City of Milwaukee Health Department (MHD)
2009 Influenza Type A (H1N1) Virus Response

Recommendations for Management of Exposed Health Care Workers (HCWs)
(Updated 10/20/2009)

Background: It is essential to minimize risk of transmission of 2009 Influenza Type A (H1N1) virus within healthcare settings, especially to high-risk patients. Influenza 2009 H1N1 has an incubation period of typically 1-4 days, is infectious from 1 day before symptom onset until 7 days after symptom onset, and is at increased prevalence in our community. After review of existing guidance from various national, state, and local public health authorities and from public and private-sector healthcare institutions, MHD makes the following recommendations:

Definitions - - for purposes of this document

- Influenza-like illness (ILI) means fever plus either cough or sore throat
- “Patients who are at high risk of complications from 2009 H1N1 influenza” means: a) children under 5 years old, b) pregnant women, and c) people ages 5-64 who have certain underlying chronic medical conditions such as pulmonary, cardiovascular, metabolic, or immune compromise
- “Exposed HCW” means a HCW susceptible to 2009 H1N1 (e.g., has not been fully vaccinated or does not have a documented laboratory-proven history of 2009 H1N1 influenza, and who in occupational or community settings was within 6 feet of an individual with confirmed, probable, or suspected 2009 H1N1 disease for a period of at least several minutes, and who was not wearing appropriate personal protective equipment (e.g., N-95) during that exposure.

Recommendations:

I. Prevent exposures whenever possible

A. Encourage all HCW to be vaccinated against both seasonal and 2009 H1N1 Influenza.
B. Provide all HCW with personal protective equipment (PPE) appropriate to their work environment and potential exposures (e.g., gloves, gowns, fitted N-95 respirators).
C. Put systems in place (e.g., temperature checks, symptom questionnaires prior to each shift) to actively monitor all HCWs, regardless of known exposure history, for signs and symptoms of influenza-like illness (ILI).
D. Send any HCW with ILI home immediately. HCWs with ILI – even if taking antiviral medication – should remain at home until 24 hours after fever has resolved (without use of anti-fever medications). If working with severely immuno-compromised patients, consider reassigning HCW with respiratory symptoms (with or without fever) until 7 days after symptom onset or 24 hours after all symptoms resolve, whichever is longer.

II. Manage exposed, asymptomatic HCWs to minimize risk to high-risk patients

A. If no personal risk factors for influenza complications AND not working in a high-risk clinical area, HCW generally does NOT require antiviral post-exposure prophylaxis.
B. Use of antiviral post-exposure prophylaxis (PEP) should be considered for HCWs with known occupational or community (e.g. sick household contact) exposure, and is recommended (if it can be started within 48 hours of last exposure) for exposed HCWs working with patients who are at high risk of complications from 2009 H1N1 influenza.
C. Exposed HCWs who are not taking antiviral PEP and who work with patients who are at high risk of 2009 H1N1 influenza complications should be either a) furloughed, for 4 days after the last exposure, or b) re-assigned to work with generally well individuals or with patients who have low risk of 2009 H1N1 influenza complications, for 4 days after last exposure, and closely monitored for signs and symptoms of ILI during that time.
D. Exposed HCWs who are taking antiviral PEP (or, if not taking PEP, who are working with only low-risk patients) do not need to be excluded from work, but should be closely monitored for signs and symptoms of ILI for 4 days after last exposure.
III. Summary algorithm of MHD recommendations for managing exposed HCWs:

Does HCW have ILI (defined as fever plus either cough or sore throat)?

Yes → Send home immediately
- May not return to work until 24 hours after fever resolution (without use of anti-fever medications)
- Consider the longer of 7 days after symptom onset or 24 hours after all symptoms resolved before working with highly immunocompromised pts

No → No PEP recommended
- No furlough or reassignment needed
- Routine symptom monitoring; OK to work if no ILI symptoms

Was exposed HCW susceptible? MHD defines this as HCW not fully immunized against 2009 H1N1 at least 7 days prior to exposure, or HCW not using appropriate PPE (N-95) while exposed.

Yes → PEP recommendation up to HCW’s own doctor based on HCW’s own personal risk factors
- PEP not required to continue working in low-risk settings (no furlough or reassignment needed)
- Routine symptom monitoring; OK to work if no ILI symptoms

No → Recommend either:
- Reassign HCW for 4 days to a position that doesn’t involve routine contact with high risk individuals, or
- Furlough HCW for 4 days after most recent exposure
- May return to original position on 5th day after last exposure if no ILI symptoms have developed

Was exposure significant? MHD defines this as within 6 feet, and more than just “in-passing” (e.g., several minutes or more within 6 feet).

Yes → PEP recommendation up to HCW’s own doctor based on HCW’s own personal risk factors
- PEP not required to continue working in low-risk settings (no furlough or reassignment needed)
- Routine symptom monitoring; OK to work if no ILI symptoms

No → Recommend either:
- Reassign HCW for 4 days to a position that doesn’t involve routine contact with high risk individuals, or
- Furlough HCW for 4 days after most recent exposure
- May return to original position on 5th day after last exposure if no ILI symptoms have developed

Does HCW’s job involve routine contact with people at high risk for complications from 2009 Influenza A (H1N1)? E.g.: those <5 years old, pregnant women, or those <65 years old with underlying chronic medical conditions (pulmonary, metabolic, cardiovascular, immune compromise, etc)

Yes → Recommend either:
- Reassign HCW for 4 days to a position that doesn’t involve routine contact with high risk individuals, or
- Furlough HCW for 4 days after most recent exposure
- May return to original position on 5th day after last exposure if no ILI symptoms have developed

No → Recommend antiviral PEP
- No furlough or reassignment needed as long as HCW takes and completes PEP
- Routine symptom monitoring; OK to work if no ILI symptoms

Was last exposure within past 48 hours?

Yes → Recommend antiviral PEP
- No furlough or reassignment needed as long as HCW takes and completes PEP
- Routine symptom monitoring; OK to work if no ILI symptoms

No → Probably too late to start antiviral PEP

These recommendations do not replace clinicians’ judgment, are intended for use only within the City of Milwaukee, and are subject to change as additional clinical and epidemiologic data regarding the 2009 H1N1 virus becomes available. Questions regarding this document can be directed to Dr. Geof Swain at MHD: gswain@milwaukee.gov or 414-286-3521.