City of Milwaukee Health Department (MHD)
Recommendations for Clinicians – Updated October 13, 2009

TESTING FOR NOVEL 2009 INFLUENZA TYPE A (H1N1) VIRUS

A. Executive Summary: 1) Influenza-like illness (ILI) – defined as fever plus either cough or sore throat – and novel 2009 H1N1 influenza are currently at relatively high prevalence in our community; 2) Almost all circulating influenza is the 2009 Novel H1N1 strain; 3) Rapid tests are unreliable for 2009 H1N1 Influenza diagnosis; 4) Delaying antiviral decisions while waiting for accurate test results is not recommended, because antivirals are most effective if started within 48 hours of symptom onset; 5) Therefore, most patients with influenza-like illness (ILI) should be managed empirically and will not need diagnostic influenza testing for clinical management.

B. Who to test: The MHD recommends, at this time, that testing for novel 2009 H1N1 influenza virus in Milwaukee should be limited to only:
1. Individuals hospitalized with ILI, OR patients with moderate-to-severe ILI (e.g., patients with illness severity suggesting reasonable potential for future hospitalization)
2. Patients who died of an acute illness in which influenza was suspected
3. Pregnant women with ILI, regardless of severity
4. Those rare patients, regardless of illness severity, for whom a confirmed diagnosis of influenza would change decisions regarding clinical care, infection control, or management of close contacts. These might include, for example, immunosuppressed patients, health care workers (HCWs), or clusters of ILI in congregate living facilities (e.g., nursing homes, jails, etc.).

C. Who not to test: With rare exceptions as noted above, MHD recommends, in general, that individuals with only mild symptoms should not be tested. If a household member has already tested positive for 2009 H1N1 influenza, there is usually no need for testing other symptomatic household members (unless they become quite severely ill or require hospitalization).

D. Rapid Tests: Rapid flu kits should NOT be used to diagnose novel 2009 H1N1 influenza.
1. Rapid test sensitivity for 2009 H1N1 influenza ranges from 10%-70%. Given the likelihood of false-negative results for 2009 H1N1 influenza using currently available rapid tests, it is inappropriate to use rapid testing to “rule out” 2009 H1N1 influenza virus.
2. Rapid test specificity for 2009 H1N1 influenza can be relatively high, but false-positive results for 2009 H1N1 influenza are likely when using rapid test modalities during periods of relatively low prevalence. Further, currently available rapid tests do not distinguish between seasonal influenza A and 2009 H1N1 influenza, which severely limits their usefulness in guiding selection of specific antiviral therapy.
3. Further, rapid flu kit sensitivity for seasonal human influenza is approximately 50%-70%, which leads to false negative results when seasonal human influenza is circulating in only low prevalence. Thus, rapid tests are not currently useful for diagnosing seasonal influenza, since almost all circulating influenza in Milwaukee, and nationwide, is the 2009 Novel H1N1 strain.

Rapid tests are not recommended, but, rapid test or not, the MHD urges clinicians testing for 2009 H1N1 influenza – using the testing criteria in point B above – to send specimens to a qualified laboratory that can perform a rRT-PCR assay specific for 2009 H1N1 influenza.

These are guidelines and recommendations only. They 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.