Varicella Immunization Policy

Ref: (a) CDC, Prevention of Varicella, Recommendations of the Advisory Committee on Immunization Practices, MMWR 1996, 45, (No. RR-11), 1-36.
(b) Poland, GA, Haidwien, DJ, Adult Immunization in the Healthcare Worker, APIC, Infection Control and Applied Epidemiology, 24-19 – 24-24, 1996.

The history of varicella must be recorded in the medical record of personnel at the time of arrival to the command. Healthcare workers with a clear history of varicella infection can be assumed to be immune. If staff gives a negative or uncertain history of varicella, serologic screening will be ordered. Results of testing will be made available to employee and recorded in the medical record.

Susceptible employees will be immunized with the two-dose varicella vaccine (brand name, Varivax), in accordance with the CDC and ACIP recommendations. Vaccine will be offered upon initial employment or at annual health evaluations.

Follow the package insert for Varivax vaccine administration. For adults, administer 0.5ml subcutaneously, followed by a second 0.5ml dose four to eight weeks later. The preferred site of administration is the deltoid muscle.

Testing for varicella immunity following two doses of vaccine is not considered necessary and will not be done. Employees completing the two dose vaccination series will be considered immune.

Limited data available suggests that vaccinated people have a small risk for transmitting vaccine virus for a few weeks after immunization. This risk increases in vaccines that develop a varicella-like rash.

Employees will be counseled during the post-vaccination period (up to 2 months following vaccination) to watch for the development of a rash. Should a rash occur, the employee should report ASAP to Occupational Health for evaluation.

Employees who develop a varicella-like rash should avoid close contact with susceptible high-risk individuals, such as newborns, pregnant women, and immuno-compromised persons during the rash period. If rash is localized at the injection site (one lesion), staff may continue to work in areas with no high-risk individuals. If rash is generalized (more than one lesion), staff will not be allowed to work in patient care areas until lesions from the rash have dried and crusted.

Before vaccine is administered, employees should be questioned regarding household contacts that are significantly immuno-compromised (i.e., organ transplant, leukemia in relapse, AIDS). Employees having intimate household contact with significantly immuno-compromised persons may be advised to delay vaccination. For further questions, consult Infectious Disease.

If vaccination is refused, the employee must sign a declination form. Employee must be advised not to care for varicella patients.

Vaccinated employees should be counseled that the vaccine provides 70% - 90% protection (95% protection against severe infection) and that mild varicella in a vaccinated subject following exposure to wild disease is possible, but rare.
Truly susceptible employees will be managed according to the following algorithm if exposed to varicella.

Disseminated VZV Infection Diagnosis Confirmed

**Patient Related**
- Index Case
- Determine in-house travel of case
- Examine charts of appropriate hospital areas to determine population at risk

**Staff Related**
- Survey potentially exposed staff

**Direct ID of High-risk Patients**
- Obtain list of all immunosuppressed and Immunocompetent

**Disseminated VZV Infection**

**Patient Related**
- Determine immunologic status
  - Immunosuppressed
    - Determine VZV History
      - Neg
        - Determine Exposure History
          - Exp
            - Serology drawn VZIG
              - No further follow-up
          - Unk
          - Not
            - No further follow-up
        - Unk
        - Pos
          - Determine Exposure History
            - Exp
              - Serology drawn
                - No further follow-up
            - Unk
            - Not
              - No further follow-up
    - Unk
    - Pos
      - No further follow-up
  - Immunocompetent
    - Determine VZV History
      - Neg
        - Determine Exposure History
          - Exp
            - Serology drawn
              - No further follow-up
          - Unk
          - Not
            - No further follow-up
        - Unk
        - Pos
          - Determine Exposure History
            - Exp
              - Serology drawn
                - No further follow-up
            - Unk
            - Not
              - No further follow-up
  - Unk
  - Pos
    - No further follow-up

**Obtain serology result**

**Susceptible**
- Continue Isolation (21 days)
- No further follow-up (D/C Isolation)

**Immune**

**Reassign to low-risk area and follow-up for 21 days after exposure**

If discharge impractical, place patient in strict isolation from 10th day after initial contact through day 21.

Discharge (if possible). Obtain follow-up on all patients with negative serologies.