

DRAFT

KEMENTERIAN KESIHATAN MALAYSIA

**STATE LEVEL**  
**DISASTER PREPAREDNESS**  
**AND**  
**CONTINGENCY PLAN**  
**FOR DIALYSIS FACILITIES**  
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## 1.0 OBJECTIVE

To ensure all parties involved in management of disasters affecting dialysis facilities follow the same system so that the process is coordinated and smooth.

## 2.0 SCOPE

This is applicable to all States involved with the disaster management and the evacuation of patients from the disaster area either to hospital or other dialysis facilities.

## 3. ABBREVIATIONS:

SDM	- State Dialysis Manager
DFM	- Dialysis Facility Manager
HSNS	- Head of State Nephrology Services
SHDD	- State Health Department Director
CPRC	- Crisis Preparedness and Response Centre
JPAM	- Jabatan Pertahanan Awam Malaysia
AMO	- Assistant Medical Officer
SN	- Staff Nurse

#### 4.0 MITIGATION, PREVENTION AND PREPAREDNESS

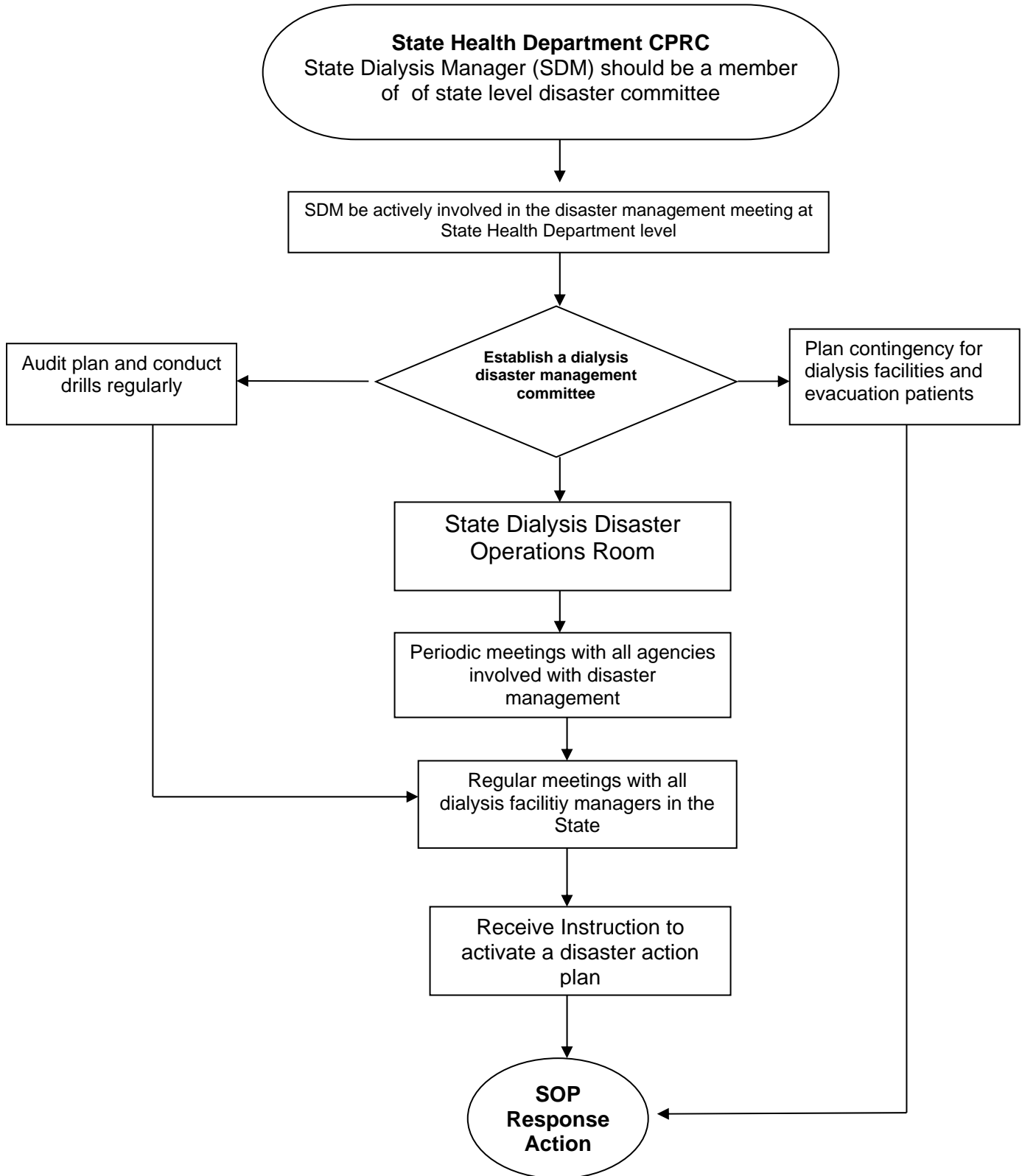
No	ISSUE	RESPONSIBILITY
4.1	Establishment of communication between the State Dialysis Manager /Head of State Nephrology Services with the State Health Department CPRC and the State Civil Defence Department (Jabatan Pertahanan Awam Malaysia).	SDM/HSNS
4.1.1	The State Dialysis Manager should be invited to be a committee member of State Health Department CPRC when disasters affect the functioning of dialysis facilities in the State.	SDM/HSNS
4.1.2	To establish a <b>state level dialysis disaster action plan</b> committee to facilitate and manage the process more effectively. This team will comprise of staff appointed by Head os State Nephrology Services.	SDM/HSNS/DFM
4.1.3	The disaster action plan committee should hold regular coordination meetings with all the dialysis facility managers in the respective state to discuss all matters arising involving disaster management.	HSNS/SDM/DFM
4.1.4	The Dialysis Disaster Action Plan Committee will provide a set of disaster preparedness guidelines and patient evacuation checklist for all dialysis facilities. Disaster drills should be conducted regularly. Such drills should involve the staff and patients.	SDM/DFM
4.1.5	The Dialysis Disaster Action Plan Committee may form a team to provide training and information to all the dialysis facilities on how the disaster drills and evacuation process should be executed.	SDM/DFM
4.1.6	To hold a regular meeting at least once a year with all parties involved with disaster management such as JPAM, BOMBA, Tentera, Jabatan Bekalan Air, TNB, TELCO, metreorological department, department of drainage and irrigation and others.	SDM/HSNS/DFM

<b>4.2</b>	<p><b>DATA COLLECTION</b></p> <p>The dialysis disaster action plan committee will gather all the patients' data, dialysis treatment facilities, staff, addresses, location of dialysis centres and to ensure that all data is updated.</p>	SDM/DFM
4.2.1	<p><b>3 monthly update of data : (January, April, July and October)</b></p> <p><b>HUMAN RESOURCE</b></p> <ul style="list-style-type: none"> <li>i. Assistant Medical Officer</li> <li>ii. Staff Nurse</li> <li>iii. Nursing Aides</li> <li>iv. Medical Attendants</li> </ul> <p><b>FACILITIES</b></p> <ul style="list-style-type: none"> <li>i. No. of HD machines – negative</li> <li>ii. No. of HD machines – Hepatitis B positive</li> <li>iii. No. of HD machines – Hepatitis C positive</li> <li>iv. No. of RO Haemodialysis points</li> </ul> <p><b>DIALYSIS PATIENTS DATA</b></p> <ul style="list-style-type: none"> <li>i. No. of Dialysis patients – negative</li> <li>ii. No. of Dialysis patients – hepatitis B positive</li> <li>iii. No. of Dialysis patients – hepatitis C positive</li> </ul> <p><b>DIALYSIS UNIT PROCEDURES PER MONTH</b></p> <ul style="list-style-type: none"> <li>i. Total number of procedures</li> </ul> <p><b>CAPACITY OF DIALYSIS UNIT</b></p> <ul style="list-style-type: none"> <li>i. HD treatment in 1,2, or 3 shifts</li> </ul>	SDM/DFM/AMO/SN
4.2.2	<p><b>DATA COLLECTION VALIDITY</b></p> <ul style="list-style-type: none"> <li>i. Ensure data collection is in accordance to NRR data.</li> <li>ii. Validation of data</li> </ul>	DFM/Nephrologist
<b>4.3</b>	<p><b>RISK STRATIFICATION ACCORDING TO DISASTER PRONE AREAS</b></p>	

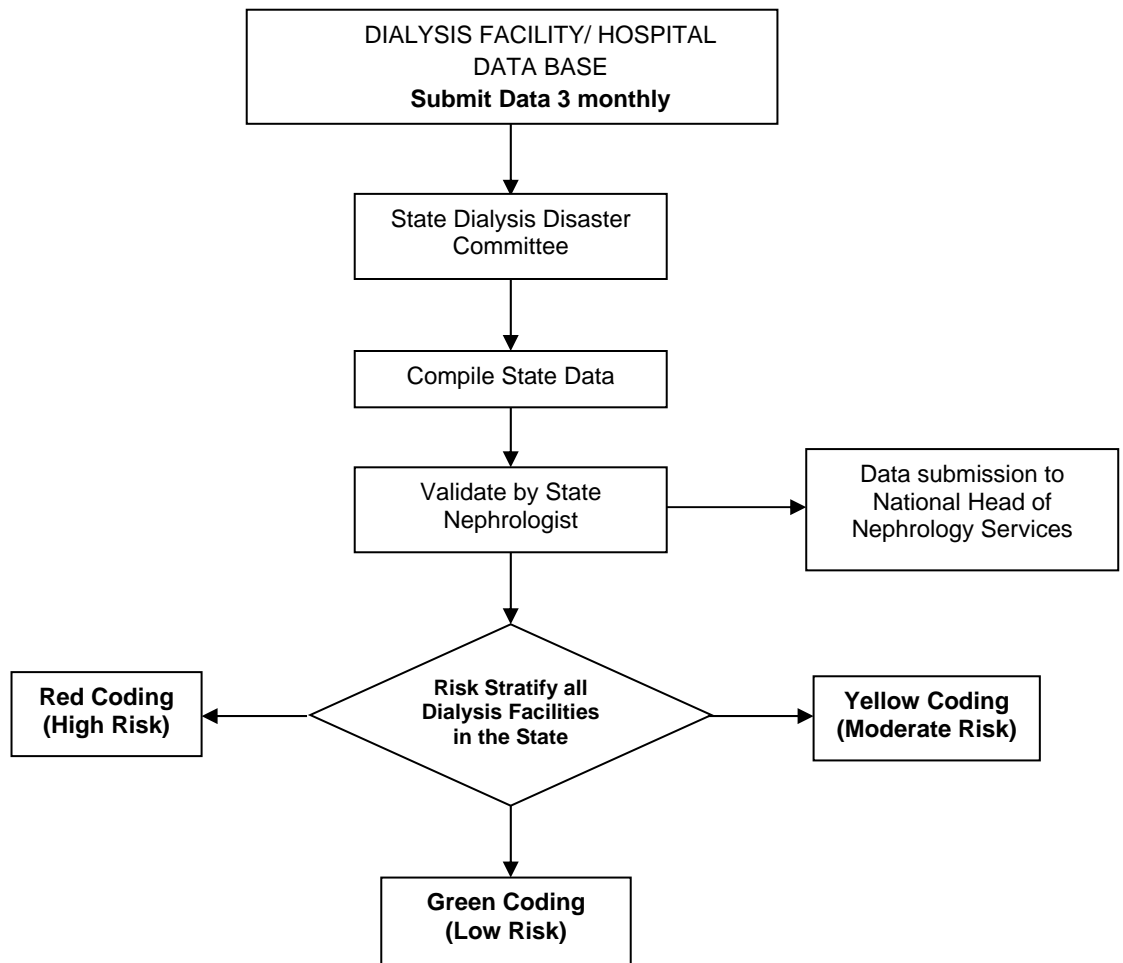
	<p><b>4.3.1 To stratify area according to colour coding</b></p> <ul style="list-style-type: none"> <li>i. <b>Red</b> code – High risk</li> <li>ii. <b>Yellow</b> – Moderate risk</li> <li>iii. <b>Green</b> – Low risk</li> </ul> <ul style="list-style-type: none"> <li>• <b>Red Code</b> – History of flooding of the dialysis facility/ hospital within 3 years. Dialysis Facility unable to function. Patients needed evacuation and dialysis treatment in other facilities.</li> <li>• <b>Yellow Code</b> – History of hospital flooding but not the dialysis unit/facility within 3 years. Transportation to and from dialysis unit is cut off. Dialysis unit still able to function but needed support for transportation.</li> <li>• <b>Green Code</b> – No previous history of flooding of the dialysis unit /facility or hospital areas.</li> </ul>	<p>SDM/HSNS/DFM State Health Department CPRC</p>

### Appendix 1: Data Collection Format (Example from State of Pahang)

**FIGURE 1: Flow Chart for Mitigation Action Plan**



**FIGURE 1: Flow Chart for Data Collection**



## 5.0 DISASTER RESPONSE

No	ISSUE	RESPONSIBILITY
5.1	<p><b>To activate the State Dialysis Disaster Operations Room (SDDOR)</b></p> <ul style="list-style-type: none"> <li>- after receiving a directive from the State Health Department CPRC</li> </ul>	<p>SDM / HSNS</p> <p>State Health Department Director</p>
5.1.1	The SDDOR will be located at the State Hospital and be managed by the State Dialysis Manager together with the state dialysis disaster management committee.	SDM / HSNS
5.1.2	The SDDOR should have all the necessary facilities such as telephone hotline, internet, amateur radio, computers, secretarial assistance and other facilities deemed necessary.	SDM / HSNS
5.1.3	To contact and activate the state dialysis disaster management committee.	SDM / HSNS
5.1.4	The State Dialysis Manager and the Head of State Nephrology Services will establish a state-level disaster management committee composed of those who are directly involved with dialysis services from the MOH, government agencies, NGOs and private sectors.	SDM / HSNS
5.1.5	To make a situational assessment of disaster severity and impact in consultation with State Health Department CPRC, JPAM and affected dialysis facilities.	SDM / HSNS
5.1.6	To conduct a 24-hour monitoring especially in the early stages and at the peak of the disaster and to inform the Head of State Nephrology Services.	SDM
5.1.7	The SDDOR will collect and compile data on the affected dialysis facilities and patients on a daily basis.	SDM/ DFM/ AMO/ SN
5.1.8	All data submitted by the respective dialysis facilities	DFM/ AMO / SN



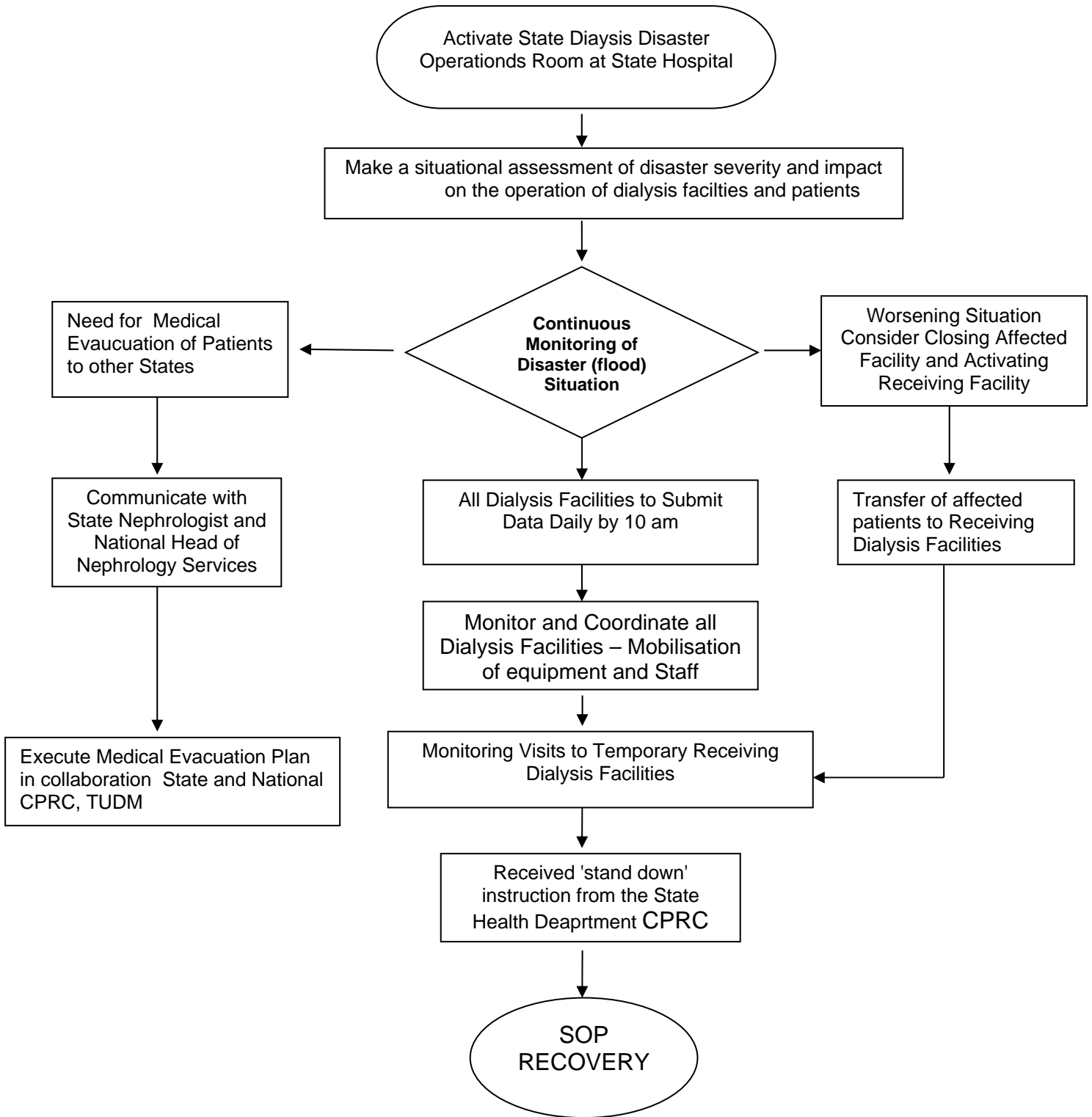
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	should reach the disaster operations room before 10am daily.	
5.1.9	The data and a daily report should be sent to the Head of State Nephrology Services, State Health Department CPRC and the MOH CPRC as required.	SDM
5.1.10	This SDDOR will coordinate assistance that is required by the affected facilities. This is done by communication with the State Health Department CPRC, other agencies involved such as JPAM, BOMBA, Tentera and other community response agencies involved with disaster management.	SDM/ HSNS
5.1.11	To identify patients who are affected by the disaster and to plan and execute when required the evacuation of patients (both HD and CAPD). To have contingency plans to transfer the patients to other states which are not affected should the situation worsen.	SDM/ DFM/ AMO/ SN
5.1.12	To plan and execute the mobilisation of dialysis equipments (HD and CAPD) such as dialysis machines, R/O machines, portable R/O, generators, APD machines and other necessities to another location as may needed to continue dialysis operations.	SDM/ DFM
5.1.13	To visit the still operational receiving dialysis facilities and to ensure that there are adequate dialysis equipment, disposables and staff to meet with the surge of dialysis patients.	SDM / HSNS
5.1.14	To receive information from the affected dialysis facilities and channel it to the still operational dialysis facilities which will be receiving patients.	SDM
5.1.15	To coordinate the transfer of dialysis patients from the affected facilities to the receiving dialysis facilities. This may involve medical evacuation by air to another State.	SDM / HSNS
5.1.16	To communicate with other agencies involved with disaster management from time to time for latest updates regarding the disaster and to channel the	SDM / HSNS

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	information to the affected dialysis facilities and the still operational receiving dialysis facilities.	
5.1.17	To obtain the 'stand down' instruction from the State Health Deaprtment CPRC.	SDM / HSNS

**FIGURE 3: FLOW CHART OF DISASTER RESPONSE**



## 6.0 RECOVERY

No	ISSUE	RESPONSIBILITY
6.1	<b>Post Disaster Recovery Plan</b>	
	After receiving the 'stand down' command from the State Health Department CPRC	SDM / HSNS
	<p>Form a task force for recovery plan.</p> <p>Task force job description:</p> <ul style="list-style-type: none"> <li>i. Evaluate overall damage</li> <li>ii. Evaluate unit damage</li> <li>iii. Evaluate cost of relief workers, transportation, etc</li> <li>iv. Evaluate patients / relatives needs – emotional and physical</li> <li>v. Evaluate staff needs</li> <li>vi. Coordinate all recovery plan</li> </ul>	SDM/ HSNS/ DFM
	To identify the problems faced by patients and collaborate with other agencies involved flooding to ease the burden of patients, such as the Welfare Department and other NGOs.	SDM/ DFM/ AMO/ SN
	To identify support that could be provided to the staff involved with disaster management. To debrief and establish a counselling unit for the staff involved with the disaster.	HSNS/ SDM/ DFM
	To visit all facilities affected by the disaster and to evaluate the extent of damage in the affected facilities. To submit a report to the Head of State Nephrology Services to apply for recovery assistance.	SDM/ DFM
	To obtain a directive letter from the State Health Department Director for assistance for in the cleaning up of the affected facilities.	SDM/ DFM
	To coordinate restoration work for the badly affected dialysis facilities. Where appropriate to seek assistance from other agencies such as JPAM, Tentera, TNB, Jabatan Bekalan Air, NGOs and other volunteers.	HSNS/ SDM/ DFM

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	To conduct a post mortem and to identify deficiencies from all aspects during the disaster management and to update and improve on the disaster action plan based on experience from the disaster.	HSNS/ SDM/ DFM
	<b>REPORT WRITING</b> To provide a full report regarding on all phases of the disaster management.	SDM/ DFM
	Documentation and report writing of Disaster i. Pre Disaster ii. During Disaster iii. Post Disaster	SDM/ DFM
	Submission of report to Head of State Nephrology Services, National Head of Nephrology Services and State Health Department CPRC.	SDM HSNS

FIGURE 4: FLOW CHART RECOVERY

