

PROGRESS OF HURRICANE HILDA

OBSERVATIONS AND COMMENTS BASED ON DISASTER OPERATIONS

- 1. Even though the PDH, as it is now constituted, is intended for use in a national emergency, its lifesaving potential in natural disasters is obvious. The use of the PDH in national as well as nuclear disaster should be included in the community utilization plan.
- 2. Repack existing PDH's and package future PDH's so that designated crates contain items that are most likely to be required first in the treatment of disaster victims. It has been found that locating the needed supplies to treat shock patients, for example, can cause a sacrifice of valuable time. Special marking of crates could aid in the rapid location of most-needed items.
- 3. As was done in Louisiana, in Hurricane Hilda, the PDH custodian should be given the authority to set up a PDH to cope with any disaster when local hospitals cannot handle the workload and where conditions are such that it would be dangerous or not feasible to move casualties to a distant community with hospital capacity.
- 4. The Raceland experience demonstrated that time can be saved in the efficient assembly of a PDH if periodic demonstrations or exercises are carried out in communities where the units are stored.
- 5. Certain equipment from stored PDH units should be made continuously available for training, such as generators, water pumps, anesthesia apparatus, etc.
- 6. There should be little or no time lag between the removal of outdated or deteriorated items from the PDH and replacement with fresh supplies.
- 7. A trailer should be made available, preferably adjacent to the PDH storage site in the community, to haul the generator to its operating site. Such a trailer proved very convenient at Raceland.
- 8. A sufficient number of catalogs of the PDH contents should be made available so that all persons concerned could become very familiar with the kinds of materials contained therein and the specific whereabouts of individual items by case number.
- 9. When patients are moved from one hospital to another, whether a PDH or a fixed hospital, communications must be established between the hospitals involved.
- 10. The community should provide for emergency communications equipment, preferably 2-way radio, at the PDH operating site.

- 11. Refrigerated items should be located in an easily accessible place to allow for a weekly inspection by the custodian. Refrigerators could otherwise be out of operation for several days or weeks without the knowledge of the custodian.
- 12. The present DHM requirement that cursory inspection of storage conditions by the custodian, including an inspection for rodent and insect infestation, be made on a monthly basis should be followed.
- 13. Community plans should include the use of functional portions of the PDH as well as selected items which may be in short supply and difficult to obtain when the requirement is immediate.
- 14. The plan for local disaster use of a PDH must include provisions for accountability of materials consumed and the exercise of reasonable care in use of equipment. This will assure rapid replacements and maximum utility of the supplies and equipment.
- 15. The Federal Government should continue to improve the operational effectiveness of the PDH for natural disasters of various magnitudes.
- 16. Systems should be devised to improve training methods and procedures for orienting community officials, emergency medical and essential supporting staffs to the availability and medical care capacity of the PDH.

SEQUENCE OF ACTIONS PHS REGIONAL OFFICE, DALLAS, TEXAS

SEPTEMBER 30	2:30 p.m.	Office of Civil Defense, Region 5, Denton, Texas, advised the Division of Health Mobilization Consultant, DHEW Region VII, Dallas, Texas, of Hurricane Hilda.
OCTOBER 1	8:15 a.m.	Inasmuch as seven American National Red Cross chapters in the coastal area of Louisiana had been alerted, the DHM Consultant requested Office of Emergency Planning, Region 5, Denton, Texas, to contact the American Red Cross to determine what requests to the PHS were contemplated. OEP reported that the ANRC would not use PHS supplies until they had exhausted their own supplies.
	9:00 a.m.	DHM Consultant informed Regional Health Director of impending disaster.
	11:00 a.m.	Regional Health Director called a meeting of the Regional Program Directors for Water Supply and Pollution Control and Environmental Engineering and Food Protection, and the Health Mobilization Consultant.
	2:00 p.m.	Official report of Hurricane Hilda made to DHM Headquarters by the DHM Consultant.
	4:00 p.m.	The Regional Health Mobilization Consultant in Atlanta telephoned that a request for cots and blankets might be forthcoming from the Southeastern Area Red Cross Office.
	4:45 p.m.	Chief, Program Services Branch, DHM, was contacted by the Region VII DHM Consultant who requested permission to release materials from the Medical Stockpile Depots and from the PHS Packaged Disaster Hospitals.

OCTOBER 1	5:30 p.m.	Chief, Program Services Branch, telephoned to say he had been in touch with the Act- ing Chief, DHM, who had approved the request granting permission to use any supplies in the Medical Stockpile Depots and the Packaged Disaster Hospitals.
	10:00 p.m.	Regional Health Director, Region IV, tele- phoned to advise that Red Cross would be requesting cots and blankets.
	10:10 p.m.	DHM Consultant telephoned the Regional Health Director, Region VII, to inform him of the latest reports on Hurricane Hilda.
	10:15 p.m.	Red Cross requested that 5,000 cots and 10,000 blankets be shipped to Lake Charles, Louisiana, and 5,000 cots and 10,000 blankets be shipped to Lafayette, Louisiana.
	10:30 p.m.	DHM Consultant contacted the Staff Assis- tant for Civil Defense, DHEW Region VII, to brief him regarding DHM activities as of that time.
	10:40 p.m.	DHM Consultant requested Regional Director, Defense Materials Service, GSA, to commence shipment of 10,000 cots and 20,000 blankets.
	11:00 p.m.	DHM Consultant contacted Southeastern Area Red Cross Office to inform them that shipment of cots and blankets was under way, and that it should be completed by noon, October 2, 1964.
OCTOBER 2	8:00 a.m.	DHM Consultant received report from GSA that six trucks had been loaded with cots and blankets and had left the Bastrop, Texas, Medical Stockpile Depot before daylight. Notification was received that all requested cots and blankets would be in transit from the Depot by noon.
	8:30 a.m.	DHM Consultant requested an inventory from GSA of the remaining cots and blankets at the Depot.

OCTOBER 2

9:00 a.m.

Report was requested of the Disaster Officer, Southeastern Area Red Cross Office, as to status of the shipment of cots and blankets. The remaining inventory of 3,000 blankets and 13,000 cots at the Bastrop, Texas, Medical Stockpile Depot was released to Red Cross.

9:20 a.m.

Region 4 Health Mobilization Consultant telephoned that Red Cross had requested cots and blankets from the Medical Depot at Prairie, Mississippi. 8,000 cots and 14,900 blankets were released to Red Cross.

9:30 a.m.

The Regional Health Director called a meeting with the DHM Consultant and the Regional Program Directors of EE&FP and WS&PC. Resources in the Region were reviewed, and the use of the PHS Inactive Reserves was discussed. The actions taken during Hurricane Carla were also reviewed. It was decided that Federal, State and local representatives would visit disaster area as a team to prepare request for financial assistance under PL 685.

10:17 a.m.

Regional Health Director received a telegram from the Acting Chief, DHM, which stated, "During the emergency created by Hurricane Hilda you are authorized to release, at your discretion, any material needed in your Region from PHS Depot stock in Bastrop, Texas, without prior approval from DHM Headquarters. This authority will also include the opening of any PDH's that you deem advisable, requiring accountability on the part of the State in each case. Notify Chief, Program Services Branch of any actions you take regarding the above."

11:00 a.m.

Regional Health Director telephoned the State Health Officers in Texas and Louisians redelegated authority contained in the telegram to the State level.

OCTOBER 2	1:30 p.m.	DHM Consultant telephoned the DHM State Representative in Louisiana advising him of authorization telegram. A written copy of the telegram was also sent to the DHM State Representative.
OCTOBER 3	8:30 a.m.	DHM Consultant contacted OEP Region 5 for latest weather bulletin. He was told of unconfirmed reports of tornadoes preceding the hurricane.
	12:15 p.m.	DHM Consultant received a report confirming that Larose, Louisiana, had been struck by a tornado and that a PDH had been put into operation at Raceland, Louisiana.
	1:00 p.m.	DHM Consultant contacted the Acting Chief, DHM, and apprised him of the situation.
OCTOBER 4	3:30 p.m.	DHM Consultant received a call from the Assistant Regional Director, DHEW Region VII, stating that OEP had requested that certain members of the Public Health Service attend a meeting called by Governor McKeithen of Louisiana on Monday, October 5, at 3 p.m. at Baton Rouge, Louisiana.
	3:45 p.m.	Regional Health Director was informed of the meeting and queried as to who would attend.
	4:00 p.m.	Assistant Regional Director, DHEW Region VII, advised DHM Consultant of PHS staff who would attend the meeting.
OCTOBER 5	7:00 a.m.	DHM Consultant and two engineers left for the meeting.
	9:30 a.m.	DHM Consultant met with the State Health Officer and the DHM Representative assigned to Louisiama. The State Health Officer requested a meeting at 1:00 p.m. to discuss PHS capabilities in the disaster prior to his attendance at the Governor's Conference.

OCTOBER 5	9:45 a.m.	DHM Consultant received a report from the Deputy Chief, Program Services Branch, DHM, that an article had appeared in a Washington paper criticizing the use of a PDH at Raceland, Louisiana.
	10:00 a.m.	DHM Louisiana State Representative called

- DHM Louisiana State Representative called Dr. P. A. Robichaux, PDH custodian at Raceland, Louisiana, to make an appointment for the Health Mobilization Consultant and himself to review the actions taken by Dr. Robichaux in the use of the PDH.
- 1:00 p.m. DHM Consultant and DHM Louisiana State
 Representative met with the State Health
 Officer, the Director of Local Health
 Services, and the Director of Engineering,
 Louisiana State Board of Health. Also,
 two engineers from the Region VII Office
 participated in this meeting to brief the
 State Health Officer on what assistance
 and actions the Public Health Service
 would provide in the wake of the disaster.
 This information was needed for the
 Governor's meeting.

OCTOBER 6 8:00 a.m. DHM Louisians State Representative and DHM Consultant met with Dr. P. A. Robichaux, PDH Custodian at Raceland, Louisians, to review the actions taken during the disaster with regard to the use of the PDH.

2:40 p.m. DHM Consultant returned to PHS Regional Office in Dallas.

SEQUENCE OF ACTIONS LOUISIANA STATE HEALTH MOBILIZATION REPRESENTATIVE

On the morning of October 2, the Health Mobilization Representative assigned to the Louisiana State Board of Health participated in a conference with the Civil Defense Coordinator and the Director of Local Health Services at the Louisiana State Board of Health in New Orleans.

Telephone contacts were made with the Louisiana State Health Officer, DHEW Region VII Health Mobilization Consultant, the Operations Officers from OCD Region 5, and the Louisiana Civil Defense Agency. The latter was operating from State Civil Defense Agency Headquarters at Jackson Barracks, New Orleans. At noon, arrangements were completed to permit requests from local officials for authority to use PDH's, in whole or in part, to be taken at the CD Agency and relayed to the State DHM Representative for decision. Civil Defense Directors in the hurricane areas were so advised.

OCTOBER 2

1:15 p.m.

Dr. P. A. Robichaux, custodian of the PHS Packaged Disaster Hospital at Raceland, was given authority by telephone to open and use the PDH when, in his judgment, it became necessary. Local and adjacent hospital and clinical facilities were already overcrowded by patients evacuated from hospitals at Galliano and Morgan City.

2:15 p.m.

Louisiana DHM Representative received call from custodian of PDH at DeRidder resulting in agreement that PDH cots could be used if this became a necessity, with the local Civil Defense Agency assuming accountability. As storm turned away from DeRidder, no PDH materials were used.

2:30 p.m.

Custodian of two PDH's stored at the PHS Hospital in Carville called concerning an inquiry he had received from the Parish Civil Defense Director about the availability of 400 cots if needed. The Health Mobilization Representative and the custodian agreed that such use should be discouraged but would be allowed if absolutely necessary. The cots were not used.

OCTOBER 2 3:00 p.m. The State Board of Health closed its offices. Key officials were on stand-by orders. Two thousand 10cc. bottles of typhoid vaccine were on hand and smake bite antivenin was on call. The DHM Representative reported to CD Headquarters at Jackson Barracks. All questions were resolved concerning use of PDH's. 4:30 p.m. Orleans Parish Civil Defense Agency made a request for a PDH to be trucked into New Orleans. The DHM Representative denied this request on the basis that fixed hospitals had ample space for expansion to meet all needs. 7:30 p.m. DHM Representative discussed possible use of the Covington PDH with the St. Tammany Civil Defense Director, and they agreed that the unit should not be set up unless emergency became acute. Covington was receiving numerous evacuees from the southern part of the Parish. 9:30 p.m. PDH custodian at Houma called and was authorized to make limited use of the PDH if conditions there worsened. House then had some flooding and gusts of hurricane force. OCTOBER 3 7:15 a.m. DHM Representative received telephoned information on Larose tornado: numerous casualties and some dead. He agreed with Raceland action in setting up PDH. 9:00 a.m. DHM Representative agreed with the custodian that the PDH should be readied for possible use at Covington. Weather advisories indicated damage might be extensive there. 9:30 a.m. DHM Representative received a call from the Assistant Administrator at Lallie Kemp

if it became necessary.

Charity Hospital, Independence, Louisiana, and was advised that some facilities were available to receive additional patients

OCTOBER 3 5:00 p.m.

DHM Representative approved use of a PDH at Abbeville, as required. There were extremely high winds and heavy rainfall in Vermilion Parish. A water tower collapsed on the emergency operating center in the town of Erath, killing 8. Over 500 people took refuge in the high school shelter where a first aid station was established and numerous cuts and fractures were treated.

11:30 p.m.

State Civil Defense Director called, and the DHM Representative advised him on the status of all requests for PDH use.

OCTOBER 4

New Orleans suffered considerable damage from high, gusty winds and from water whipped into the city from Lake Ponchartrain.

6:00 p.m.

Emergency operations were suspended at the State Civil Defense Agency Headquarters.

All communications concerning PDH operations during the emergency were handled by telephone. The State Health Mobilization Representative was available around the clock and decisions were made immediately. Much reliance had to be placed on the judgment of PDH custodians and local Emergency Medical Officers. In all cases, they were advised to exhaust local and Red Cross resources before using PDH components and were made to understand that property accountability must be maintained by the local custodial agency to assure responsible use and protection of the PDH property. Action of the local authorities, in later review, appeared to have been logical and responsible in nature.