

# DISASTER VICTIM IDENTIFICATION GUIDE

**ANNEXURE 13** 

RECOMMENDATIONS FOR DVI OPERATIONS WITH A LARGE NUMBER OF FRAGMENTARY REMAINS

**NOVEMBER 2023** 

#### Introduction

The effective management of large-scale fragmented human remains that may result from a disaster is of vital importance when undertaking a DVI operation and this requires pro-active strategic planning and managerial decisions. This document outlines the major issues that should be considered in such circumstances. Experience has shown that these issues should be addressed as early as possible, preferably in the initial strategic planning stages of the DVI operation.

As each disaster event will be unique, it is not appropriate to provide a prescriptive list of how to manage human remains. Rather, this document provides a general guideline of pertinent issues to be considered. The final decisions about how to manage human remains are ultimately the prerogative of the local jurisdiction.

### 1. The aim of the DVI operation

The aim of the DVI operation should be defined as soon as possible after the disaster has occurred. It is necessary to consider whether the DVI operation aims to identify every missing person (i.e. to stop searching after the last person is accounted for), or to identify every human remain (i.e. to analyse each recovered human remain regardless of the preservation). The duration and cost of the latter should not be underestimated.

Typically, a range of variables will dictate the decision-making process, such as the scale of the event (number of deceased), the nature of the disaster (open vs. closed), the preservation (extent of disruption and fragmentation) and political and public pressure.

Special consideration should also be given to incidents where a crime has been committed and the remains of the perpetrator are commingled with those of the victim. In such situations, families frequently express strong desire that the remains of their loved ones should not be stored, examined, or cremated/buried with those of the offender/s.

# 2. The definition of a "human remain"

If the decision is made to re-associate every human remain with a named individual, the definition of what constitutes a human remain must be clearly stated and communicated to scene and mortuary personnel. The definition of a "human remain" varies. Examples include (but are not limed to): all suspected human tissue greater than 5x5 cm or containing at least 5 cm of bone; human tissue with 'a fair chance of identification'; and 'those parts that can be anatomically identified, regardless of the size'. Input by forensic experts is imperative to finalise a prudent definition suitable for the context of the DVI operation.

A decision also must be made about what to do with the remaining human tissue that has not been defined as a human remain. Such decisions may include placing all remains of human tissue into a common container for later cremation or burial. Depending upon the jurisdiction of the country, the next of kin (NOK) may have a legal say in the disposal of this tissue.

# 3. The DNA sampling strategy

If it is decided that there are resources (personnel and equipment) and time available to identify each human remain, then a decision should be made as to the most appropriate DNA sampling strategy. It is imperative to include forensic experts in this discussion to achieve a realistic planning and favourable outcome.

The potential negative effects that high volume DNA analysis might have on the availability of resources for other purposes within the local jurisdiction should also be taken into account. Depending on available funding, outsourcing to other laboratories might (partially) circumvent this.

#### 4. Long-term storage of human remains

Human remains that do not initially produce a useful DNA profile could be stored in anticipation of the development of more advanced DNA analytical techniques in the future. To prevent degradation, the samples should be stored frozen. Repeated freezing and thawing must be avoided. Logistical issues (such as cost) as well as ethical concerns of long-term sample storage should be considered.

## 5. Communication with the next of kin of the victims

The decision to analyse small human remains introduces practical (e.g. related to exhumation and reburial) and psychological (e.g. the effect on the mourning process) issues for the NOK. The quality and content of information provided to the NOK is also of particular importance. The families have a right to be informed about the anticipated duration of the investigation and similarly, should be made aware that a human remain might be identified long after the disaster, or long after the initial identification of their loved one.

An important aspect of the communication with next of kin is to be prepared for three scenarios:

- 1. When the next of kin of the deceased person chooses not to be informed when additional human remains are located.
- 2. When the next of kin decides they want to be informed of additional human remains, regardless of the size of the part or the time that has passed since the initial identification of the deceased.
- 3. When a small human remain has been fully consumed by the DNA analysis process but has been identified as having belonged to a named individual.

There may be situations where a combination of scenarios is active at the same time.

Each of these scenrios requires a separate management plan which should be developed considering the appropriate cultural and religious needs of the affected next of kin.

There may be disparate wishes of family members (e.g., the victim's parents vs. victim's spouse). Remains may need to be curated until a judicial decision is made, which may involve a (lengthy) legal procedure. Also, if the DVI is a long-term operation, changes in the legal NOK might occur. For example, in the case of a child of a victim who comes of age (turns 18) and has different wishes than their parent/guardian.