

PUBLIC HEALTH SITUATION REPORT AS OF FEBRUARY 26, 2006

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A. Introduction

The province of Southern Leyte experienced heavy rains from later weeks of January to 2nd week of February 2006. On February 17, at around 10 o' clock in the morning, a mudslide engulfed the whole of Guinsaugon, a Barangay of St. Bernard, with a population of 1,857. Nearby barangays were also affected and evacuated to safer area in the same town. Immediate responses were provided by different government and non-government agencies. Tasking and networking were employed to coordinate efforts. The Department of Health, for its part, was responsible for emergency medical services, management of dead bodies, disease surveillance and health education.

B. Statistics (As of 25 February 2006, 2130 hrs)

a. Reported Missing Persons	:	972
b. Recovered Dead Bodies	:	140
i. Identified	:	40
ii. Unidentified	:	89
iii. Unidentified Body Parts	:	11
c. Persons at the Evacuation Centers		
i. St Bernard Central School	:	1,580
ii. Cristo Rey Regional High School	:	648
iii. UCCP Church	:	384
iv. Iglesia ni Kristo Church	:	169
v. Catmon Elementary School	:	533

d. Table 1: Proportion of Evacuees per Baranggay
St Bernard, Southern Leyte, 21 February 2006

Affected Barangays	Total Population			Evacuees	
	Individual	Household	%	Individual	%
Kauswagan	138	23	2	121	88
Sug-angon	417	70	7	340	82
N. Esperanza	400	67	6	215	54
Ayahag	896	149	14	398	44
Ginsaugon	1,857	310	29	690	37
Tambis I	893	149	14	180	22
Ma. Socorro	612	102	10	131	21
San Isidro	612	102	10	111	18
Magatas	541	90	8	51	9
Total	6,366	1,061	100	2,237	35

The barangays with the most number of evacuees in proportion to total barangay population were Kauswagan(88%), Sug-angon (82%) and N. Esperanza (54%) (Table 1). However, in terms of the number of individuals evacuated, barangays Ginsaugon (690) and Ayahag (398) tops the list.

The evacuees were settled in 3 centers during the first few days of the disaster. At present, evacuees are now cared in 5 centers located in 3 different unaffected barangays in St. Bernard. Central Elementary School and Cristo Rey School, both located in barangay Poblacion, has the most number of evacuees (Table 2).

e. Table 2: Proportion of Evacuees by Evacuation Center
St Bernard, Southern Leyte, 26 February 2006

Evacuation Center	Evacuees			
	Individual	%	Families	%
Central Elementary School	1,384	42	318	35
Cristo Rey School	639	20	280	30
UCCP	384	12	94	10
Iglesia ni Cristo (INC)	339	10	105	11
Catmon Elementary School	526	16	123	13
Total Evacuees	3,272	100	920	100

f. Table 3: Room Requirements Per Evacuation Center
St. Bernard, Southern Leyte, 26 February 2006

Evacuation Center	Evacuees	Available Rooms	Standard	Current Ratio	Additional Rooms Needed
Central Elementary School	1,384	20	WHO: & person:3.5 m ²	1:69	35
Cristo Rey School	639	17		1:38	9
UCCP	384	6**	Acceptable space per person**** 1 room:25 person (7m x 7m room size)	1:64	9
Iglesia ni Cristo (INC)	339	4***		1:85	10
Catmon Elementary School	526	8		1:66	13
Total Evacuees	3,272	55		1:59	76

* Actual number of rooms is 18, é of which were duplex, equivalent to 2 additional rooms

** The area occupied is estimated to be equivalent to 6 rooms

*** Actual number of rooms is 16 but the size is small and is estimated as 4 small rooms = 1 average room

**** Computation of required number of rooms per 7m x 7m (average room size):

WHO standard = 3.5 m² per person

Estimation of the number of persons per average room size in relation to risk of contracting diseases through droplets and direct contact

25 person per room – acceptable to low risk

30 person per room – moderate risk

>30 persons per room – high risk

Six health clinics, one per evacuation center, were set-up to provide immediate health care to the evacuees, and serve as the sentinel sites for disease surveillance. The most common cause of consultations for the past three days were cough/URTI, headaches, loss of appetite and loose bowel movement (Table 4).

g. Table 4 Reason of Consultations by Date
St. Bernard, Southern Leyte, February 21, 2006

Chief Complaint	2/19/06	2/20/06	2/21/06	Total
Cough/URTI	48	71	142	261
Headaches	39	1	5	45
Loss of appetite	20	0	3	23
Loose bowel movement	7	4	4	15
Conjunctivitis	0	7	7	14
Epigastric pain	10	0	1	11
Chicken pox	2	6	3	11
Others	16	7	9	32

C. Health Issues

a. Search and Rescue



The Search and Rescue activities started immediately after the onset of the landslide disaster but due to the magnitude of the incident, the Municipal Disaster Coordinating Council (MDCC), headed by the Municipal Mayor of St Bernard was not able to cope with the disaster. Eventually resources from the

National Disaster Coordinating Council (NDCC) were mobilized to assist in the disaster.

Local and international rescue teams were deployed to perform SAR missions on the disaster site. The objective of the SAR teams was to locate the school that was buried in the landslide wherein it was believed that more than 200 children and teachers are having classes when the landslide occurred and was believed to be trapped under the massive amount of mud and rocks.

The SAR operations were complex due to continuous heavy rainfall that makes the 5 km² affected land unstable. The prevailing weather condition at that time poses risk to all rescuers involved in the operations.



After doing aerial survey Gov. Rosette Lerias, PDCC Chairman, together with Dr. Anthony Golez, Dr. Puji Pujiuno, MGB representatives, UP-Ateneo Geologists, officially announced during the commanders' meeting of all rescue teams (local and international) at the site's command center that SAR operation for possible survivors will be halted by 12 midnight of February 24, 2006, same announcement was also made

during the press conference meeting at the SB social hall.

Governor Lerias, announced that the affected area wherein hundreds of barangay folks were buried alive could no longer be retrieved has suggested three mitigation measures;

- No construction is to be made within the affected zone
- Declared the area as a sacred sanctuary
- To contain the mudflow and disease, an embankment along the peripheries of the affected areas be constructed.

With this announcement, the Malaysian and Taiwanese contingent terminated their operations on Sunday, 26 February 2006.

b. Management of Dead Bodies



The management of human remains was managed by the local health office. Initially the separate body bags and stored near the disaster site. As the day progressed and continuous raining in the area, the rate of decomposition of the bodies became faster. This created fears from the public that these bodies might pose a health risk and creates an

epidemic in the area. Unfortunately this notion was validated by local health official that prompted them to do mass burials without proper identification.

c. Environmental Health

The Provincial Government of Southern Leyte in coordination with the Municipal Government of St. Bernard had mobilized their respective sanitary inspectors to take the lead in the environmental health concerns of the evacuees.

While working towards the attainment of 1 latrine for 20 individuals, 40 portable toilets from the US Marines have been distributed in the evacuation centers. The team of sanitary inspectors of the Pacific Inter-local Health Zone, through the technical assistance of Oxfam Great Britain and AusAID had identified priority sites as basis for distribution. The UNDAC facilitated the release of the said portable latrines. This collaborative effort of government and non-government agencies has reduced the current gap of latrine need from the average of 1:70 to about 1:40.



An environmental health cluster / working group was organized compose of the local sanitary inspectors, Oxfam, Plan International and World Vision. This group took charge of all water, sanitation and health promotion interventions in the different evacuation centers. Water testing in the different water sources was conducted located at the different camps and appropriate interventions and recommendation were made to resolve problems such as chlorination at the household level of

drinking water, installation of water bladders with appropriate chlorination, distribution

of family sanitation kits, and health promotion campaigns through distribution of posters and health teachings. All activities are highly participatory and it involves active participation of the people in the camps.

All of the evacuation centers had enough supplies of drinking water (Table 1). Bottled waters came from donations from different GOs/NGOs. Water supply for cooking, washing and other daily activities were locally available and enough (Table 2).

a. Table 1: Supply of Water for Drinking by Evacuation Center
St. Bernard, Southern Leyte, February 22, 2006

Evacuation Center	Type	Source	Required	Available
Central Elem. School	Bottled /Piped	Ration/Piped	2L/person/day	>2L/person/day
Cristo Rey School	Bottled /Piped	Ration/Piped		
UCCP	Bottled /Piped	Ration/Piped		
Iglesia Ni Cristo	Bottled /Piped	Ration/Piped		
Catmon Elem. School	Bottled /Piped	Ration/Piped		

b. Table 2: Supply of Water for Other Activities by Evacuation Center
St. Bernard, Southern Leyte, February 21, 2006

Evacuation Center	Type	Source	Quality*	Required	Available
Central Elem. School	Level3	Piped	A	50L/person/d	>50L/person/d
Cristo Rey School	Level2**	Piped/ Ration	A		
UCCP	Level3	Piped	C		
Iglesia Ni Cristo	Level2 &3	Piped	B		
Catmon Elem. School	Level2	Piped	B		

* Quality: A=No risk & suitable for drinking, B=Low Risk, C=Medium Risk. Source: Oxfam

** Low Chlorine level. Source: CHD 8 – Environmental Health Services

All toilet facilities in all evacuation centers were water sealed (Table 3). All evacuation centers did not have enough number of toilets per number of evacuees. For garbage disposal, most of the evacuation centers utilized daily collection system (Table 4).

c. Table 3: Ratio of Available Toilet Facilities to Population by Evacuation Center
St. Bernard, Southern Leyte, February 21, 2006

Evacuation Center	Type	Required	Available
Central Elementary School	Water sealed	1:20 (toilet: evacuees)	1:67
Cristo Rey School	Water sealed		1:92
UCCP	Water sealed		1:68
Iglesia Ni Cristo Church*	Water sealed		1:61*
Catmon Elementary Sch.**	Water sealed		1:15**

* With on-going construction of additional eight (8) shelters with toilets.

** Other rooms were opened for the purpose

d. Table 4: Garbage Disposal System/Facility by Evacuation Center
St. Bernard, Southern Leyte, February 21, 2006

Evacuation Center	Disposal Type	Required	Available
Central Elementary School	Collection	Storage: 100L/10 families Disposal: Burial Pit or Collection	100L/25 families
Cristo Rey School	Collection		100L/45 families
UCCP	Collection		100L/30 families
Iglesia Ni Cristo Church	Collection		no data
Catmon Elementary Sch.	Burial Pit		no data

d. Protection and Security



NGOs noticed a group of people going around searching for relatives who survived the disaster especially young children. This prompted the Vizayan Forum, a local NGO based in Manila to investigate the report. The group set up a system and briefed the NGOs running the different evacuation centers. After 3 days through the help of the Philippine National Police, they were able to catch the recruiter and filed criminal case against the person.

According to Racquel of the Vizayan Forum, children are very vulnerable especially after traumatic incident wherein they got separated from they parents or in worst case scenario lost their parents in the disaster. Its important that a system should be in place as safety mechanism to protect the children against this illegal child trafficking.

Sources : United Nations Disaster Assessment and Coordination (UNDAC)
Telecoms Sans Frontieres / Asian Disaster Preparedness Center
Disaster Operations and Coordination Center
Municipality of St Bernard, Southern Leyte

Pacific Inter Local Health Zone
Operations Center for Health
St Bernard Rural Health Unit