

# Letters to the Editor



## Comment from the Editor

**It is delightful to see that our members are writing into the Journal about the articles published and also passing the Journal onto other colleagues.**

**We welcome letters and comments, as this is how we are able to develop and broaden our horizons.**

While congratulating Lynelle Foster (Journal 1:4:p23, April 1996) on attempting a formal assessment of the benefits of a needleless IV system, we have some concerns with the conclusions of her study:

1. The significant reduction in IV-related needlestick injuries attributed to the implementation of a needleless IV system is accompanied by a substantial and statistically significant fall in non-IV related needlestick injuries – clearly factors other than the needleless IV system must have influenced this outcome.
2. The apparent decrease in catheter-related colonisation is difficult to understand. If one accepts Maki's theory of central line infection, then the reduction in CVC tip isolates cannot be attributed to Interlink. Alternatively, if one accepts Sitges-Serra's approach to the pathogenesis of CVC infections, the result is still no more explicable in that the design of needleless IV systems might be expected to increase the incidence of CVC infection by increasing the frequency of hub-colonisation.

Moreover, the rationale for the implementation of needleless IV systems as described in the paper is confusing and cannot readily be extrapolated to Australia. The author agrees that the type of needlestick injury prevented by an needleless IV system is regarded as low risk.

However, she goes on to argue that over 12,000 healthcare workers acquire Hepatitis B annually in the workplace in the United States, with most of these new infections attributable to needlestick injuries, and that Hepatitis B has been transmitted

by so-called low risk needlestick injuries. We would make two points:

1. Even if 12,000 workers pa in the US were acquiring Hepatitis B through occupational exposure, the vast majority of these do so through high risk needlestick injuries and these are the ones on which our infection control programmes should focus.
2. The apparent marked incidence of Hepatitis B transmission within the US healthcare force has never been documented in Australia, where with the exception of public hospital dentists, healthcare workers' acquisition of Hepatitis B, at worst, is only marginally greater than that of the general community.

Finally to argue on the basis of a subjective questionnaire that staff are satisfied with the needleless system is surely not the point. One of the major thrusts of infection control programmes over the past 30 years has been to place recommendations and protocols on a sound scientific footing, and to avoid the continuation of expensive rituals, implemented without evidence of efficacy solely because staff feel comfortable with them. Needleless IV systems may well have a place in modern hospitals; however, scientific data to show that they do reduce those needlestick injuries that put staff members at significant risk is not yet available; moreover, soundly based economic studies of cost benefit and cost utility have not been published. Until such data are available, enthusiastic recommendation of such systems seems premature.

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*Dear Ms Dalton,*

As an active associate member of the Victorian Division I would complement the Journal on its increasing professionalism.

One of the most current issues in Infection Control is needlestick injuries,

their reduction, and it was reassuring to see the space and time devoted by the International Speaker, Dr Gerberding, at the National Conference in Sydney in May. She made a number of points concerning needleless intravenous systems that had been previously published in the Journal of the American Medical Association in 1995. Her main point was that needleless intravenous systems may have increased bacteraemia rates when used in the setting of home in the hospital programs due to the large intravenous point of entry. I note on the contents page of your Journal the advertisement from Baxter and Becton Dickinson, they obviously provide valuable financial support for the Journal. I hope this will not preclude in forthcoming issues of the Journal a review of the Conference and also comment on Dr Gerberding's comments relating to needleless intravenous systems. Baxter and Becton Dickinson are actively promoting their systems at this stage and if there is any safety concern that may be of relevance to infection control personnel, I believe there is some need for the Australian Infection Control Association to give this issue some publication.

At this stage I am not sure the data is all in on the relative safety. Some countries, such as Italy, have used needleless intravenous systems for many years and I have seen very little data from Italy suggesting higher bacteraemia rates. On the other hand as these systems have only recently been introduced in America, a publication such as the Journal of American Medical Association has obvious relevance to the members of AICA particularly given the various active promotion of the system by Baxter and their failure to mention the American data in their presentations. I note the Journal of AICA does not have a letters section, but I wonder if this issue could be addressed.

**Kind regards,**  
**Rob Baird**  
**Microbiologist & Infectious Disease**  
**Physician**