

DNA RESULTS AND RECOMMENDATIONS FOR PHASE II AND PHASE III WORK

**ADDENDUM TO REPORT OF THE INVENTORY OF SUTINA
MORTUARY, MOSTAR (ICMP.FSD.AA.632R.4.W.DOC)**

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I. EXECUTIVE SUMMARY

1. During the inventory at Sutina 204 body bags were examined and reviewed. The status of each body bag was determined. The body bags were found to contain a total of 395 distinguishable bodies and body parts. Many bags contain remains of multiple individuals. 75 bags (37%) had not apparently been sampled before. 273 new DNA samples were taken.
2. A report describing the aims and objectives, organization, methods, work undertaken and preliminary results was submitted to the Head of War Crimes Department of the Cantonal Prosecutor's Office of Herzegovina-Neretva Canton (CPOHNC) in Mostar. This addendum to that main report is compiled to provide details of DNA results after processing all submitted bone samples, and outlines further necessary examination, re-association and identification work to be undertaken.
3. The results were 233 DNA profiles successfully obtained. 94 (40%) have positive matches with blood reference samples. 6 DNA reports are in a review phase, and have not been issued yet. 139 (60%) have profiles but there are no matches to reference blood samples.
4. Together the positive matches provided 29 new identities. There are 28 re-associations to these new names, and 31 re-associations to already identified cases.
5. The reason 60% of samples did not match is because remains are not related to the conflict of the 1990s, or there are no living relatives to provide a blood reference sample, or families previously provided no reference blood samples because their missing family member were identified by presumptive "traditional" means.
6. There were 40 bone samples that failed to provide DNA profiles (14.6% of all samples). These will be re-examined to determine if the cases can be re-sampled.
7. With the DNA results, further examination measures can be undertaken as phase II of the NN case review. These consist of re-examinations and review of the case review form, anthropological examination data, autopsy notes and additional investigative information.
8. The review has determined that 94 re-associations of body parts and bodies can be made from the initial result. Of these 32 are simple re-associations and 62 are complex re-associations which require physical re-associations and other associated activities.
9. Of the 94 re-associations, 22 relate to cases already buried and identified. Three of these relate to cases identified by presumptive "traditional" means. These will need to be re-exhumed with family permissions and court orders. Re-exhumed cases are likely to need DNA sampling and adding, replacing or removing skeletal elements or bodies.
10. The initial case review phase at Sutina determined 29 possible historic cases. No matches have been made to these. What further scientific testing can be done to allow closure of these cases has to be determined.
11. Once re-associations of cases with DNA match reports is undertaken and completed, identifications can be made and cases returned to families. The total number of such cases is

yet to be determined.

12. Phase II work will be undertaken to an agree plan, a summary of the weekly findings produced and a final Annex to the main report submitted once all phase II work has been completed.

II. BACKGROUND

13. Under the instruction of the Chief Prosecutor of BIH and the order of the Chief Prosecutor of the Federation of BIH, the CPOHNC in Mostar undertook a review of cases stored at the Public Utility Company "Komos," Sutina. A report describing the aims and objectives, organization, methods, work undertaken and preliminary results was produced for the Head of War Crimes Department of the CPOHNC in Mostar by the International Commission on Missing Persons (ICMP).
14. A strategy and process for the inventory developed by ICMP based on the analysis of case status and issues found at Podrinje Identification Project (PIP) and Krajina Identification Project (KIP) facilities was followed. The review found an under-estimate of total cases held due to the fact that many body bags will contain more than a single case of human remains. It also found cases identified accurately as individuals contain unrelated skeletal elements that have been mis-associated. This makes subsequent re-examination work more difficult, and identification of which bones belong to which individuals more complicated.
15. During the inventory at Sutina, 204 body bags were examined and reviewed. The MPI and the Prosecutor had been following the practice of counting one body bag as one "case." The status of each body bag was determined. 120 (59%) required an immediate change of case status due to the inventory review.
16. The body bags were found to contain a total of 395 distinguishable bodies and body parts. Many bags contain remains of multiple individuals. 75 bags (37%) had not apparently been sampled before. 273 new DNA samples were taken.

III. TESTING OF BONE SAMPLES

17. 233 DNA profiles were successfully obtained from the bone samples, with the following results:
 - 86 (37%) have positive matches with blood reference samples, and DNA match reports have been issued relating to named missing persons;
 - 8 DNA reports are in a review phase, and have not been issued yet; and
 - 139 (60%) have but there are no matches to reference blood samples.
18. Within the positive matches the following results were obtained:
 - 29 new identities;
 - 28 re-associations to these new names; and

- 31 re-associations to already identified cases.
19. The main reasons for bone samples having no matches are:
- The remains are not related to the conflict of the 1990s;
 - There are no living relatives to provide a blood reference sample;
 - Families provided no reference blood samples because their missing family member was identified and repatriated to them in early presumptive identifications utilized with “traditional” means.
20. 40 bone samples failed to provide DNA profiles, a 14.6% failure rate (of all samples submitted). Re-submission of samples will depend on the expert assessment of the pathologists and anthropologists when physically reviewing the related cases during phase II work.

IV. EXPECTED PHASE II WORK

21. The very encouraging results from the testing provide a considerable amount of phase II work (the necessary workflow is described in section VI below) to be able to assess and work out requirements to close or update the status of each case. This will require re-examination of cases, with data from DNA results, the case review form, anthropological examination data, autopsy notes and additional investigative information. This work will result in re-association of cases or parts of cases, separation of some cases, exclusion of some cases from investigations, and some case will remain open but with recommendations for further work.

4.1. Re-associations

22. Through the DNA testing of bone samples, anthropological assessments and case investigation, it has been determined that 94 re-associations of body parts and bodies can be made as an initial result of the review. Of these there are:
- 32 simple re-associations which require photography and updates of records;
 - 62 complex re-associations which require physical re-associations, other associated activities and updates of records.
23. Within these 94 re-associations, there are 22 re-associations needed to already identified and buried cases, out of which four are related to presumptive identifications made by “traditional” means. Re-exhumations will be needed to assess buried cases and undertake further re-examinations, and re-associations. If mis-associations and mis-identifications are observed or suspected, then further DNA sampling and case investigation will be needed.
24. Once relevant re-associations and re-organisation of those cases with DNA match reports is undertaken, and they have completed status, identifications can be made. Families will be able to take over identified remains of their loved ones. The number of cases this represents is not yet known, as there are many variables which will determine case status, as described above (also see Annex 4 in the main *Report of the Inventory of Sutina Mortuary, Mostar*,

25. Those buried cases that need to have re-associations made to them will have to be re-exhumed with family permissions and court orders. Those 22 buried cases will need re-examination and comprehensive analysis of all records in order to determine recommended actions. This may be DNA sampling, adding, replacing or removing skeletal elements or bodies. Based on previous experience of cases with this status, additional bone sampling is often required to verify associations of skeletal elements.

4.2. Possible historic cases

26. The initial case review phase at Sutina determined 29 possible historic cases. Of these five previously untested cases had 10 bone samples taken, as there was uncertainty as to their historic case status. These samples however provided no matches, adding to the probability that they are historic rather than missing person's cases.
27. Discussion is needed regarding these cases as to what further testing can be done to add certainty to their non-conflict status, and what level of proof is required by the prosecutor, pathologist and MPI to discount them as missing persons related cases.

V. ORGANISATION OF PHASE II WORK

28. The ICMP team will assist in the undertaking of re-examinations, and related re-association work to an agreed process (see section VI below) under the direction of the prosecutor, together with MPI, pathologists and police. The team can use the same work space created for phase I work.
29. All updated case details from examined cases will be entered into a database, so that findings can more easily be managed, analyzed and updated.
30. The prosecutor, MPI and pathologists will coordinate the re-exhumation of necessary cases, with permissions of relevant families and under court order. This can be described as phase III work. It should be noted that the re-exhumed bodies may be complex cases with one body bag containing multiple individuals.
31. The time taken for phase II work is likely to be 4-5 weeks given availability of cases. It is likely cases that need to be re-exhumed as part of phase III work will not be available for re-examination during the phase II work timeframe. The team will need to return to the facility over time to complete all re-examinations and further work.
32. A summary of the weekly findings will be generated to showing the number of cases examined, their status and samples taken. This will be accumulated into a table for input into a final Annex to the main report, to be submitted once all phase II work has been completed.

VI. PROCESS OF PHASE II AND PHASE III WORK

33. The process of phase II work is outlined below for agreement by the prosecutor and team, and will implement decisions about NN human remains following the phase I case review and inventory. It will lead to phase III work with the necessary re-exhumations.

