



Emergency Preparedness in Clackamas County

Introduction

At their 2007 Annual Meeting, the League of Women Voters of Clackamas County adopted a one-year study of the emergency preparedness of Clackamas County government. The focus of the study was to encompass what disasters are most likely to occur in Clackamas County, what disaster preparedness experts recommend in preparation for these types of disasters, and how well the county meets these recommendations. The findings are presented in this document.

Clackamas County’s ability to respond in an emergency or disaster is best understood by being familiar with the county’s geography, population, and infrastructure. Clackamas is a large geographically diverse county with an estimated population of 368,470, half of which lives in unincorporated areas. The county land area is 1,879 square miles, with 50% in state and federal lands. Elevations in the county range from 55 feet in Oregon City to 11,235 feet above sea level at the top of Mt. Hood. Major rivers include the Willamette, Clackamas, and Sandy. The county’s 1,421-mile road system includes 335 urban and 1,086 rural road miles and 165 bridges. The county is divided north to south by I-205. Highway 26 is its major east-west transportation route, and a north-south rail line runs the length of the county.

The county’s vulnerability varies according to several factors, including the type of emergency/disaster, location, season, and weather. For clarification, the terms **Emergency** and **Disaster** have different meanings and implications during times of need and implementation. For the purpose of this study, the following definitions will be used:

Emergency: The Oxford dictionary states that an emergency is "a sudden state of danger requiring immediate attention." The event can cause deaths or significant injuries, health detriments, property or environmental damage. The event may have a high probability of escalating to cause immediate danger

to life, health and property. The event can usually be handled at the local level.

Disaster: A disaster is defined in the Oxford dictionary as “a sudden or great misfortune, catastrophe or act of God.” It can be a region or locale heavily damaged by either natural hazards or sociological situations. A disaster is a situation or event that overwhelms local capacity, necessitating a request to a state, national or international level for assistance.

Thus, an emergency is an event that can be handled locally; a disaster is an event that requires outside assistance.

Declarations of disaster open up the affected areas for national or international aid. The following emergencies are considered to be of the greatest risk in Clackamas County: earthquake, health emergency (pandemic, bioterrorism), winter storms, release of hazardous materials, and residential and commercial structure fires. Additional information is available through the Clackamas County Emergency Operations Plan.

“911 - What’s your Emergency?”

The handling of an emergency or disaster usually begins with an individual contacting the local 9-1-1 center. At the center there are highly trained operators who must undergo background checks, psychological testing, other standardized tests and interviews as well as complete an eight week academy to learn the applicable laws and codes. At the 9-1-1 center, the operator answers and follows a protocol to decide which agencies to contact. An AT&T language line is available for non-English speaking persons. In the event of a local emergency, such as a structural fire or traffic accident, local fire districts or police agencies are notified. The county’s 9-1-1 centers can also decide to notify the Emergency Operations Center (EOC) in the event of a more widespread nature or involvement. Then the EOC decides which local and/or county agencies to contact. The EOC

also acts as the coordinating body for all agencies. In the event that additional support is needed, the state is contacted. The state makes the decision whether or not the situation requires activating the state's National Guard or declaring a "State of Emergency". In the latter case, assistance may be requested from the federal government, and the Federal Emergency Management Administration (FEMA) may become involved.

Decision Makers

In order to provide a more detailed and complete description of the procedures and protocol that occur, Dana Robinson, the Director of the Department of Emergency Management, provided the following information:

1. A 9-1-1 call is initiated from a citizen and is routed to the appropriate 9-1-1 center based on geographical address data associated with the telephone that generates the call (if a wireline phone). If the 9-1-1 call is initiated from a cell phone, the call is routed through a cell phone tower and the call will be routed to the 9-1-1 center that serves the area where the cell phone tower is located.
2. The 9-1-1 dispatcher obtains the specifics of the event:
 - Location
 - Type of emergency: police, fire or medical
 - Timeframe
 - The caller's name and telephone number
 - Suspect information
 - Suspect vehicle information
 - Medical situation and patient information
 - Potential hazards at scene
 - Other supporting information
3. The dispatcher dispatches responders based on needs described in the call. All information on the initial event and all response information are tracked in a computer system designed for this purpose.
4. Responders arrive, assess the situation and update the dispatcher.
5. If needed, responders may request additional resources, e.g. other responders, special equipment, tow trucks.
6. The primary responder on scene serves as the commander for the event and utilizes the Incident

Command System to manage the event.

7. If the event escalates and additional resources are deployed, the Incident Command Structure is expanded to meet the needs of the incident.
8. An Incident Command Post may be established, typically a short but safe distance away from the incident. Command responsibilities may be transferred from the primary responder to someone with greater expertise or authority, such as a Battalion Chief in the case of a fire.
9. The Incident Commander has overall responsibility for the incident and establishes objectives to manage the incident. The Incident Commander may assign additional staff to manage elements related to the incident. Any responsibilities that are not assigned to others remain with the Incident Commander. The Incident Commander may assign personnel in the following responsibilities, depending on need:
 - Safety Officer – Assesses the incident to identify and address any safety issues
 - Public Information Officer – Serves as an interface with the media
 - Planning Chief – Develops an Incident Action Plan to accomplish the objectives set by the Incident Commander
 - Operations Chief – Develops the tactical organization and directs resources to carry out the Incident Action Plan
 - Logistics Chief – Provides resources and other services needed to support the incident
 - Finance Chief – Monitors incident costs and provides fiscal guidance
10. If an emergency occurs within city boundaries, that city has primary incident management responsibility. For incidents occurring within unincorporated areas, the County has primary incident management responsibility. When an incident involves both unincorporated and incorporated areas, the County and impacted city(s) share incident responsibility.
11. A city EOC or the County EOC may be activated to support field activities. The County EOC provides coordination and access to resources in adjoining jurisdictions or access to state or federal resources.
12. If a city experiences or anticipates the need for resources not available internally or through mutual aid, the city requests assistance from the County. Cities use an Emergency Declaration to request assistance.

13. Likewise the County may declare an emergency to request additional resources. Emergency declarations are also used to enable emergency measures such as curfews or mandatory evacuations. Emergency declarations put a jurisdiction in an emergency operating mode and provide centralized authority over all organizational resources.

14. If a city declares an emergency they will notify County Emergency Management who will acknowledge receipt of the declaration and coordinate incident support as requested/needed. When a city requests resource assistance, the County will try to fill the request using internal and mutual aid resources.

15. If the County is unable to provide the requested assistance or if the County needs assistance in unincorporated areas, the County will issue an Emergency Declaration requesting the Governor to provide assistance using state resources.

16. If the emergency is of such severity and magnitude that effective response is beyond the capabilities of the state and local governments, the Governor will declare a disaster.

17. Based on the request of the Governor, the President may declare a disaster under the Stafford Act. The President may or may not invoke disaster assistance components of the Stafford Act. The President may direct any Federal agency to utilize its authority and resources to support state and local assistance response and recovery efforts. Even when authorized, assistance is usually limited, and eligibility is determined by the federal government using very stringent criteria.

Sheriff Department indicate that there is no standard communication system or equipment being used. For example, Sandy Fire District uses an 800 MHz radio system, while neighboring Hoodland Fire District uses a 150 MHz (VHF) radio system, because of the topographical issues (valleys, trees, and mountains) in the rural area. These two fire districts are working around this difficulty. Nevertheless, interagency communication can still be a difficult, time consuming, and serious problem, when multiple staff from both agencies are attempting to coordinate action on the same emergency situation.

The cost to purchase communication systems is considerable. The Clackamas County Sheriff Department recently purchased high quality 800 MHz radios and their associated operating components (worth \$3500 plus components at an estimated \$1,500 each), only after applying for and receiving a Urban Security Area Initiative (UASI) grant from Homeland Security. These radios provide better interagency communication when access to a radio transmission tower is available. The grant provided insufficient funds to equip all officers with the new radios. However, even though the Clackamas County Sheriff Department is pursuing these high quality units, they are maintaining older communication systems as back-ups for unforeseen emergencies, such as a disabled transmission tower.

Clackamas County's 800 MHz communications are shared with Washington County Consolidated Communications Agency (WCCCA) through a common radio system controller. The two counties are currently linked with a single transmission tower. If the communications link is lost between Clackamas and Washington counties, radios continue to function in a limited manner. Steps are underway now to build a redundant microwave path. The county has a robust amateur radio (ham) group. These volunteers provide an auxiliary communication network when needed.

Currently, all interagency communication is routed through the 9-1-1 centers located in Oregon City and Lake Oswego. The county uses a generic "reverse 9-1-1" notification system, which can be used to notify a geographic area about specific protective actions that may be taken in the event of an emergency. Although the 9-1-1 system works well, according to Lt. Slaney of the sheriff department, special radio software is required for interagency communications. Additional funding and investment is needed to

Concerns

Several areas of concern were identified during interviews with city and county officials. The following sections will address these concerns and will end with recommendations on emergency planning.



Communication

Radio communication between local and county agencies and those in surrounding counties is of major importance to all service providers. Interviews with the 9-1-1 center, EOC, fire districts and Clackamas County

improve this situation.

Everyone interviewed stressed the need for improved, reliable, and compatible communications within Clackamas County and with the surrounding region. Without this, Clackamas County citizens could be at risk in emergency situations, as well as in the event of a disaster.



Transportation

In an emergency, transportation is especially vital. Service providers, such as fire, police, ambulance, and hospital personnel are very dependent on passable roads. Therefore, if roads are

impassable because of fallen trees, downed electric lines, flooding, or unusable bridges, access to services can be interrupted, curtailed, or suspended.

Transportation hazards may include major incidents involving motor vehicles, trains or aircraft. Hazards increase significantly if the incidents include a fire or explosion, a release of hazardous materials, or a large number of casualties.

Weather related transportation emergencies are the most common events. Weather extremes may cause trees to fall across roads. Rain may cause flooding and disrupt travel on roads. Bridges can be destroyed by rising water, debris flow, or earthquake. As a result, traffic management becomes a major problem. Families may be separated and trying to reunite. Crucial service providers may be unable to get to where they are needed. In extreme cases, evacuation may be attempted which could result in increased disorder and confusion.

In Clackamas County, transportation emergencies are coordinated through the EOC and County Sheriff Department.

Transportation issues are a major component of planning within the county due to the extensive road mileage, breadth and diverse terrain of the area, and the large number of bridges involved.



Hospitals

There are four hospitals in Clackamas County - Willamette Falls Hospital in Oregon City, Kaiser Sunnyside in Clackamas, Providence Hospital in Milwaukie, and Legacy Meridian Park in Tualatin. Hospital

accreditation process requires a twice-annual emergency training in conjunction with regional and other jurisdictions.

Clackamas hospitals have participated in all of the regional and local emergency preparedness exercises including the Top Off 4 exercise in October, 2007, and the Pandemic Flu exercise in September, 2006. The Emergency Plan is called "All Hazards Plan" or "Hazard Vulnerability Assessment" which includes utility failure, natural disaster, biochemical disaster and chemical spills. Hospitals have a designated surge capacity (available beds and hospital resources including staff and supplies). They also have a Hospital Incident Command System.

The chair for Emergency Preparedness for each hospital sits on the Homeland Security Task Force for Clackamas County that has regular monthly meetings. They also sit on the Regional Health Organization, a federally mandated group that receives Department of Homeland Security and domestic preparedness funding. The other participants on this committee are representatives of Washington County, Multnomah County, and the coastal counties.

Hospitals have emergency generators, and the accreditation process stipulates that each has a one-week supply of fuel available to operate the generators. There are fixed and portable storage tanks at the hospitals' disposal, which are inspected for fuel level and usability at frequent intervals.

Communication has proved to be a cumbersome part of any drill exercise and is constantly being improved and corrected as the events are critiqued. The hospitals have multiple methods of communication including satellite phones and HAM radio operators. All hospitals encourage their employees to prepare for a disaster and keep their supplies up to date and available. They are also advised to keep their family members apprised as to their location and condition to eliminate many unnecessary phone calls to the hospital.

In summary, the hospitals are preparing to meet the demands of an emergency or disaster. The staff is constantly refining and updating their protocols as a result of internal drills and participation in county-wide and national safety events. They are fully committed to being 100% prepared.



Pharmaceuticals

The Oregon Board of Pharmacy is currently meeting with State officials to present a plan for the role of pharmacies in the event of a disaster and/or emergency.

At present there is nothing in writing that can be reviewed by the public. They are addressing many areas, such as, “how to register pharmacists from out of state”, “how to fly in medications, if necessary”, and “dispensing of medications”. All events and scenarios will depend on the type of disaster.

At present there is no plan for people to obtain extra personal medication for extended emergency use as recommended by the Red Cross. Medications must be rotated by expiration date and at frequent intervals. Once a person has reached an emergency shelter run by the Red Cross and medication requests are known, this agency may have access to needed medications.

Pharmacies state that most insurance companies will allow medications to be filled between 3 to 5 days before a 30, 60 or 90 day refill is due. This is one way for individuals to obtain medications for emergency kits. At some pharmacies medication records can be accessed from around the country, even though it may take awhile. Pharmacies do not have the storage capacity to have drugs available immediately when needed. This lack of storage and having sufficient medications available will certainly have an impact on proper medication management.



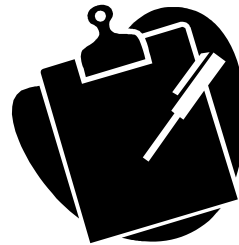
Critical Services

Primary needs are food and water. All government agencies recommend personal reserves for family use. As recently witnessed in the 2007 Vernonia flood, access to food and water

from outside the area can be severely limited, and local supplies may be contaminated or otherwise unavailable. The state Emergency Management Office

(EMO) is prepared to respond with aid, but this may not be immediately available. For example, in 2007 in Vernonia, high winds prohibited the use of helicopters initially, and roads were impassible. Thus, the EMO and other agencies recommend having emergency supplies and personal emergency plans.

Generators are extremely useful in case of power failure, and may be life saving for those needing ventilators or refrigeration of medical supplies. However, generators are useful only with a fuel supply. In the case of widespread disaster, a few gallons of gasoline may not last through the situation. In addition, gas stations may be inoperable, due to lack of electricity to operate pumps, even if they are accessible. The need for planning was demonstrated in 2005 after Katrina and in 2007 along the Oregon coast and in Vernonia. Hospitals have generators and emergency plans, but there is no law requiring nursing homes, foster-care homes or assisted living facilities to have either a generator or an emergency plan. Private utility companies have disaster plans in place and work in conjunction with the EOC. Clackamas County has a well-developed plan of mutual support for utilities that includes electric, gas, water, sewer and telephone.



Recommendations

Experts recommend that the county should have a well-developed countywide plan for emergency/disaster responses. Regular drills, such as TOP OFF and other local exercises, should

be conducted and evaluated for strengths and weaknesses so that action may be initiated to address identified deficiencies. Experts indicate that planning for the most likely emergency situations should take priority over less likely events. According to Ken Murphy, Director of Oregon Department of Emergency Management: “It is impossible to anticipate every contingency so plan for the most obvious, the 80%. Every plan must have flexibility in order to be useful.” Experts also recommend that a clear and flexible chain of command be established and practiced. While there may be concerns that include communication, transportation, hospitals/ pharmaceuticals, and critical services, we can be assured that the county and local agencies are preparing and planning within budget limitations.

Closing

Ken Murphy indicated that Clackamas County meets both state and federal guidelines for emergency planning. He stated that Clackamas County was the first in the nation to have an approved FEMA Mitigation Plan and is reworking its disaster management plans to include pet/farm animal care.

While we can be reassured that our local, county and state governments, as well as hospitals and other organizations, are planning and practicing disaster/emergency responses, it remains very important for individuals and families to be prepared in case of an emergency. It is likely that it could be days before help arrives. The bottom line in emergency / disaster preparedness is ultimately the responsibility of the individual.

What You Should Do

- Educate yourself. Learn about disaster assistance at www.clackamas.us/emergency/recover_assistance.html and family disaster planning at www.oregon.gov (public safety bullet).
- Create a family disaster plan, including establishing in and out-of-state emergency contacts and picking a meeting place for your family.
- Stock pile 72 hours of food and water per person, pet.
- Learn CPR and first aid.
- Assemble first aid kits for each person and car.
- Obtain fire extinguishers and know how to use them.
- Make sure family members know where and how to shut off utilities.
- Know your neighbors; learn if any are ill, elderly or disabled and might need assistance.

Interviewees

Bob Cozzie, Director, Department of Communications, Clackamas County

Ryan DesJardins, 9-1-1 Operations Manager

Mic Eby, Fire Chief, Hoodland Fire Department

Larry Goff, Assistant Fire Chief, Lake Oswego Fire Department

Alice Lasher, Public Information Officer, Sandy Fire Department

Virginia Lundquist, Director of Education and Staff Development, Chair Emergency Preparedness for Willamette Falls Hospital

Gary Minor, Director Oregon Board of Pharmacy Compliance

Ken Murphy, Director, Oregon Department of Emergency Management

Capt. Bruce A. Pearson, Division Commander of Investigations & Civil, Clackamas County Sheriff Department

Shelley K. Redinger, Ph.D., Superintendent, Oregon Trail School District #46

Dana S. Robinson, Director, Department of Emergency Management, Clackamas County

Lt. Chuck Slaney, Watch Commander, Clackamas County Sheriff Department

Scott Turkle, Manager of Safety and Environmental Health, Providence Milwaukie Hospital

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