

Joint Commission 2010 Guidelines:

Influenza Vaccinations for Health-Care Workers



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Employee health and **employee well-being** play significant roles in workplace productivity. Axion Health's ReadySet™ immunization management module tracks each employee's history of immunity, vaccination dates, titer results, and even sends out reminders to workers due for an immunization action.

As a service to our customers and in support of their **health programs**, Axion Health is providing this white paper, which summarizes and gives guidance on who should be vaccinated for influenza, how often, and the type of vaccination they should receive.

The Joint Commission on Accreditation of Health-Care Organizations (JCAHCO) approved an infection-control standard that requires accredited organizations to offer influenza vaccinations to staff, including volunteers and licensed independent practitioners with close patient contact. The standard became an accreditation requirement beginning January 1, 2007. Some states have regulations regarding vaccination of health-care personnel (HCP) in long-term-care facilities, require that health-care facilities offer influenza vaccination to HCP, or require that HCP either receive influenza vaccination or indicate a religious, medical, or philosophic reason for not being vaccinated.

Persons Who Should Be Vaccinated

All persons aged 6 months and older should be vaccinated annually. As providers and programs transition to providing annual vaccination to all persons, continued emphasis should be placed on vaccination of persons who live with or care for persons at higher risk for influenza-related complications. When vaccine supply is limited, vaccination efforts should focus on delivering vaccination to persons at higher risk for influenza-related complications, as well as these persons, who are:

- HCP
- Household contacts (including children) and caregivers of children aged 59 months and younger (i.e., aged younger than 5 years) and adults aged 50 years and older
- Household contacts (including children) and caregivers of persons with medical conditions that put them at higher risk for severe complications from influenza

Healthy persons, who are infected with influenza virus, including those with subclinical infection, can transmit influenza virus to persons are at higher risk for complications from influenza. In addition to HCP, groups that can transmit influenza to high-risk persons include:

- Employees of assisted living and other residences for persons in groups at high risk
- Persons who provide home care to persons in groups at high risk
- Household contacts of persons in groups at high risk, including contacts such as children and mothers of newborns

Healthy HCP and persons aged 2–49 years, who are contacts of persons in these groups and who are not contacts of severely immunocompromised persons living in a protected environment (see Close Contacts of Immunocompromised Persons), should receive either LAIV or TIV when indicated or requested. All other persons, including pregnant women, should receive TIV.

HCP and Health-Care Professionals

All HCP and persons in training for health-care professions should be vaccinated annually against influenza. Persons working in health-care settings who should be vaccinated include physicians, nurses, and other workers in hospital and

outpatient-care settings, medical emergency-response workers (e.g., paramedics and emergency medical technicians), employees of nursing home and long-term-care facilities who have contact with patients or residents, and students in these professions who will have contact with patients.

Facilities Employing HCP

Facilities that employ HCP should provide vaccine to workers by using approaches that have been demonstrated to be effective in increasing vaccination coverage. The HCP influenza coverage goal should be vaccination of 100% of employees who do not have medical contraindications. Health-care administrators should consider the level of vaccination coverage among HCP to be one measure of a patient safety quality program and consider obtaining signed declinations from personnel who decline influenza vaccination for reasons other than medical contraindications. Influenza vaccination rates among HCP within facilities should be measured regularly and reported, and ward-, unit-, and specialty-specific coverage rates should be provided to staff and administration.

Effective Policies and Campaigns

Policies that work best to achieve this coverage goal might vary among facilities. Studies have demonstrated that organized campaigns can attain higher rates of vaccination among HCP with moderate effort and by using strategies that increase vaccine acceptance. A mandatory influenza vaccination policy for HCP, exempting only those with a medical contraindication, has been demonstrated to be a highly effective approach to achieving high vaccine coverage among HCP. Hospitals and health-care systems that have mandated vaccination of HCP often have achieved coverage rates of more than 90%, and persons refusing vaccination who do not

have a medical contraindication have been required to wear a surgical mask during influenza season in some programs. Efforts to increase vaccination coverage among HCP using mandatory vaccination policies are supported by various national accrediting and professional organizations, including the Infectious Diseases Society of America, and in certain states by statute. Worker objections, including legal challenges, are an important consideration for facilities considering mandates. Studies to assess the impact of mandatory HCP vaccination on patient outcomes are needed.

Persons at Higher Risk for Complications from Influenza

Children aged younger than 5 years are at increased risk for influenza-related hospitalization as compared with older children. As such, vaccination is recommended for all household contacts and out-of-home caregivers, who come in contact with them.

Children aged younger than 6 months are not recommended for vaccination, and antivirals are not licensed for use among infants. Protection of young infants, who have hospitalization rates similar to those observed among the elderly, depends on vaccination of the infants' close contacts. A recent study conducted in Bangladesh demonstrated that infants born to vaccinated women have significant protection from laboratory-confirmed influenza, either through transfer of influenza-specific maternal antibodies or by reducing the risk for exposure to influenza that might occur through vaccination of the mother. All household contacts, health-care and day care providers, and other close contacts of young infants should be vaccinated.

Immunocompromised persons are at risk for influenza complications but might have inadequate protection after vaccination. Vaccination of close contacts of immunocompromised persons, including HCP, might reduce the risk for

influenza transmission. In 2006, a joint recommendation from ACIP and the Hospital Infection Control Practices Advisory Committee (HICPAC) recommended that TIV be used for vaccinating household members, HCP, and others who have close contact with severely immunosuppressed persons (e.g., patients with hematopoietic stem cell transplants) during those periods in which the immunosuppressed person requires care in a protective environment (typically defined as a specialized patient-care area with a positive airflow relative to the corridor, high-efficiency particulate air filtration, and frequent air changes). To reduce the theoretic risk for vaccine virus transmission, ACIP/HICPAC recommended that HCP who receive LAIV should avoid providing care for severely immunosuppressed patients requiring a protected environment for 7 days after vaccination, and hospital visitors who have received LAIV should avoid contact with severely immunosuppressed persons in protected environments for 7 days after vaccination but should not be restricted from visiting less severely immunosuppressed patients. Healthy non-pregnant persons aged 2–49 years, including HCP, who have close contact with persons with lesser degrees of immunosuppression (e.g., persons with chronic immunocompromised conditions such as HIV infection, corticosteroid or chemotherapeutic medication use, or who are cared for in other hospital areas such as neonatal intensive care units) can receive TIV or LAIV.

ACIP/HICPAC recommends that HCP and hospital visitors who receive LAIV should avoid contact with severely immunosuppressed patients, who are in a protected environment, for 7 days after their vaccination.

The rationale for avoiding use of LAIV among HCP or other close contacts of severely immunocompromised patients is the theoretic risk that a live attenuated vaccine virus could be transmitted to the severely immunosuppressed person. However, instances of LAIV transmission from a recently vaccinated person to an immunocompromised contact in health-care

settings have not been reported. In addition, the temperature-sensitive and attenuated viruses present in LAIV do not cause illness when administered to immunocompromised persons with HIV infection, children undergoing cancer treatment, or immunocompromised ferrets given dexamethasone and cytarabine. Concerns about the theoretic risk posed by transmission of live attenuated vaccine viruses contained in LAIV to patients should not be used to justify preferential use of TIV in health-care settings other than inpatient units that house severely immunocompromised patients requiring protected environments. Some health-care facilities might choose to not restrict use of LAIV in close contacts of severely immunocompromised persons, based on the lack of evidence for transmission in health-care settings since licensure in 2004.