University of Delaware
Disaster Research Center

PRELIMINARY PAPER
#101

THE NEED FOR PLANNING, TRAINING,
AND POLICY ON EMERGENCY PREPAREDNESS*

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The title I have given the remarks I will make is The Need for Planning, Training, and Policy on Emergency Preparedness.

The need is not as self-evident as might appear at first glance. Even when the need is recognized there is sometimes difficulty in seeing how the need can be communicated to others. And even when it is communicated to others, there frequently is an overlooking of the fact that the three elements--planning, training, and policy are not separate and independent, but intricately linked to one another. This, in part, is why although the emphasis of this symposium is on training, I think it is appropriate to look at the training in a larger context.

In my remarks I want to suggest some of the reasons for the need to plan, to train, and to have policy for emergency preparedness at all governmental levels. I want to at least hint at how the need might be communicated to others. And I want to allude to the necessity of seeing the three elements as linked to one another.

The absence of any one of the key elements means that the others can not be implemented very well.

We will try to make our points by setting forth six basic themes or basic principles.

We are going to go about making our points by drawing on the existing research base. Therefore, instead of directly addressing the issues, let me first draw some parallels.

We know from studies a great deal on how to plan for warning populations about community dangers and threats. There are some parallels between what we know on how to warn individual citizens of disasters, and how we might go about planning, training, and developing policies for emergency preparedness. No parallel is ever perfect, and this one is no different from any other. At any rate, when flood waters are threatening a community or there has been a train wreck involving dangerous chemicals, there is a question of how to effectively warn the endangered population.

Study after study has consistently shown that warnings will be effective only if certain general principles are followed.

A basic principle is that the population that is warned must accept the probability that there is probable danger. This acceptance in turn is dependent on what? It is dependent on: a) that people must perceive that there is personal danger to themselves, or to relatives and friends that are important to them, or to property or symbolic objects that they value highly; b) the danger must be seen as relatively

certain, not just vaguely possible; c) the certainty has to be thought of as relatively immediate, not something in the distant future.

Our point is that just as the case of warning populations of dangers, the same factors are operative in getting acceptance of disaster planning.

The first basic principle, therefore, is that there has to be a perceived possibility that there is a potential danger or dangers. The danger(s) in turn must be seen as directly threatening, highly possible if not probable, and likely to occur within a relatively short time span. Just as citizens are generally not convinced by warnings that do not have the characteristics of indicating personal, very probably and immediate danger, so similarly, whether you are talking of the public at large, various community interest groups and organizations, or governmental and political figures-- few will be convinced that disaster planning is worthwhile unless the dangers associated with disasters are seen as definitely threatening to what is perceived as valued, unless it appears that the threats are fairly probable, and unless the danger is defined as relatively immediate at hand.

How one can specifically convey this message or package of ideas _will_ vary from locality to locality, from jurisdiction to jurisdiction.

But there are some general points that can be made almost anywhere. The need for disaster planning can be emphasized by noting that we are going to have more and worse disasters in the future. Whether looked at quantitatively or qualitatively, it is an assured fact that we are going to have more disasters than ever in the future, and that as a whole the disasters are going to be worse than those in the past.

I am not the voice of Cassandra. Some very simple matters can be pointed out.

While there is no reason to think that natural disaster agents (what we like to blame the supernatural for--so called Acts of God) will increase or are increasing. But because of greater numbers of people, higher population densities, and increased living in vulnerable areas, we can be sure that some natural agents that in the past would have impacted nothing of consequence will in the future hit communities. In one sense there is more, and there will continue to be more to be impacted even if the number of natural disaster agents does not change at all from the past.

But more important for this gloom prediction of the future is that to the Acts of God we have added the Acts of man (and in these days we want to be sure women get equal billing)--therefore, we can speak of the acts of men and women or in more general terms, they are the newer agents for the most part of a technological nature. Bhopal, Three Mile Island, even the threat at Mississauga are merely specular events indicating the future.

A few examples should suffice to make the point.

Many localities which in the past were little at risk from natural disaster agents, are now assured of being at risk to dangerous chemicals. All they need are not chemical plants, but major highways or railroads. Let me give a few statistics. About 35% of all freight trains contain dangerous material. One truck in every 10 carries hazardous items. I will not attempt to detail the numerous threats posed by hazardous waste sites.

Unfortunately, chemicals are not the only newer kinds of technological threats. We have the whole nuclear area, and I leave aside here completely superpower nuclear war. The existence of nuclear material, nuclear plants along with terrorists, the certainty of accidents in plants and transportation, and minor nuclear war among smaller nations almost insure that all of us have become vulnerable in this respect. All it will take is one bomb or device being exploded by terrorists or world benefactors, such as Khadafi in Libya or Khomenhi in Iran, to send everybody ducking for cover around the world where the nuclear cloud will drift. Canada had a minor scare when a radioactive Russian satellite fell onto Canadian soil, but that is nothing to what may actually occur totally outside of worldwide nuclear war.

There are other technological disaster possibilities. We can have very complicated electrical and lifeline system breakdowns. Remember the Great Blackout of 1965 in which southeastern Canada was involved. We also now have fires and explosions in high rise buildings which can actually be much worse than in the past since we frequently managed to prevent fires by having building material which will asphyxiate or otherwise poison people. Any highly industrialized and urbanized society insures for itself a vast array of potential emergencies and disasters. Other interesting possibilities are around urban droughts; infrastructure collapses of dams, bridges and aqueducts, mass food poisoning (watermelons, milk, wine); jumbo jet plane crashes, etc.

We have stated the future dangers in macro level terms, but any good local emergency management office should be doing a good risk or hazard analysis of their local area and be able to point out there are no safe areas anywhere.

Now, it is dangerous, however factually correct it may be, to only point out dangers or threats. It can lead to fatalism and a sense of hopelessness. So while one major principle for bringing about disaster preparedness is to point out that there are personally threatening, highly probable, and relatively certain dangers, it is vital that this be stressed at the same time that it is also stressed that while there is a potential problem, something can be done about the problem, namely that planning for mass emergencies can and does make a difference.

To create fear alone is a very poor tactic if action is desired; the fear must be countered with a hope that something can be done about the threat or danger. In terms of what we are talking about the hope is to be suggested by noting that emergency planning can mitigate, if not prevent disasters and emergencies.

That planning can and does make a difference can be illustrated both theoretically and empirically. In theory and logic it follows that if one knows what to expect, the options available, and the results that can be expected, one will be better prepared in responding.

Disaster planning ought to attempt to reduce the unknowns in a problematical situation. <u>Planning should work at anticipating problems and possible solutions</u>. The contingencies are too many to anticipate all possibilities. However, good planning can indicate some of the major parameters of the situation. Thus, for example, we can incorporate into the planning process, the perspective that disaster victims will take initiatives and will not be passive, or that helping organizations will have difficulty coordinating new tasks. Such an approach reduces the unknowns which have to be considered. It not only narrows the range of problems which need to be anticipated, but also lessens the number of alternative or optional solutions which have to be examined. If disaster victims do not markedly engage in antisocial behavior, for instance, there is little need to plan for a variety of security measures or the mobilization of many law enforcing agencies. On the other hand, if there is always a degree of tension between local and extra-local organizations, be they in the public or private sectors, this ought to be recognized and addressed in some way in preparedness planning.

Disaster planning ought to aim at evoking appropriate actions. At times, planning appears primarily as a mechanism for speeding up response to crisis situations. It is true that good planning may allow a quicker response to certain disaster problems. But that is a byproduct rather than what ought to be a major objective. <u>Appropriateness of response rather than speed of response is far more crucial</u>. Accordingly, it is far more important to obtain valid information as to what is happening than it is to take immediate actions. Reacting to the immediate situation may seem the most natural and humane thing to do, but it is rarely the most efficient and effective response. The immediate situation is seldom that important in terms of both short-run and long-run consequences. Planning, in fact, should help to discourage impulsive reactions in preference to appropriate action necessary in the situation. Thus, for example, planning should be directed at slowing down the convergence of helping organizations at a disaster site, thus reducing coordination problems.

Preparedness planning ought to be based on what is likely to happen. Some planners seem more oriented toward the most ideal response type situation which could be imagined rather than the realistic possibilities which will be present. This is

unfortunate. It is far better to plan on the basis of what people and groups usually do in normal situations and emergencies, than to expect them to change their behavior drastically in disasters. In this sense, <u>planners must adjust their planning to people, rather than expecting people to change their behavior in order to conform with the planning</u>. This principle is equally applicable to organizations. The great majority should not be expected to act and react much differently during an emergency than they behave during everyday operations. There is no use to pretend that concerns, for example, over organizational domains or territories which prevail during ordinary times will suddenly disappear during mass emergencies. Disaster planning must adapt itself to expect organizational behaviors, rather than trying to force organizations to drastically alter their activities to reflect the dictates of some planning.

We do not have time to document or detail specific cases, but the good although not perfect response at Mississauga stemmed from some planning. In fact, that particular case illustrates that <u>almost</u> any kind of prior planning will help. I say almost because it is not true that all planning will have good consequences. Bad planning can lead to bad responses in disasters, and some poor planning is worse than no planning at all.

We go on to our third principle, namely that planning can be helpful only if it is the right kind of planning.

What is the right kind of planning? Very important is understanding that planning, the process is what is crucial, not an end product, such as disaster plans or even the way of teaching or educating about the planning as though training courses. Too often the goal of emergency planning is seen as the production of written plans, or setting up training courses. That is not the goal at all. The goal is to create circumstances and situations which will help in preventing, neutralizing, weakening or mitigating the impact or consequences of disaster agents. In fact, what we will later call education or training, is really the crucial element in planning. At the very best, written disaster plans should be only one, and not necessarily the most important aspect, of good disaster planning. At worse, written disaster plans can be dysfunctional, giving the illusion of being prepared, and taking attention away from more crucial activities.

Now as a sociologist with major interests in group functioning, I can very well understand why bureaucrats in organization might lay great store on demanding, producing, counting, or otherwise seeing written plans as the ultimate goal. Unfortunately, written plans are a very poor measure of effective disaster planning. Some locations and organizations have excellent emergency planning, research shows, even though written plans may be absent. On the other hand the presence of written plans may mean very little at all. A good case being that all hospitals need written plans to be accredited, but anyone who has ever studied hospital activities at time of disasters knows that the existence of such written plans is really no indication of how

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well a hospital is prepared to deal with a mass emergency. The meeting of a bureaucratic requirement for a plan is totally independent of being able to respond efficiently and effectively in a disaster.

In emphasizing that effective planning involves a process, what are we saying?

Disaster preparedness is not synonymous with the formulation of written disaster plans. A more useful perspective is to envision planning as a process rather than the production of a tangible product. Viewed this way, preparedness planning involves all those activities, practices, interactions, relationships, etc., whether short- or long-term, intended to improve the response pattern at times of disaster impact.

In this conception, preparedness planning includes such matters as:

- convening meetings for the purpose of sharing information;
- holding disaster drills, rehearsals, and simulations;
- developing techniques for training, knowledge transfer, and assessments;
- formulating memoranda of understanding and mutual aid agreements;
- educating the public and others involved in the planning process;
- obtaining, positioning, and maintaining relevant material resources;
- undertaking public educational activities;
- establishing informal links between involved groups;
- thinking and communicating about future dangers and hazards;
- drawing up organizational disaster plans and integrating them with overall community mass emergency plans; and
- updating continually that which becomes obsolete.

If you think back over what I have just said, you will see that in the broad sense of the term, all the activities involve some kind of training and educating. That is what planning is all about--teaching oneself and others how to act in crisis situations. Thus, the core of planning involves training and educating oneself and others.

The basic point in all this is that good planning always involves a degree of educational activity. It involves teaching not only oneself but others what is expected of them. A frequent error in organizational disaster planning is for planners to forget that they will have to inform, if not educate others (people and groups) about their respective roles under disaster circumstances. Knowing what oneself, a few key officials, or one's organization will do is not enough. The counterpart roles of others must be clear to facilitate coordination and an integrated response. Of necessity, this requires teaching others what will be expected of them.

Now another crucial part of good emergency planning is recognizing that the training and education that is undertaken must be realistic. This is another way of saying that it must be based on research. It is possible to talk as well about nonsense as sense. This is why we stress we must be realistic in planning.

Among other things this requires recognizing that disaster is not simply just a larger accident or an extension of everyday emergencies. There is not time here to note crucial differences between what could be called everyday or routine emergencies, disasters, and catastrophes. Everyday emergencies has reference to traffic accidents, small house fires, or the kind of disruption of service situations that utilities, phone companies, and cable systems have to handle almost everyday. There are routine emergencies which can be and are handled in routine ways. A disaster is not simply a bigger such emergency, simply something more, a difference of degree if one sees a routine emergency at one end of a continuum and a disaster at another end. An accident cannot be taken as a little disaster nor can a disaster be viewed as a big accident. Disasters do not only differ in degree, but they also differ in kind from everyday emergencies. The difference between routine emergencies and disasters is a difference both in quantity and quality.

Let me give four examples to illustrate some of the ways in which disaster, everyday, and even minor emergency operations differ.

(1) In disaster situations, organizations are forced into more and different kinds of interactions than they have during normal times with other groups. The greater number of contacts is accompanied by new kinds of relationships. for example, business concerns may be dealing with social service agencies that probably did not know of one anothers' existences prior to the disaster. Local private groups may have to be coordinating their activities with distant and unfamiliar governmental bureaucracies.

In everyday times, new relationships between organizations develop slowly. There is seldom need to suddenly and concurrently establish links with multiple groups, often having local, state, regional, and/or national components. In a disaster, however, there is little time available to adjust, for example, to the blurring of interorganizational boundaries, or the informal sharing or pooling of personnel, tasks, and equipment--common features of major disasters, but not minor emergencies. Complicating such situations of greater interdependence is the sheer number of new groups with varying functions, capabilities and expectations that will be involved. Even a relatively moderate size disaster will force dozens, if not hundreds, of unfamiliar local and extra local organizations to work together on unfamiliar or new tasks that are part of the community response.

In short, disasters call for more and different organizational relationships.

(2) It is usual for organizations to lose some degree of their autonomy (direct control over their own functioning) in disasters. When a community's ability to function normally is seriously threatened in our society, responsibility for security and well-being usually becomes centered in certain civil authorities. The mayor, the police chief, the local civil defense or disaster agency head, or some other official can declare a state of "disaster" and assume control of disaster related activities in a given locality for a set period of time.

As a result of this loss of organizational autonomy, things and activities which are taken for granted on a daily basis become problematical during a disaster. Even simple physical movements, such as entering or leaving one's own property, may be restricted by police lines or an evacuation order. In some disasters, such as chemical incidents, site control may actually be vested in some outside agency, such as a provincial or regional hazardous materials response team, or the federal EPA or the coast Guard. In other instances, even within the private sector, corporate or higher headquarters will intervene at times of disasters and assume responsibilities, make decisions, or set policies which normally would be the sole prerogative of the local plant, office, or operation.

In short, organizations can have their autonomy pre-empted in disasters in a way which will not occur during minor emergencies.

(3) Performance standards for organizations may have to change drastically in disasters. What is appropriate in normal times or even minor emergencies often becomes less relevant in the changed context of disasters.

For example, swift response is an absolute necessity for fire services operating or an everyday basis when responding to structural fires. This is true whether the fire organizations are public or private. But dealing with unidentified chemical substances or materials whose properties are not thoroughly understood, requires a very different response on the part of the firefighters. Delaying the response until the situation is clarified is proper under the circumstances. Some fire departments using everyday performance criteria have turned minor chemical incidents into major chemical disasters. Similarly, EMS services handling large numbers of casualties must shift from their everyday emphasis on quick response time and swift delivery of patients to hospitals (everyday and emergency performance criteria) to attempting triage of victims and judicious disturbance of injured persons to a number of area hospitals (disaster performance criteria) so as to avoid overcrowding at any one emergency room and the risk of long waits and sub-standard medical care. EMS systems operating by everyday standards under the pressure of increased disaster-related demands have badly botched responses to mass casualty incidents by emphasizing speed of response and using "snatch and run" procedures. In the same way, maintenance of production lines or continuation of office routines become less meaningful performance standards during disasters.

Disasters call for different types of organizational performance than do minor emergencies.

(4) The public and private sectors have to work much closer together in disasters than they normally do. An emergency is often something which can be handled within the confines of an organization, or coped with by the routine responses of the local emergency organizations such as police and fire departments. In such situations, there need not be much meeting or unusual crossing of the boundaries between the public and private sectors. A disaster, instead, involves the extraordinary mobilization of public community resources, and often the pre-empting of some private rights by public rights. For instance, unrestricted entry onto private property, normally very limited on everyday basis, is quite allowable under disaster conditions-- even the destruction of some of that private property for the larger community good is permissible without negative consequences. Similarly, the not altogether strictly legal requisitioning of private goods or equipment for the public good can become very acceptable behavior in a major disaster. Lest this kind of action be thought of as only involving the public intrusion upon the private, it should be noted that private personnel and resources are often freely given for public purposes at the height of a disaster. In fact, there may be private expectations and demands for goods and services from the public sector which would not even remotely be thought about in ordinary times.

In short, the line between the public and the private can get very blurred at times of disasters.

We have no time to look at examples not of organizational but human behavior at times of disasters. Research consistently shows human beings show considerable adaptability and coping behavior in situations of great stress. Realistic planning takes that into account--it does not assume that victims need to have everything done for them.

But because something can be done, such as undertaking disaster planning, and that something should be done, such as undertaking the right kind of disaster training and education--the can and should in this case will not occur unless there is also the attitude that something will be done.

The can, the should, and the will are not the same, even though they are related.

The will, in this particular case, refers to our fifth theme or principle, namely that there must be an explicit policy by those responsible for such, that disaster planning and its partial implementation in training and education, is not only worthwhile but something to which time, effort, and resources must be directed. Put

another way, there has to be a clear commitment by policy and decision makers in and out of government if anything is going to happen. A passive willingness to let disaster planning occur is not enough. Implicit rather than explicit support is not enough. If anything is going to happen, there has to be open leadership and provision of some wherewithal to do something. Leadership as the term indicates means taking the lead, getting out in front.

The wherewithal involves not only some degree of material support--although less of that is usually needed than is frequently suspected--(laments about budgets to the contrary), but the providing of legitimacy and saliency for the undertaking is also crucial. Disaster planning though training and education has to be on the regular agenda, not something turned to after a mass emergency has already occurred.

What will induce governmental officials and political decision makers to take the lead and provide material and nonmaterial support for disaster planning? This is our sixth principle, and it is very simple; persons in responsible positions must see some payoff from their stance. Obviously, I do not mean payoff to them in any financial sense (although in some countries around the world this would be true). Payoff in two senses--avoidance of problems and some kind of rewards. For example, disasters can create both political and legal problems. The political frequently involves blame which is not an irrational psychological process but often a very rational political activity. The legal refers to the fact that we live in a very litigious modern world. Governmental and political figures like to avoid being blamed or being sued. They will tend to go along with measures that will minimize their chances of getting blamed or sued. A case can be made that support of disaster preparedness can help in this regard.

The willingness of officials to take a position is also helped by providing them with different kinds of information and ideas. There has to be something a decision maker can use in practical sense instead of being just against sin, and for virtue.

It helps if there is something concrete that is offered. It can be documented that disasters can happen. They are not nonzero probabilities. The use of a plausible local epicenter for something that has happened elsewhere can be used to show local consequences.

It is important, also, to stress these can be incremental steps in preparing, that not everything has to be done at once.

It can also be indicated how the preparedness burden can be spread over social groups, time, etc. This is not so much a matter of equity as one of avoidance of creating opposition.

It can be pointed out that disaster planning can serve multiple purposes. It can help in everyday emergencies and up to nuclear war.

It is also helpful if different constituencies can be created. Key groups should be cultivated. Coalitions should be built.

I have suggested six principles (with respect to bringing about disaster preparedness). Two each with respect to planning, training, and policy making.

1. There has to be a perceived possibility that there is potential danger.
2. Planning can and does make a difference.
3. Planning can be helpful only if it is the right kind of planning.
4. The right kind of planning involves realistic training and education.
5. There must be policy support that planning is not only worthwhile, but is supported.
6. To be supported, decision makers need to see some payoffs.

To plan, to train, and to have policies should not be treated as separate phenomena, but as interrelated matters.

The right policies can lead to planning. The right planning can lead to training (and education). In the long run, the right training implemented in actual disasters can reinforce the right policies.

There is no magic way to bring all this about. I would be the last to underestimate the difficulty of the task. Disasters are low probability although high impact events. Governmental and political figures tend to be reactive rather than proactive. Both these facts indicate some of the difficulties involved. They are reasons why disaster preparedness activities will have low priority.

However, things just do not happen. Whether we are talking of revolutions, reforms, or social changes--they occur because small groups of individuals act to make things happen. Those who are armed with information and principles can make things happen much better than those who are not. Presumably you fall in the former class, in part, because of your attendance at this symposium. The knowledge that has been reinforced or acquired should enable you to move things along if that is what you want. In my remarks I have tried to suggest some principles or themes that might be helpful in your endeavors--the kinds of things that might be kept in mind.

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