Table 3. Summary of Recommendations for Preventing the Spread of Vancomycin Resistance (adapted from CDC-HICPAC).

1. Appropriate use of vancomycin

    a. Treatment of infection due to B-lactam resistant gram-positive organisms.

    b. Treatment of infection due to gram-positive organisms in patients with serious beta-lactam allergy.

    c. Treatment of antibiotic associated colitis in cases of metronidazole failure or potentially life threatening illness.

    d. Endocarditis prophylaxis, as recommended by the American Heart Association (Dajani).

    e. Prophylaxis for surgical procedures involving implantation of a prosthesis in institutions with a high rate of infection due to MRSA or methicillin-resistant S. epidermidis.

2. Education Program

    a. Include physicians, nurses, pharmacy and laboratory personnel, students, and all other direct patient care providers.

    b. Program should include information on epidemiology of VRE and impact of VRE on cost and outcome of patient care.

3. Role of the Microbiology Laboratory

    a. Laboratory should be able to identify and speciate enterococci.

    b. Fully automated methods of testing enterococci for susceptibility testing are unreliable; disk diffusion, gradient disk diffusion, agar dilation, or manual broth dilution are acceptable.

    c. Vancomycin resistance should be confirmed by repeating one of the above tests, or by streaking onto brain heart infusion containing 6 ug/ml of vancomycin. Preliminary and confirmatory identification of VRE should be immediately reported to patient care personnel and infection control.

    d. Screening for VRE should be conducted periodically in hospitals where VRE has not been previously detected.

4. Prevention and control of nosocomial transmission of VRE

    a. For all hospitals, including those with no or infrequent isolation of VRE:

        1. Notify appropriate staff immediately when VRE are detected.

        2. Educate clinical staff about hospital policies regarding VRE colonized or infected patients so that appropriate procedures can be implemented immediately.

        3. Establish systems for monitoring process and outcome measures.

        4. Isolation precautions to prevent patient to patient transmission of VRE: REFER TO TABLE 2.

    b. In Hospitals with endemic VRE of continued VRE transmission despite implementation of above measures:

        a. Focus initial control efforts on critical care units and other areas where VRE transmission rates are highest.

        b. Where feasible cohort staff caring for VRE-positive and VRE-negative patients.

        c. Carriage of enterococci by hospital staff are rarely implicated in transmission. Investigation and culturing of hospital staff should be at the direction of infection control staff.

        d. Verify that environmental disinfection procedures are adequate, and that procedures are correctly performed.

        e. Consider sending representative VRE isolates to reference laboratories for strain typing as an aid in identifying reservoirs and patterns of transmission.