ADDRESS LETTERS TO
The Editor, Australian Family Physician
1 Palmerston Crescent, South Melbourne Vic 3205 Australia
FAX 03 8699 0400 EMAIL afp@racgp.org.au

Improving vaccination cold chain

Dear Editor

Confidence building studies of cold chain facilities for vaccines in different types of refrigerators available in general practice in Australia[1] or elsewhere would be enhanced by potency assays on vaccines. Aliquots might be retrieved from different refrigerator types on hand. Any loss in vaccine potency following inadvertent exposures to adverse environments would be explicit. Furthermore, with environment challenges around, storage and quality of other therapeutic agents and diagnostics cannot be ignored: their storage requirements are similar to vaccines. For example, insulin vials are to be stored at 2–8ºC and not frozen. They are not to be kept near the cooling system or the freezer.[2]

During August 2005, the after effects of hurricane Katrina were associated with prolonged power failure and auxiliary generators in hospitals and laboratories ran out of fuel. Research would be desirable to make vaccines more stable to maintain efficacy in adverse environments occurring during a natural disaster or any bioterrorism misadventure.

Subhash C Arya, Nirmala Agarwal
Sant Parmanand Hospital, Delhi, India

References

1. Page SL, Earnest A, Birden H, Deaker R, Clark C. Improving vaccination cold chain in the general practice setting. Aust Fam Physician 2008;37:892–6.
2. Storage and handling insulin. Available at www.bddiabetes.com/US/main.aspx?cat=1&id=247 [Accessed 13 October 2008].

Reply

Dear Editor

While I agree that the storage of therapeutic agents requires similar standards of temperature control, and that more temperature stable devices to administer both therapeutic agents and vaccines are required, I am unconvinced as to the benefit of adding the cost and complication of aliquot testing in the primary care setting.

The most clinically relevant standard for assessing the effectiveness of vaccination is to document the consequent immunogenicity and reactogenicity within vaccinated individuals.[1] This is not feasible in large scale populations and a link to clinical efficacy within populations has been historically accepted where laboratory testing of vaccine potency can be shown to correlate to efficacy in test subjects.

However, because of the complexity of pathogenic processes and associated immune responses, vaccines that pass control potency testing may not always provide adequate efficacy. This is particularly true of adjuvanted, inactivated vaccines.[2] The mandatory testing on animals to measure potency has sufficiently little discriminatory power that it is not even considered possible to use product potency as a measure to optimise the production process of cellular pertussis bulk suspensions.[3] However, WHO has recently convened a panel of experts to review international recommendations around potency, safety and identity testing of diphtheria/tetanus/pertussis (DTP) vaccines.[4]

Major disasters are commonly associated with failures of utilities, including electricity. Recent experiences in developed countries may accelerate the research agenda for temperature stable vaccine devices, including aerosols and genetically modified plant products such as powdered potato, which would greatly benefit developing countries for whom the lack of stable refrigerated facilities is the norm.

Sue Page
Lismore, NSW

References

1. Pichichero ME, Rennels MB, Edwards KM, et al. Combined tetanus, diphtheria, and 5-component pertussis vaccine for use in adolescents and adults. JAMA 2005;293:3003–11.
2. McVey DS, Galvina JE, Olsonb SC. A review of the effectiveness of vaccine potency control testing. Int J Parasitol 2003;33:507–16.
3. Thalena M, van der Arkb A, van den IJssel J, et al. Improving the cellular pertussis vaccine: Increased potency and consistency. Vaccine 2008;26:653–63.
4. Corbel MJ, Das RG, Lei D, et al. WHO Working Group on revision of the Manual of Laboratory Methods for Testing DTP Vaccines. Report of two meetings held on 20–21 July 2006 and 28–30 March 2007, Geneva, Switzerland. Vaccine 2008;26:1913–21.

Sexual health and GP professional development

General practitioners and sexual health clinics are major providers of sexual health services in Australia. However, many GPs hesitate to address sexual issues, although patients would appreciate their GP initiating such a discussion.[1] A global study of sexual attitudes and behaviors has concluded that worldwide, only 9% of men and women report having been asked by their physicians about sexual difficulties within the past 3 years.[1]

To address this issue, Central Sydney GP Network Ltd developed an educational activity on sexual health as an active learning module. Ten male and five female GPs participated in the activity between April and May 2008. Key learning objectives were to improve GPs' knowledge and skills in identifying sexual health issues in young adults, to take a sexual history, assess erectile dysfunction, and do contact tracing for specific STIs. The patient safety objective was to identify three ways to improve young adults' comfort and confidence in talking about their sexual problems to GPs. The majority of the GPs found the activity relevant to their day-to-day practice and useful in meeting their own learning objectives. A need for training in management of HIV patients was identified.

Vijayasarathi Ramanathan
Central Sydney General Practice Network Ltd
The University of Sydney, NSW

Reference

1. Platano GMA, Margraf JP, Alder JP, Bitzer JMD. Frequency and focus of sexual history taking in male patients: A pilot study conducted among Swiss general practitioners and urologists. J Sex Med 2008;5:47–59.