

Objectives

- To measure influenza on surfaces and PPE (gloves and masks) and in the air during flu season
- To determine the potential for direct-contact transmission from doffing of contaminated PPE

Applicable Standards

- ASTM E2720 – 10 / E2721 – 10
- NIOSH 42 CFR Part 84
- ISO TC94/SC15
- OSHA 1910.134

Key Partners

- Johns Hopkins University
- Veterans Administration
- Air Force Research Laboratory
- CDC/DHQP
- NIOSH (DSHEFS, HELD)

Stakeholders

- Healthcare workers
- Hospital administrators
- Policy makers



Project Scope

- FY11 – write proposal, initiate contract with JHU (NPPTL)
- FY12 – Correlate influenza environmental sampling to PPE sampling in the lab (HELD)
- FY13 – Pilot field study. Measure environmental and PPE influenza contamination in healthcare setting (DSHEFS)
- FY14 – Laboratory study to on contact transmission from contaminated PPE using MS2 phage and human test subjects (NPPTL)
- FY15 – Full-scale field study. Measure environmental and PPE influenza contamination. Relate contamination to influenza rates of subjects in the ResPECT study (JHU)
- FY12-15. Manuscripts, presentations, etc.

Milestones FY13

- Q1 Obtained field test plan and IRB approvals
- Q2 Completed pilot study sample collection at JHU student health
- Q3 Complete pcr analysis of field samples
- Q4 Submit 2 manuscripts to peer reviewed journals
- Q4 Submit IRB protocol for virus transfer from FFR to hands

Outputs

- Manuscripts published in peer review journals (3 in draft stage)
- Presentations at conferences (0 to date)
- Contractor reports (2)

Outcomes

- Outputs will be used by other government agencies for guidance in using non-pharmacological interventions for influenza transmission
- Other researchers will use the findings of this project to explore the modes of influenza transmission and examine the efficacy of PPT

Updated: 01 April 2013