Emergency Preparedness: A Longitudinal Query of MCH Impact

For the last several years, emergency preparedness has been a constant presence in health departments across the country. In the wake of recent events, including hurricane Katrina, the attention given emergency preparedness by public health is not likely to abate. Since 2003, CityMatCH has been querying its members annually to ascertain the impact of emergency preparedness activities on maternal and child health (MCH). Our members’ responses reveal how MCH leaders are managing the changes and finding ways to make current circumstances work for mothers and children in their cities.

**Background and Methods:** In this query, CityMatCH member representatives rate their agreement with four core statements about the impact of emergency preparedness (formerly referred to as bioterrorism) activities in their health departments (See Figure 1). This year, the query was administered via the internet, using Macromedia ColdFusion software. Responses were accepted over a three-month period between May 13, 2005 and August 12, 2005.

**Response Rate:** Representatives from 86 of 152 CityMatCH member health departments responded to the survey for an overall response rate of 57 percent. The response rate for members with central cities under 200,000 (according to Census 2000) was 53 percent; it was 62 percent for cities between 200,000 and 400,000, and 59 percent for cities of 400,000 and over. This difference was not statistically significant (p=.6108), indicating that results are likely to be unbiased with regard to city size. Federal regions in the eastern United States were better represented than central and western regions, but this difference was also not statistically significant (See Figure 2).

**Demographics of Respondents:** Our respondents were 84% female. Twenty-four (30%) of 81 respondents who gave their racial/ethnic background indicated that they were something other than “white.” Respondents’ ages ranged from 25-65 with a mean of 52 years (N=67). Asked how long they had been in this particular job, 79 of them responded, and their answers ranged from less than one year to 35 years, with a mean of 7 years. There were no significant relationships between city size and demographic characteristics of our respondents.

**Overview of Results:** More than three fourths of our MCH leaders continue to play a role in emergency preparedness (EP) activities, which gives them the opportunity to bring MCH concerns “to the table.” Although respondents indicated that EP activities and trainings continue to take significant staff time, the perceived adverse effect of EP is diminishing. When asked to indicate whether EP emphasis had adversely affected their health departments’ MCH programs and activities, 51 percent of respondents in 2003 agreed. In 2004, 39 percent agreed or strongly agreed, in 2005 the percentage decreased to 23 percent (p=.0386).

Though many believe that important MCH issues are not being adequately addressed, few attribute the problem to emergency preparedness activities. In fact, in each year of the survey, just over one third of our members have indicated that their health departments have found new opportunities or experienced innovation as a result of recent emphasis on Emergency Preparedness.

**Risk Communications 2005:** This year, three new questions were added to the query, to assess members’ participation in risk communication activities. We learned that 89 percent of our responding member health departments (N=74) do have a risk communication plan, and that 56 percent (N=72) have received formal risk communications training. A majority (52 of 74, or 70 percent) perceive that there is “currently an increased emphasis on risk communication” in their health departments (See Figure 3).

The majority of comments indicate that the new emphasis on risk communication has benefited MCH. Training has helped our members communicate better regarding MCH issues: “We have better links and relationships with various media sources as a result of the increased emphasis on risk communication and these links/relationships are useful for publicizing our MCH programs.” Direct communication with consumers has also benefited in some cities: “We are increasing our communications staff that are available to help the MCH programs in the development of public education materials.”

**Discussion and Analysis of Comments:** All questions from the survey were analyzed with respect to population of the central city in the health department’s jurisdiction (Small cities are defined as populations less than 200,000; large cities are 400,000 and over, using 2004 census figures). The survey found that members in small cities are significantly more likely to feel that EP emphasis has adversely affected their department’s MCH programs and activities (average rating 3.0 for small cities, vs 2.2 for mid-sized and 2.5 for large cities, p=.0121). Designated leaders for MCH

![Figure 1. Trends in the effects of BT/Emergency Preparedness on Urban MCH (CityMatCH members query, responses to four core statements)](image-url)
are somewhat more likely to be involved in EP in smaller cities, but the difference is not statistically significant.

Some cities reporting little or no adverse effect indicate that separation of funding streams protects their MCH programs. Others report both adverse effects and benefits of EP. Some respondents note serious deficits in MCH areas such as women’s health, chronic disease prevention, FAS prevention, mental health or women in the legal system, but do not believe EP is responsible.

Among respondents who agree that EP has adversely affected their health departments, the most commonly reported impact of EP activities is on staff time. “Staff time has been pulled to planning or implementing activities related to Emergency Preparedness. This has resulted in reduced direct service time to MCH patients (e.g., cancelled or downsized clinics, decreased outreach visits).” In addition to the time taken, there is a sense that the increased emphasis on EP is taking attention away from MCH activities in some cities. “Public interest in MCH has taken a back seat to issues of preparedness.” Some health departments are managing to keep their MCH programs in place, but cannot meet increasing community needs.

The most-cited new opportunity provided by EP programs is staff training. While this training is NOT specifically about MCH, it has helped staff with their MCH duties in several ways, including increasing their media savvy, giving them a broader perspective of public health and teaching them how to do mass immunization programs. Other positive impacts were infrastructure improvements and new partnerships that might have a role in emergency preparedness.

In Conclusion: Emergency Preparedness efforts have taken large amounts of staff time for planning, training and carrying out activities. In some cases, this has directly affected services to mothers and children and taken the spotlight away from traditional MCH issues. In many health departments, budget cuts affecting programs and infrastructure have occurred or are threatened, and increasing needs are not being met with increasing capacity (though it is not clear that EP is the cause). However, many of our members have found ways to help urban women and children benefit from EP activities.

Though planning meetings take time, members who are personally involved with EP planning have been able to ensure that planners consider the needs of mothers and children. Though extra training can be a burden, new skills in messaging and media relations can help with routine MCH communication. As the media emphasizes bioterrorism, disaster management and a possible influenza pandemic, the public becomes more aware of the existence and multiple functions of public health. Health departments have learned how to “reach out to all” with mass immunization clinics, and partnerships established for these exercises are being utilized for MCH purposes.

Footnotes:

1 The first year, as the issues were being explored, members were asked whether they agreed or not; the following years they were asked to rate their level of agreement on a Likert scale (5=strongly agree, to 1=strongly disagree). The first year’s “percent agreement” is roughly comparable with “percent agree or strongly agree” in succeeding years.

2 In the original 2003 query, members were asked, “As a result of recent emphasis on BT preparedness and smallpox planning, have your health department’s MCH programs and activities been adversely affected?” In 2004 and 2005, members were asked to rate on a Likert scale (5=strongly agree, to 1=strongly disagree) their agreement with the statement, “as a result of emphasis on Emergency Preparedness, my health department’s MCH programs and activities have been adversely affected.”