
MEMORANDUM

TO: RICHARD DALEY, GOVERNOR OF CHICAGO
FROM: VERONICA VALLEJO, E&A CONSULTANTS
SUBJECT: THE CITY OF CHICAGO AND THE 1995 HEAT WAVE
DATE: MAY 5, 2008

Background:

The heat wave of 1995 marked one of the deadliest disasters in United States and Chicago's history. The heat wave lasted five days and claimed 522 lives according to one count and 733 lives according to another. However, the heat wave was not recognized as a disaster until after the heat wave hit (Varley, P., 2002, p. 1-2). The following memorandum will address issues concerning why a crisis of such magnitude had gone unrecognized until after-the-fact. In order to prevent another disaster from killing and/or injuring large numbers of individuals, appropriate action is necessary. Furthermore, recommendations will be provided in order to address critical issues Chicago faced before and after the heat wave. The recommendations will allow Chicago to recognize and mobilize its forces before hundreds of lives are claimed.

Lack of a Heat Emergency Plan

The City of Chicago developed a haphazard emergency plan to deal with heat wave emergencies. The plan was a page and a half in length and few city officials realized the policy existed (Varley, P., 2002, p. 2-3). Thus, in the event of an emergency, individuals lacked direction. French management theorist and practitioner Henri Fayol

(1949) identified five general functions managers should perform. The functions consisted of planning, organizing, commanding, coordinating, and controlling. Here, we will concentrate on the first step, planning. Planning is a function that is easily disregarded due to managers' hectic schedules. Planning involves preparing your organization to move effectively into the future. Effective managers are conscious that taking time out to plan has a greater return in the end (Denhardt B., & Denhardt V., 2006, p. 166-167).

The City of Chicago's Heat Wave Emergency Plan:

It is pertinent that the city establish a heat wave emergency plan. The emergency heat wave plan will be a clear and concise document explaining what to do before and during a heat wave. The first step in the plan is to send the public a clear message that a heat wave will hit. It is critical to communicate that heat waves are dangerous and can be life threatening. Secondly, inform the public regarding the heat wave conditions. For example, when the heat wave will be dangerous, the length of the heat wave, and how hot it will feel at various times during the day (U.S. EPA, 2007).

The plan needs to identify how the city will assist individuals who are at greatest risk. The city needs to assess locations with vulnerable populations such as homeless individuals and nursing homes. The city should indicate how to staff additional personnel in order to handle the increase in demand as well as offer functional cooling centers and emphasize the use of centers. Furthermore, the emergency plan needs to address the use

of additional resources during the heat wave such as toll free numbers and websites (U.S. EPA, 2007).

Unclear Legislation

Policy formulation is the creation of relevant and supportable courses of action for dealing with problems. For policy formulation to be successful, it is necessary that policy proposals be adaptable. In addition, policy adoption is the act of choosing which alternative will be chosen as the preferred course of action to meet a given problem (Theodoulou, S. & Cahn, M, 1995, p. 88-89). Thus, unclear legislation is at times formulated in order to facilitate policy adoption and implementation. The Emergency Medical Services Commission of Metropolitan Chicago established a bypass policy, which allows overwhelmed hospitals to re-route patients to the next less burdensome hospital. However, the criterion for declaring bypass was vague and open-ended. The vagueness of the bypass legislation leads to abuse by emergency departments. It became a joke that emergency department would go on bypass “ for the Christmas party” (Varley, p., 2002, p. 8).

Revision of Legislation

Policies are rarely maintained exactly as adopted. Change begins to occur as soon as policy is implemented because of the intrinsic ambiguity of legislation. One of the reasons for change is that once the legislation is implemented the policy demonstrates its defects and challenges (Theodoulou, S. & Kofinis, C., 2004, p. 201-202). Therefore,

Chicago must revise the current bypass legislation in order to provide clear and succinct criteria for when and how hospitals can declare bypass. The new legislation must also include a provision that mandates the monitoring of hospitals on bypass. Stakeholders must lobby in order to change the legislation. Denhardt & Denhardt (2006) identify two methods of lobbying, direct and grassroots. Through direct lobbying, Chicago can communicate with legislators or with other public officials on the matters concerning bypass legislation on which they have a role to play in the bill's formulation. On the other hand, Chicago can also take part in grassroots lobbying. Through grassroots lobbying, Chicago can influence the legislative process attempting to sway public opinion on the policy issues (p. 119).

Responsiveness vs. Efficiency

Public administrators frequently encounter difficulties in integrating efficiency and responsiveness. Some of the issues include the questions of whether public agencies should concentrate only on creating desired outcomes in the most efficient manner possible or should agencies be responsive to stakeholders (Denhardt, B., & Denhardt, V., 2006, p. 20). 11 of the city's 67 hospital emergency departments announcing, "bypass;" therefore, they temporarily closed their doors to new ambulance patients. Many of the hospitals lacked the medical equipment and staff resources to cope with unusually high numbers of emergency patients. The fact that 11 of the hospitals to be on bypass at once put extra burden on the other hospitals (Varley, P., 2002, p. 5). Chicago was faced with the dilemma of whether to continue to allocating its resources to patients in the hospitals and closing its doors to all other patients. Allocating resources is described as the

mechanics of investments or how one disposes of one's resources for greatest possible effect (Mankiw, N., 2007. p. 225). The hospitals were faced with allocating resources efficiently or being responsive to the various stakeholders/patients involved in the resource allocation process. In the article "The Listening Bureaucrat: Responsiveness in Public Administration (1994)," Stivers discusses that the increasing demand for responsiveness in government policy-making places the continued existence of a professional viewpoint portrayed by independence of judgment and indifference to political pressures increasingly at risk in the corridors of American bureaucracy (p.345). The primary tactic for dealing with the idea of responsiveness is to treat it as an aspect of responsibility. Woodrow Wilson argued that, in order to be specialists and efficient rather than political, the administrator should have a will of his own in the choice of means for accomplishing his work. He is not and should not to be a mere passive instrument" (p. 212). Here, Stivers discusses the ongoing conflict between responsiveness and efficiency.

Implement the 10- Point Plan to Avoid Casualties from Heat Waves

Hospitals must implement a disaster plan to deal with surge of patients during disasters. In addition to clarifying bypass legislation, hospitals need to adapt the 10-point plan to avoid casualties from heat waves. David C. Seaberg, M.D., a member of the board of directors of the American College of Emergency Physicians, proposed a 10-point plan to increase emergency department capacity in the nation's hospitals, alleviate overcrowding and improve surge capacity. The plan will allow emergency departments to be better prepared in the event of a disaster (Seaberg, D., 2006)

The plan includes:

1. Increase surge capacity by ending the practice of “boarding” admitted patients in emergency departments because no inpatient beds are available. This requires changing the way hospitals are funded to allow for inpatient and intensive care unit surge capacity to manage this burden.
2. Implement protocols to collect and monitor real-time data for syndromic surveillance, hospital inpatient and emergency department capacities and ambulance diversion status.
3. Homeland Security agencies on the federal, state and local levels need to understand that hospitals and emergency departments are part of the community’s critical infrastructure.
4. Require hospitals and communities that are severely affected by a natural or man-made disaster, or even a severe influenza outbreak, to postpone elective admissions until the crisis abates, and develop a way to compensate those facilities for their loss of revenue.
5. Command and control of disaster medical response must be better coordinated across federal, state and local agencies and departments.
6. Establish a committee of stakeholders and disaster-medicine experts from the public and private sectors and academic institutions to develop and/or refine national medical preparedness priorities and standards. Change the national preparedness culture to one that is consensus-driven and evidence-based.
7. Provide federal and state funding to compensate hospitals and EDs for the unreimbursed cost of meeting their critical public health and safety-net roles to ensure they remain open.
8. Establish a sustainable funding mechanism for disaster preparedness for hospitals, EDs and emergency management that is tied to national benchmarks and deliverables.
9. To ensure emergency physicians and nurses play a primary role in disaster planning and are considered in any national allocation of resources and protective measures, Congress should continue to include them in any definitions regarding first responders to disasters, acts of terrorism and epidemics.
10. Congress should approve the Access to Emergency Medical Services Act (H.R. 3875), which provides incentives to hospitals to reduce overcrowding and provides reimbursement and liability protection for EMTALA-related care (Seaberg, D., 2006).

Staff Overload/ No Volunteers

Chicago did not have enough staff to deal with the growing demand of victims. The coroner's office, hospitals, fire department, emergency medical services, and the police department needed additional staff, for they had been working countless hours and were exhausted. Chicago lacked volunteers to help various agencies who were understaffed. Volunteers assist employees in meeting the agency's mission and become a strategic part of human resource management and planning. Volunteers deliver services and foster community involvement. In addition, they can give detailed attention to people for whom paid employees do not always have time. Most importantly, volunteers provide an expansion of staff in emergencies and peak loads (Pynes, J., 2004, p, 121-123).

Citizen Participation

Citizen participation not only enhances the end result but also acts as a tool for empowerment and social change. Chicago needs volunteers and the best way to recruit volunteers is by encouraging citizen participation. Chicago should adapt the model Learning and Design Forum, which focuses on the significance of interactive processes that build trust among participants, and lead to mutual understandings and agreements. The formal expressions of the collaborative deliberation are signed agreements between city departments and neighborhood councils. The agreement should include the guideline and processes for a more collaborative delivery of services during a heat wave. The process should be developed through a series of workshops with homework between sessions. The priority of the deliberations is to identify obstacles that prevent the

excellence in service delivery during a heat wave, design new processes for the delivery of services, and design a plan that will address the actual service-delivery problem by using the new processes identified throughout the forum. Finally, the Learning and Design Forum will demonstrate that creative, collaborative, and mutually beneficial partnerships and agreements can be developed between diverse groups such as city agencies and neighborhood councils (Kathi, P. & Cooper, T., 2005, 560-565).

The Curse of Cluelessness

Mayor Daley was aware that the heat wave was going to hit Chicago and instead of taking precautions, he told reporters and residents not to “blow it out of proportion.” Mayor Daley then left to his vacation spot, near a lake (Klinenburg, E., 2002, p. 181). In the book *Reframing Organizations: Artistry, Choice, and Leadership* (2003), Bolman and Deal discuss that management often struggles with opposing evidence, but management usually precedes by pushing it aside until they come across additional evidence that is too clear to misperceive which makes vivid still other signals they do not want to see. Bolman and Deal call this the “self-destructive intelligence syndrome” because intelligent leaders sometimes make extremely unintelligent decisions. It is difficult for some leaders to see old problems in a new light or find a more promising way to look at challenges. When leaders do not know what to do, they do more of what they know (p. 6-7). In order to prevent leaders from making unintelligent decisions, a disaster management plan needs to be developed.

Disaster Management

The undertaking of managing modern American cities has changed. It is no longer enough to plan for roads, sewers, and convention centers. Planning for natural disasters is crucial. It is necessary to manage disasters as events. David Alexander argues that disasters tend to be cyclical events, and for the purposes of management are divided into four phases: mitigation, preparation, response, and recovery. Emergency management is a leadership style that would allow Mayor Daley to become a more effective leader. The first step, mitigation, encompasses all actions designed to diminish the impact of future disasters, such as planning for evacuation. Preparation, the second step, refers to action taken to reduce the impact of disasters when they are forecasted or imminent, such as evacuation of vulnerable populations. The following step is response. Response refers to actions taken to diminish the impact during and after the disaster. The goal of response is to save and protect individuals, rescue victims, and provide care. The final step is the recovery process, which involves restoring services (Morgan, et. al., 2004, p. 321-333). Mayor Daley must realize that there is no substitute for careful planning when it comes to disaster management.

Fuzzy Boundaries

The Heat Wave disaster exhibited a lack of coordination between bureaucracies. Many of the agencies shared responsibility for pieces of work and no agency had responsibility for the entire situation. Each agency was part of multiple networks and the impossibility of drawing clear boundaries arose around all of the agencies. Furthermore, lack of coordination with nongovernmental entities is evident. In the book *Transformation Governance: Public Administration for the Twenty First Century*

America (2002), Kettl, D discusses the concept of fuzzy boundaries. The fuzzy boundary problem confounds the tasks of administration building coordinated efforts to solve the complex problems. Administration in the public life is a search for coordination it is about leaders pulling together widely disparate resources such as money, people, expertise, and technology to do complex things. Therefore, with responsibility for management to be shared broadly, no bureaucracy can completely encompass, manage, or control any problem that really matters. Managing government programs effectively depends on bridging the fuzzy boundaries that separate those who make policy from those in the complex interdependent chain of those who share responsibility for implementing it (p. 59-60).

Quality Circles

Implementing quality circles will help bridge the fuzzy boundaries that separate those who make policy from those who implement policy. Quality circles developed in order to undertake unruly problems, look for areas of possible future problems and improve them, or to search for general opportunities for improvement (Goldstein, 1985). Chicago needs to encourage the development of quality circles that are made up of employees from various agencies. The quality circles should consist of six to twelve volunteer employees led by their first line supervisor and assisted by a trained facilitator. The groups select their own heat wave problems to work on and they approach those problems through a structured, problem solving process. The recommendations are then presented to the team leader's immediate supervisor, who decides whether or not to carry

out the recommendations. Team leaders, facilitators, and circle members are trained in quality circle operations, group dynamics and problem solving (Denhart, et. al, 1987). Not only are social needs of the circles met, but also the structure and solution orientation of the circle meeting minimize group process variables and assure that the groups are working toward the welfare of the organization as well as toward the welfare of the group itself (Roll, Roll, 1983). Thus, quality circles can provide an avenue for various agencies to work together in order to bridge the boundaries between agencies. If the quality circles focus on interdepartmental coordination, then the City will be better prepared the next time a heat wave hits.

Equity vs. Efficiency

The growing spatial concentration and separation of poverty and wealth hurts all parts of our metropolitan regions, but they have particularly harsh effects on those consigned to live in high poverty levels (Dreier, et. al., 2004, p. 76). Virtually all the emergency departments on Chicago's South Side, which is a large, densely populated low-income area were on bypass. Thus, patients had to travel long distances to get to the closest open emergency department (Varley, 2002, p. 7). The issue of equity versus efficiency has been a long-standing dilemma among public administrators because public administrators frequently encounter difficulties in integrating efficiency and equity. One of the questions administrators confront includes whether public agencies should concentrate only on creating desired outcomes in the most efficient manner possible or should they focus on maintaining equity (Denhardt, B., & Denhardt, V., 2006, p. 20). Efficiency means that society is getting the most it can from its scarce resources. Equity

means that the resources are dispersed fairly among the individuals. A measure of inequality would take into account not only material dimensions of life, but also its social dimensions. Social inequality implies that people share the same access to public amenities and responsibilities regardless of economic status. Access to justice, police stations, hospitals, and civil liberties must be unconditioned by wealth or income (Schiller, B., 2008, p. 15). Therefore, the manner in which Chicago handled the bypass situation demonstrates this struggle because many low-income individuals were disproportionately affected by the bypass legislation, which attempts to provide efficient service.

Cost-benefit Analysis

The tool developed to help government evaluate projects is a cost-benefit analysis, for it helps measure program outcomes (Lee, R. et. al, 2004, p.202). Cost-benefit analyses help clarify the pros and cons of investment decisions, and they help move the decision processes towards greater rationality. The goal is to make as complete an accounting as possible of the benefits and costs to society of a proposed project or program. Furthermore, cost-benefit analyses help tip the scales against bad projects and toward good ones (Levy, J., 1995, p. 135). Chicago must conduct a cost-benefit analysis in order to look at the social and economic issues surrounding bypass legislation. The cost-benefit analysis needs to be approached as a multiple step project that is thorough, well organized, communicated clearly, and factual. It must provide the necessary information in order to allow management to make a reliable decision and take action.

The first step is a preliminary survey, which allows personnel to gather information on the existing hospital bypass situation. The second part of the analysis is a feasibility study, which provides the confirmation that the analysis offers the benefits initially projected. It should address the short and long-term impacts of the bypass legislation. The two steps provide information that is necessary to move forward with the cost-benefit report (State of Texas, 2008). Thus, the City of Chicago can conduct the cost-benefit analysis on bypass and determine if the legislation is producing the desired results.

Partnering with Private Companies

Fulfilling government responsibilities requires integrating complex networks of organizations. The City of Chicago did not integrate networks in order to deal with their responsibilities to citizens. The City of Chicago was not able to call in private ambulance companies because they worked with different rules and financial arrangements than did the public emergency medical service. Both charged fees for service; however, the private ambulance companies charged demanded payment upfront. Private companies also charged patients according to different formulas (Varley, 2002, p.14). In the book *Governing by Networks: The New Shape of the Public Sector*. (2004), Goldsmith and Eggers discuss that the structure of government with its lumbering personnel process and its self-inflicted legal constraints limits flexibility. Networking, through alliances with highly fluid private sector, allows governments to adapt better to changing circumstances (p.74). In the case of Chicago, the changing circumstances are the emergency heat waves.

Develop a Public-Private Partnership/Rainy Day Fund

In order to deal with the City's lack of flexibility and networks, a two-pronged solution is necessary. The possible solutions are to develop a public-private partnership with a private ambulance company in order to help the City during an emergency heat wave and create a rainy day fund in order to pay for the extra services that are needed during the heat wave.

There is a growing realization that government is only one element of society, the private sector also plays an important role in a healthy society. The City needs to develop a public-private partnership with the ambulance companies. A public-private partnership is a form of privatization. It is an arrangement in which a government and private entity jointly perform a public activity. In this case, the partnership would be during emergencies (Savas, E.S., 2005, p, 14-15). The partnership can be formed through private companies bidding for the government contract. Before the bidding takes place, the City will outline the basic guidelines of the contract. The contract should include that the private companies will be used during emergencies. The contract should also include payment methods on the part of patients and the City.

Budget stabilization funds (BSFs), also known as rainy day funds, are a relatively new addition to the set of tools states have at their disposal to face the fiscal pressures brought about by business cycles. BSFs can help states smooth their consumption by serving as receptacles for savings to be used in times of emergencies. BSFs are simply a separate account for savings where funds can be stored during good times to withdraw

them in times of need (Rodriguez-Tejado, I., 2006, p.4). The City should allocate ten percent of the City's general budget to a contingency reserve in order to fund emergencies such as heat waves. The rainy day funds will allow the City to pay the private ambulance companies for the services they rendered under their emergency contract.

Coroner's Office did not Research Possible Strategies

Public administrators often ask questions that begin with "how effective," "how efficient," "how adequate," and "why." They need to decide how serious a problem is or what distinguishes more effective programs from less effective ones (O'Sullivan, E. et. al., 2003, p. 1). However, the Medical Examiners Office did not ask questions of this nature. They did not use data to make better decisions, to monitor the decisions, or examine their effects. The Medical Examiners Office did not look into best research strategies during an emergency. The Cook's County Medical Examiners Office was not able to keep up with the amount of dead bodies that were coming in. Furthermore, there was not enough refrigeration space in order to place the dead bodies. Many of the bodies were scattered around the offices and vehicles with bodies were in a line that wrapped around the entire parking lot (Klineberg, E., 2002, p. 8, 148).

Best Practice Research

No matter how unique a problem may seem it is likely, that the issue has occurred and has been solved somewhere else. Best practice research is designed to help organizations learn from others experiences. Best practice research allows agencies to replicate successes and avoid mistakes. Conducting best practice research is critical to

developing a full understanding of a problem and all of its components from multiple perspectives. The Medical Examiners Office must look at best practices used in other Medical Examiners Offices during an emergency. The first step is to formulate clear questions. Identify issues that are not part of the research goals in order to gain a more comprehensive picture of the questions being asked. Step two is to gather preliminary information. This stage requires the use of the internet, interview, and libraries. Here, the goal is to begin identifying other cities that have dealt with an overload of bodies during an emergency. Find similar organizations with similar problems. The third step is to interview knowledgeable people that were identified in the data-gathering step. It is critical to talk to individuals that are involved in projects that are of interest in order to get an insiders' perspective (Eglene, O., 2000, p. 1-5). Therefore, conducting best practice research will allow the Medical Examiners Office to be better prepared the next time an emergency heat wave hits Chicago.

More than twice as many individuals died in the Chicago heat wave than in the Great Chicago Fire of 1871. The Oklahoma City bombing in April 1995, which killed 168, and the TWA Flight 800, which killed 230, were several times less fatal than the Chicago heat wave. The previous examples of catastrophic events help put the Chicago heat wave into perspective (Klineberg, E., 2002, p. 10). The Great Chicago Fire, Oklahoma City bombing, and the TWA flight were not dismissed and considered a catastrophe until after-the-fact. Any event that has the possibility of taking lives needs to be taken seriously. Unfortunately, the Chicago heat wave was not seriously. However, Mayor Daley has an opportunity to learn from the City's mistakes and make changes

before another emergency heat wave hits. The following memorandum identifies issues during the Chicago heat wave and makes recommendations on how to remedy the issues in order for the City to be well prepared in the event of another emergency heat wave.

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