



Disaster Management Sector

Beirut Port Explosion Response

Assessment Results

(MSNA, DANA)

As of August 14, 2020



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Table of Abbreviations

MSNA	Multi-Sectoral Needs Assessment
DANA	Damage Assessment Needs Analysis
DMS	Disaster Management Sector
LRC	Lebanese Red Cross
HoH	Head of Household
WASH	WASH

Executive Summary

This assessment report presents the findings of the immediate household surveys conducted by LRC volunteers containing the Multi-Sectoral Needs Assessment (MSNA) and Damage Assessment Needs Assessment (DANA) in the affected areas surrounding the Beirut Port. The data shows that the primary response needs are in terms of Shelter Repairs **(41.7%)**.

Highlights:

- By August 14th 2020, **4,194 assessments** have been conducted, reaching **1,581,835 individuals** affected by the Beirut Blast.
- **11% of households** so far have reported **having unacceptable toilet conditions**.
- **54% of households** have resorted to the use of temporary seals to damages to external openings caused by the blast.
- Needs reported by the affected population revolved around: **repairs, cash, medication, shelter, food and others**.
- **52% Female headed-households** and **48% Male headed-households** residing in the affected area have been assessed.



Introduction

On August 4, 2020 at around 18:08 a massive explosion shook the Lebanese capital, Beirut. The explosion was centred in the port area in Beirut. Thousands of people across the Lebanese capital were affected, resulting in many dead and injured casualties. Buildings were also largely damaged and glass was shattered at a wide radius in the aftermath of the immense explosion.

The explosion killed at least 158 individuals and injured over 5,000, with an unknown number of missing. Hospital emergency rooms in Beirut area are being overwhelmed by the casualties, knowing that several hospitals were rendered non-functional by the explosion. The Lebanese government declared a two-week state of emergency.

As a result, the DMS deployed its teams to conduct its Multi-Sectoral Needs Assessment (MSNA) and Damage Assessment Needs Analysis (DANA) starting August 6th, 2020. These assessments have been conducted in the affected Beirut Areas, selected by referring to aerial imagery developed by LRC, in order to analyse the needs of the affected areas and serve as a basis for future interventions.





Methodology

The methodology of the needs assessment was a mixed methodology consisting of quantitative and qualitative methods.

Damage Assessment Needs Analysis (DANA) and Multi-sectoral needs assessment (MSNA), are **quantitative** tools that were merged in one survey completed with all affected households by the Blast in Beirut. The survey was uploaded on tablets using ArcGIS, thus facilitating data entry and analysis. The assessment targeted all households in the affected area in Beirut. The area was mapped using aerial imagery and divided into specific smaller and coded areas; each zone has a specific number of buildings.

Data collection was completed by Youth volunteers deployed from the Youth Sector at LRC after receiving a rapid training on the administration of the survey. Teams consisting of **10 data collectors** were divided into each coded area and the teams were further divided into pairs to complete the assessment with affected households. Data collection was completed over the duration of 9 days starting from August 6 to date. Quality assurance was ensured through daily data cleaning and spot checks at field level in addition to daily briefing with data collection teams. Finally, analysis was completed using excel and results are presented below.

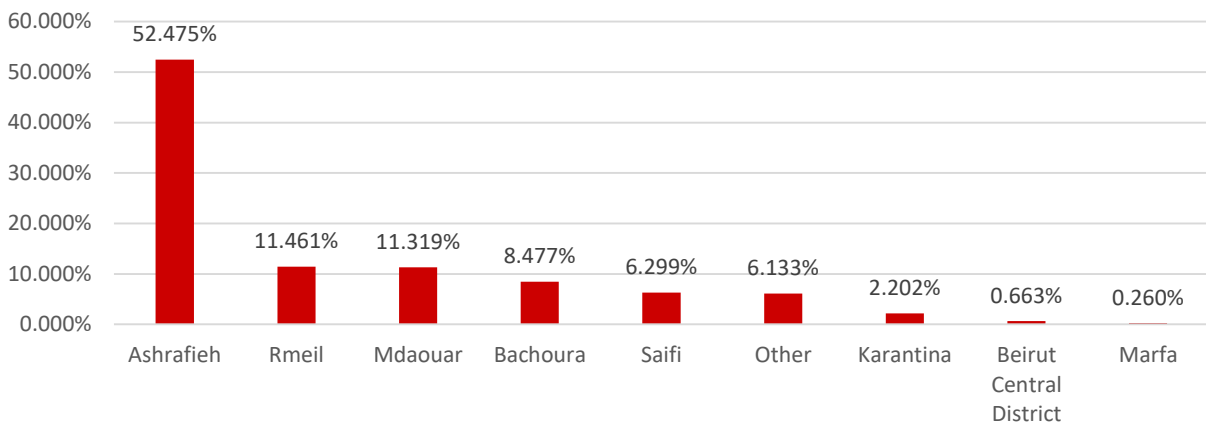
Quantitative assessment was further triangulated with observations and key informant interviews with key stakeholders in the area.



MSNA Results

Each interview household completed one MSNA Survey. To date, **4,194 surveys** have been conducted in Ashrafiyeh, Rmeil, Saifi, Karantina, Mar Mikhayel, Bachoura, Beirut Cental District, Marfaa, Mdawar, and other locations near the Blast.

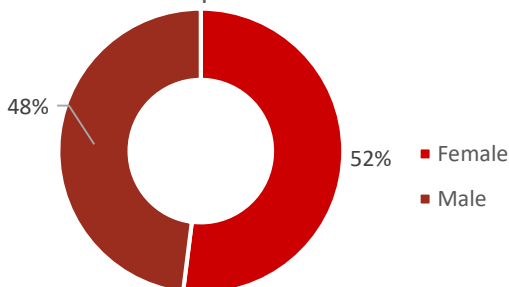
Location of Respondents



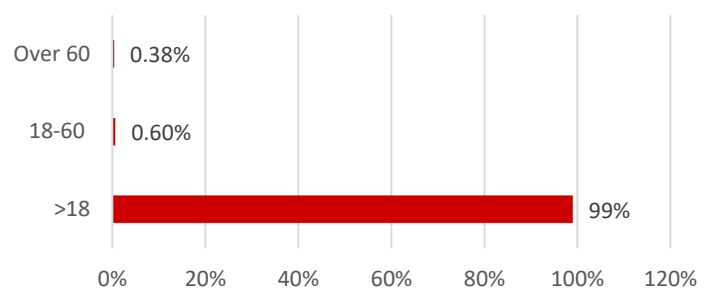
Demographics

A cumulative number of **1,581,835 individuals** have been assessed by August 14th, their demographics are summarized as follows:

Gender Distribution of Respondents



Age Distribution of Respondents

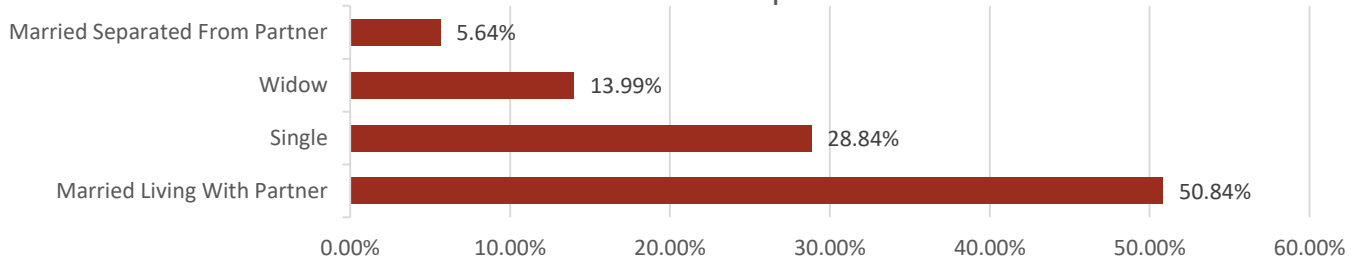


Nationality of Respondents



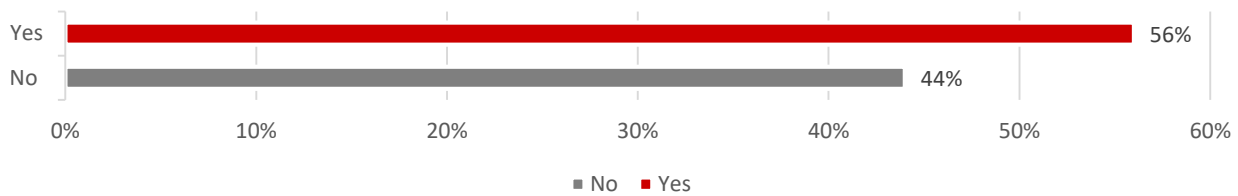


Marital Status of Respondents

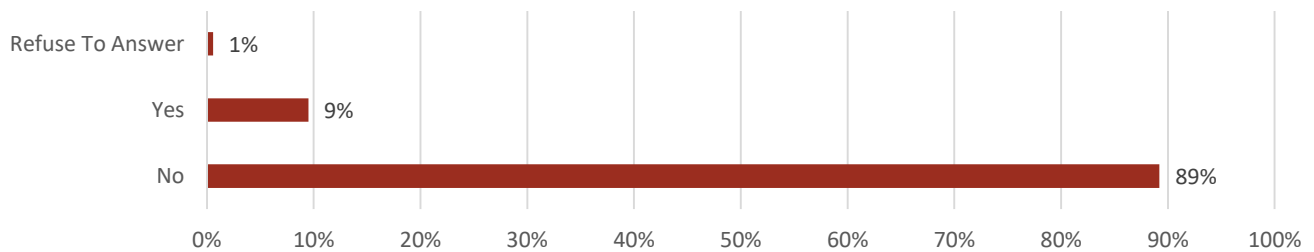


Health Information

Households reporting having Chronic Illnesses or Critical Medical Conditions



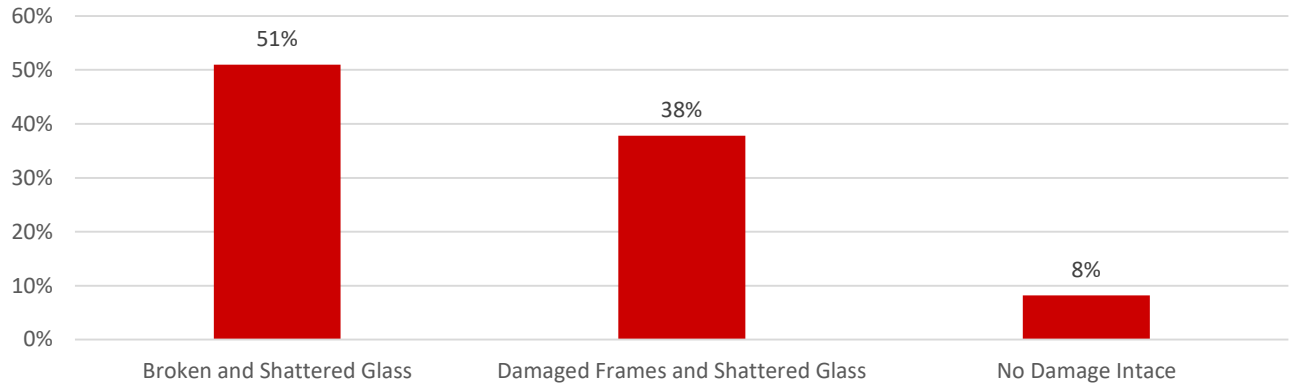
Households reporting Cases of Mental or Physical Disability in Households



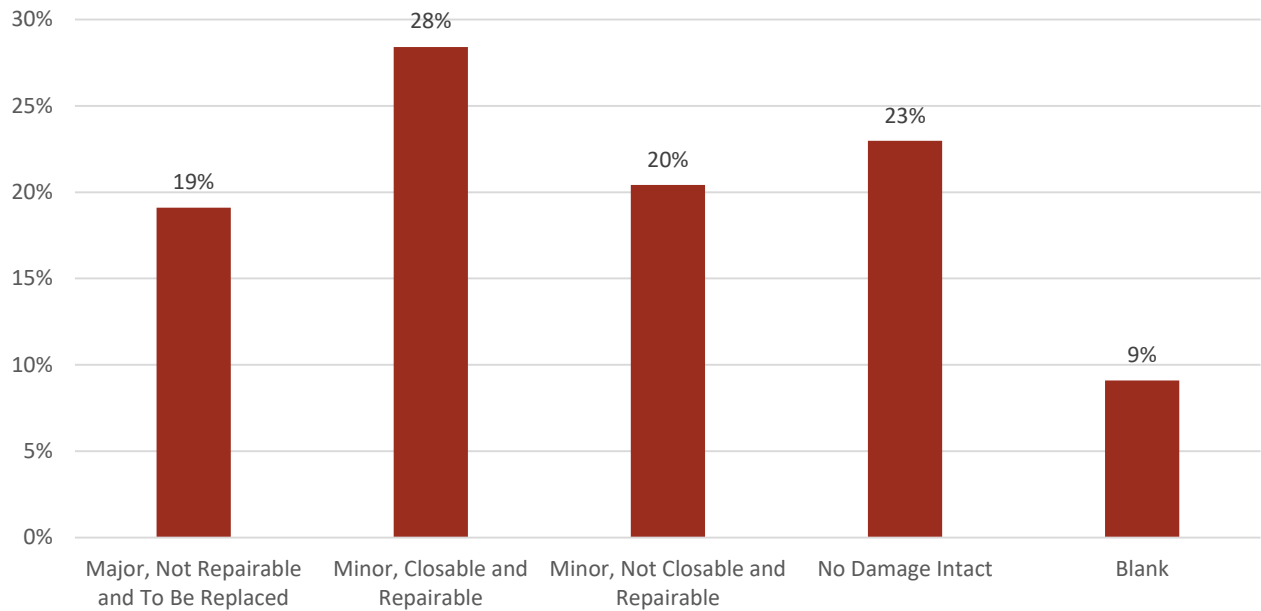


Reporting of Damages through MSNA

Window's Damage



Condition of the External Door



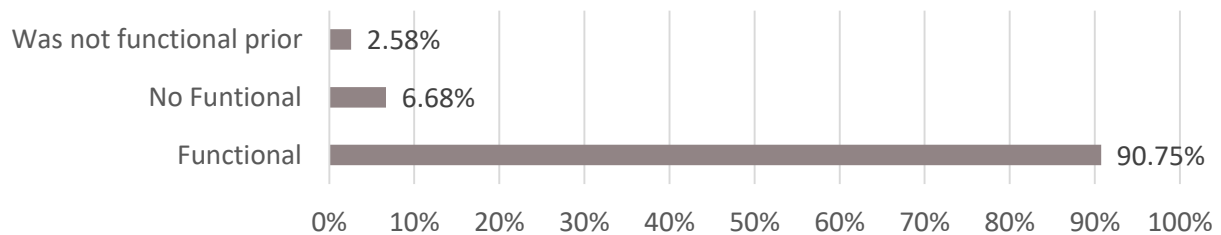


WASH Results

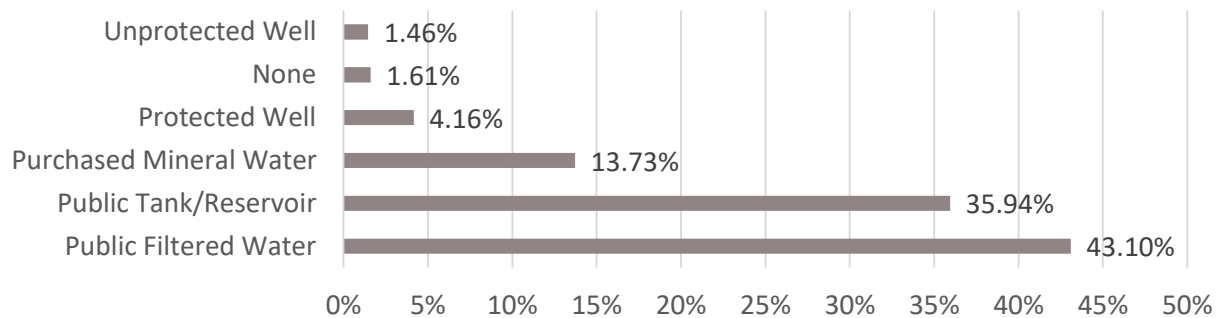
From a WASH perspective, the main things that were noted were the availability of water in the households, the sources of water available for drinking and cooking and washing, and the condition of the toilets in the households.

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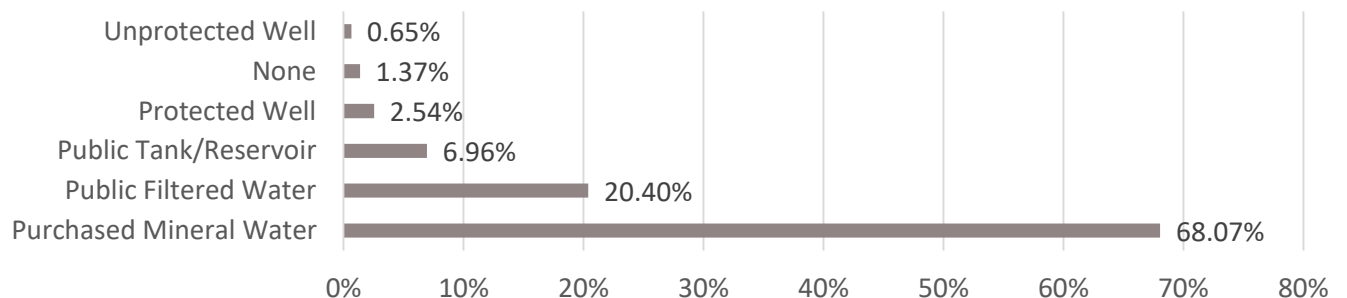
Status of Water Supply



Source of Washing Water

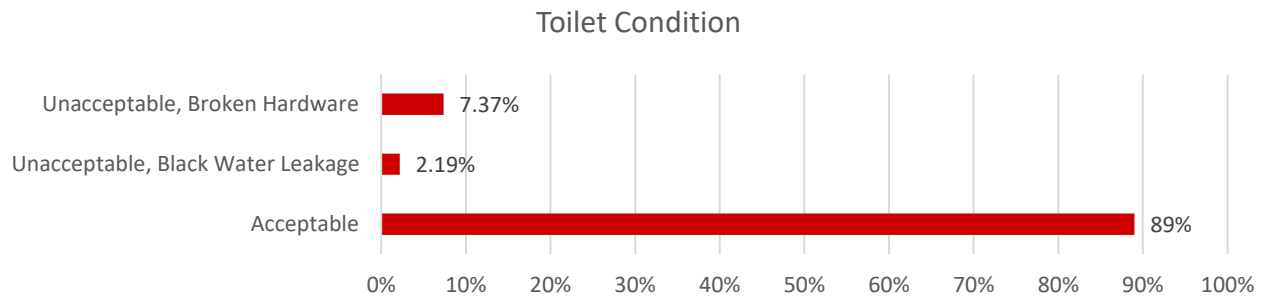


Source of Cooking and Drinking Water



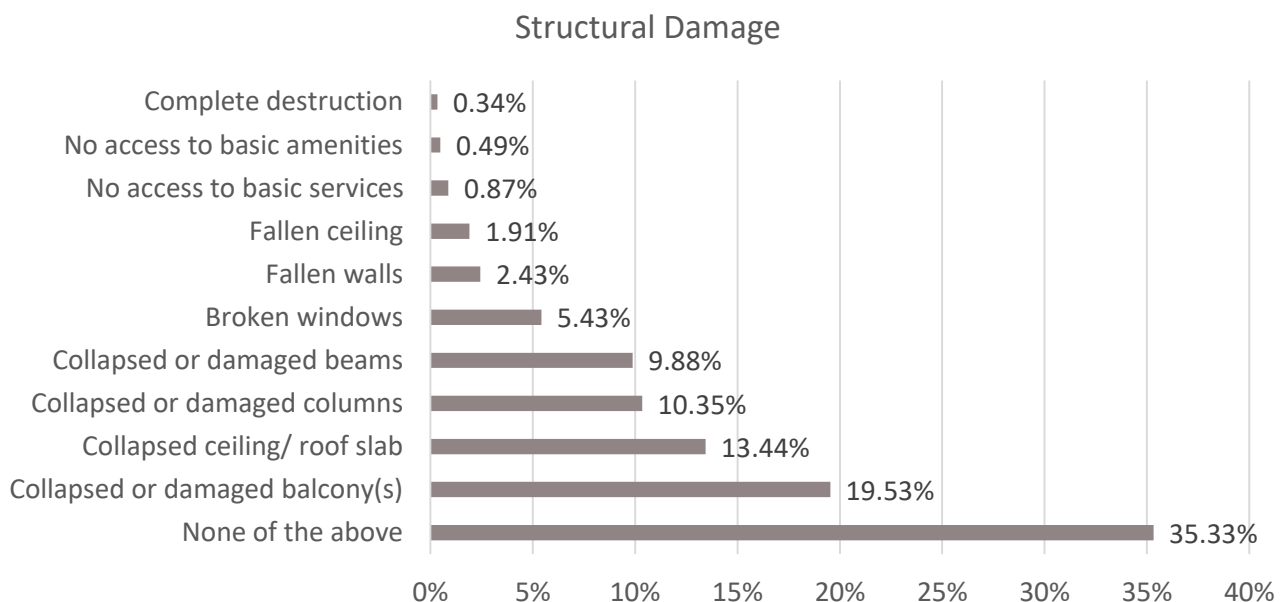


89% of assessed households reported having acceptable toilet conditions, while 11% reported having unacceptable toilet conditions: 7% because of broken hardware and 2% because of black water leakage.



DANA Results

The assessment is based on observation and Key Informant Interviews. The questions revolve around the organization of the urban context in which the disaster has happened, and provides through its analysis an overview a pre and post comparison of the disaster-affected area. The assessment has been conducted in Ashrafieh, Karam el Zaytoun, Karantina, Badawi and Khandak al Ghameek. In terms of observed damages, the below table summarizes the findings highlighted in the assessment. Only 0.34% of the assessed reported having their households completely destroyed, 1.36% reported having a lack of access to basic amenities and services, 67.97% reported having more significant damages (as shown below), while 35.33% reported none of the above.





Analysis of Results per Sector and Zone

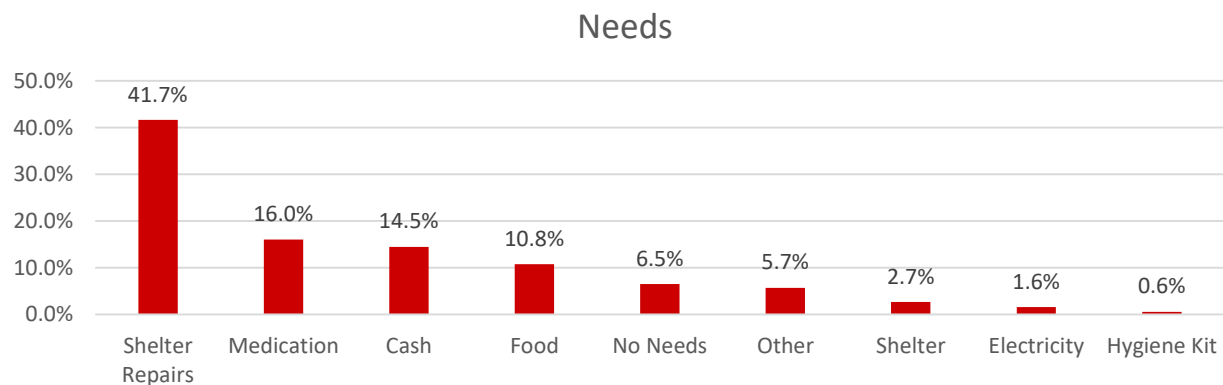
1. WASH

- **Water Storage:** Water tanks are needed to replace the damaged or broken tanks on the roofs of buildings to ensure continuous supply to household and to store water safely in case of shortage or cut in government supply.
- **Drainage:** Replacement of broken pipes that drain water from roofs into the storm water network.
- **Solid waste:** Management of accumulated waste, mostly broken glass and constructional debris. Replace broken or damaged bins to hold generated waste. Need bins to segregate when possible glass, plastic, and other waste in order to recycle and to prevent risk of vector build-up. Supply mesh on windows when needed to avoid entrance of vectors into the household.

2. Shelter

- Structural assessment of standing buildings to assess damage to foundations and load-bearing structures
- Replacement of broken glass windows, aluminum frames, and dislocated doors inside and outside in mildly damaged buildings. Wall paint needed in most houses.
- Construction of masonry walls in partly damaged buildings
- Excavation of debris of completely damaged buildings (uninhabitable), reassess foundations and soil properties, construction of new structures to replace destroyed buildings

Needs per area based on Assessment





Temporary Measures taken as a result of the Blast

