

dine formulation was dispensed directly onto the hands, which were subsequently scrubbed, it would be improbable that "quenching" of activity would be an issue for concern.

Regarding concern #3, single plates were not used, rather the solutions were plated in triplicate and a mean value used. The dilution fortunately did inactivate the formulation, but it also provided a comfortable number of colonies per plate for accurate counts to be obtained.

Concern #4 addresses an erroneous interpretation of provided data and has been carefully addressed in the October 1986 issue of *Infection Control*, p. 484. It is emphasized that data presented in this publication do not agree with data presented in other publications, including their own, regarding the use of the hand spongebrush impregnated with chlorhexidine gluconate. This fact may well be due to different conditions under which the experiments were performed, or it may be related to a difference in efficacy of the formulation between usage directly from the quart bottle with subsequent brushing, on the one hand, and usage in the pre-packaged form, on the other hand.

Once again, I hope the information provided herein will be of value to the readers of *Infection Control*, and I thank you for the opportunity to respond to these points of concern.

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Homosexuality in Institutionalized Retardates

To the Editor:

Public law 94-142, the Mentally Retarded Persons Act of 1977, and several federal district court decisions continue to provide further impetus to the return of institutionalized retardates to the community. Although the movement is viewed as an important social advance, the occasional pres-

ence of hepatitis B carriers among such individuals has generated public health concerns, especially in schools.¹ It is well recognized that hepatitis B infection is unusually prevalent among institutionalized retardates and that carrier rates are high, especially among Down's syndrome subjects.² Congregate living, reduced personal hygiene, and behavioral aberrations such as biting and scratching are thought to enhance disease spread. Among nonretarded, however, the importance of sexual transmission of hepatitis B has been particularly emphasized in male but not female homosexuals.³

However, a literature review regarding the potential for this mode of institutional spread yielded conflicting results. One study of a heterogeneous group of institutionalized retardates reported a 14.5% incidence of homosexual behavior.⁴ Another reported such behavior no greater than in the general population,⁵ and yet another stressed its importance but failed to provide quantitative data.⁶ Consequently, a survey of homosexual behavior among a group of ambulatory males aged 19 to 63, possessing basic self-help skills and averaging a moderate degree of mental retardation in adaptive functioning, was undertaken. The males resided together and constituted a subunit of a residential facility for mentally retarded from which the majority of male community placements had been effected. Data, which were derived from information supplied by staff members in daily 24-hour contact with residents, namely, direct care attendants and nursing personnel, disclosed that 29 of 54 residents (53%) engaged in homosexual behavior. The majority (n=23) preferred anal intercourse, whereas substantially fewer (n=6) engaged in oral-genital intercourse. Such activity was typically concentrated during unstructured time, primarily evenings and weekends. Results approximated rates identified in prisons,⁷ but in contrast to the latter setting, group sexual assault was absent and individual assault rare. Review of prevaccination serologic data disclosed that hepatitis B markers were most common (75%) in those identified as engaging in receptive anal intercourse, but only slightly lower in both the remaining homosex-

ual (70%) and nonhomosexual groups (68%). No correlation between hepatitis B surface or e antigenemia and sexual orientation or behavior was found, and all homosexually active residents were anti-HTLV-III negative, except one who was positive but Western blot negative.

If these findings are confirmed by a broader data base, it would indicate that a significant portion of ambulatory socially interactive adolescent and adult male retardates returning to the community constitute another small subgroup at increased risk of sexually transmitted disease. In the case of homosexually active hepatitis B carriers, knowledge of such behavior, confidentially transmitted to local health professionals, could further minimize related spread of that infection in recipient schools and communities. Readmission of homosexually active retardates from communities where HIV infection is likely to be more prevalent should be accompanied by repeat antibody screening because the institutional milieu could favor rapid dissemination of that infection. Whether the sexual behavior of deinstitutionalized retardates will parallel that of former convicts, which reflects a change to heterosexuality for those who had engaged in active (insertor) anal intercourse, and persistence of homosexuality for those involved in receptive anal intercourse,⁷ is unknown and deserves study.

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