# An exercise in communication:-analysis of calls to a meningococcal disease hotline

Justine D Ward, 1 Brad D McCall, 1 Sarah G Cherian 1

### **Abstract**

We describe our experience with a hotline which was set up to deal with enquiries relating to a secondary school mass vaccination campaign against meningococcal disease. Three thousand, three hundred calls were received over 6 days, mostly from the general public but also from contacts of the school and health practitioners. The hotline served as an important means of providing consistent advice and reassurance to the public and reduced the burden of calls to hospitals and public health units. *Commun Dis Intell* 2001;25:280-281.

Keywords: Meningococcal, outbreak, telephone hotline

## Introduction

A mass vaccination and chemoprophylaxis intervention was conducted at a secondary school in Brisbane from 17 to 21 August 2001 in response to 2 cases of serogroup C meningococcal disease. The polysaccharide vaccine and antibiotics (ciprofloxacin) were provided to staff, students and selected football contacts. Both cases died, the first on 5 August 2001 and the second on 21 August 2001 after the mass intervention had commenced. These cases occurred at a time when other cases and deaths from meningococcal disease were being reported in the media.

A community hotline was established within hours of the decision to undertake the intervention at the school. The aim of the hotline was to provide a means of assistance to the school vaccination team and address any community concerns about the intervention or meningococcal disease. Six telephone lines were established and the hotline was open for 6 days, from 17 to 22 August 2001. The hotline was staffed by hospital and community health nurses, with supervision by a trained medical officer. Staff were briefed at the beginning of each shift. The hotline remained open for 24 hours following the death of the second case.

Both the cases and the intervention were extensively reported in the media during the time that the hotline was open and the hotline number was made available through the media. However, on 19 August 2001 a widely circulated newspaper suggested that the public could ring the hotline if they wanted advice regarding a person with symptoms of the disease. This was contrary to the information provided by Queensland Health.

#### Methods

Staff collected the name and phone number of each caller, and recorded a brief comment as to the reason for the call. At the end of each shift, the data sheets were collected and counted. Every tenth case was selected and categorised according to a coding system (Table 1).

The authors all served as medical supervisors on different shifts, and their qualitative assessment of the experience is also provided. Call costs, fax and postage costs and staff wages (including time and half and double time rates but no on-costs) were used to calculate an estimate of the costs of running the hotline.

#### Results

There was a total of 3,300 calls to the hotline and the number of calls per hour tended to increase over the six day period (Table). The total cost was estimated to be \$23,600, of which \$2,600 was phone and fax costs and \$21,000 was staff costs. There was a noticeable increase in the frequency of calls around the time of news bulletins.

Calls from contacts or relatives of the school cases (33%) and other cases (8%) made up the highest proportion of calls on the first evening after the campaign started but decreased thereafter. Over 50 per cent of calls were general enquiries about the disease or the vaccine. The third most frequently asked question was to request advice about the management of a sick person (16.2%), particularly on days 3 and 4. Nearly 13 per cent of calls were from students, teachers or footballers connected with the cases or contacts of this group.

The proportion of callers seeking information on the vaccine increased on the last day. Information regarding the vaccine and the reasons why Queensland Health was not recommending vaccination for the general public was given to callers. Some callers accepted this advice but many stated that they would be seeking vaccination from their general practitioners anyway and some callers expressed anger that the vaccine was not being provided to the general public or to contacts outside the school.

## Comments

The hotline served as an important means of providing advice and dealing with the considerable public concern generated by the occurrence of the cases and the reporting in the media. The provision of consistent advice and reassurance to the general public was an important focus of the communication strategy in a similar incident in the United Kingdom in which mass vaccination was carried out at a school.<sup>1</sup> The experience of an increase in demand

Corresponding author: Ms Justine Ward, Public Health Registrar, Brisbane Southside Public Health Unit, PO Box 333, Archerfield Qld 4108, Telephone: +61 7 3000 9148, Facsimile: +61 7 3000 9130, E-mail: Justine\_Ward@health.qld.gov.au

Table. Summary of call numbers and reasons for calling

| Date | Hours of operation | No. of calls | Calls/<br>hour/<br>day | Coded reasons for calling (%) |        |        |        |       |       |       |       |       |
|------|--------------------|--------------|------------------------|-------------------------------|--------|--------|--------|-------|-------|-------|-------|-------|
|      |                    |              |                        | 1                             | 2      | 3      | 4      | 5     | 6     | 7     | 8     | 9     |
| 17/8 | 6pm to             | 125          | 31.3                   | 4                             |        | 3      | 1      | 1     |       |       |       | 3     |
|      | 10pm               |              |                        | (33)                          |        | (25)   | (8)    | (8)   |       |       |       | (25)  |
| 18/8 | 6am to             | 555          | 34.7                   | 7                             | 6      | 18     | 12     | 2     |       | 2     | 2     | 6     |
|      | 10pm               |              |                        | (13)                          | (11)   | (33)   | (22)   | (4)   |       | (4)   | (4)   | (11)  |
| 19/8 | 6am to             | 896          | 56.1                   | 9                             | 24     | 21     | 20     | 5     |       | 4     | 2     | 4     |
|      | 10pm               |              |                        | (10)                          | (27)   | (24)   | (22)   | (6)   |       | (4)   | (2)   | (4)   |
| 20/8 | 6am to             | 773          | 55.2                   | 6                             | 16     | 18     | 16     | 4     | 1     | 5     | 3     | 8     |
|      | 8pm                |              |                        | (8)                           | (21)   | (23)   | (21)   | (5)   | (1)   | (6)   | (4    | (10)  |
| 21/8 | 8.30am             | 427          | 50.2                   | 4                             | 4      | 18     | 7      | 2     | 2     |       | 2     | 3     |
|      | to 5pm             |              |                        | (10)                          | (10)   | (43)   | (17)   | (5)   | (5)   |       | (5)   | (7)   |
| 22/8 | 8.30am             | 524          | 61.7                   | 3                             | 3      | 19     | 18     | 1     | 2     | 1     |       | 5     |
|      | to 5pm             |              |                        | (6)                           | (6)    | (37)   | (35)   | (2)   | (4)   | (2)   |       | (10)  |
|      | Total              | 3,300        |                        | 3                             | 53     | 97     | 74     | 15    | 5     | 12    | 9     | 29    |
|      |                    |              |                        | (10.1)                        | (16.2) | (29.7) | (22.6) | (4.6) | (1.5) | (3.7) | (2.8) | (8.9) |

- 1. Contact or relative of student/teacher/footballer
- 2. Advice on sick person
- 3. General advice on meningococcal disease plus or minus vaccine information
- 4. Information re vaccine specifically
- 5. Contact of another meningococcal case
- 6. Going to social or athletics meet at the school
- 7. Enquiry from health professional
- 8. Eligible student/teacher/footballer (enquiry re intervention or side-effects of prophylaxis)
- 9. Unclear

following television and newspaper coverage has been reported by other help line services.<sup>1,2</sup>

The hotline ran over a weekend when regular medical services were not routinely available to most people and only hospital Emergency Departments were available to field calls from the public. Hospitals were instructed to forward calls to the hotline and it was reported that this service was welcomed by hospital staff. Public Health Units and hospitals still received large numbers of calls and would likely have been overwhelmed if the hotline had not been available.

Inappropriate calls to the hotline might have been avoided if the media had not suggested that the hotline be called for concerns about management of sick people. It is more appropriate that people seek advice regarding an acutely ill person from their general practitioner or nearest hospital.

Just under 5 per cent of calls concerned other suspected cases of meningococcal disease. Therefore, it is important that the medical officer supervising the hotline be briefed on all recent confirmed or suspected cases. Although health service providers received direct information about the campaign, the hotline also served as an additional means of communication with this group.

The establishment of a hotline to deal with community concerns is a valid procedure in such a setting of high community concern especially when fuelled by media reporting. However, the costs involved mean that such interventions should be considered only when the community concern is such that additional reliable methods to the usual media releases of providing consistent information to the public and dealing with misinformation are required.

# Acknowledgements

We thank Rod Davison, Linda Selvey, Trevor Barnes and Henry Petracci as well as the medical and nursing staff who provided accurate and sympathetic advice.

# References

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