

NATO STANDARD

AMedP-8.5

**MINIMUM TEST REQUIREMENTS
FOR LABORATORY UNITS
OF IN THEATRE MILITARY MEDICAL
TREATMENT FACILITIES (MTFs)**

Edition B, Version 1

JUNE 2023



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED MEDICAL PUBLICATION

Published by the
NATO STANDARDIZATION OFFICE (NSO)
© NATO/OTAN

INTENTIONALLY BLANK

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

27 June 2023

1. The enclosed Allied Medical Publication AMedP-8.5, Edition B, Version 1, MINIMUM TEST REQUIREMENTS FOR LABORATORY UNITS OF IN THEATRE MILITARY MEDICAL TREATMENT FACILITIES (MTFs), which has been approved by the nations in the Military Committee Medical Standardization Board, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2571.
2. AMedP-8.5, Edition B, Version 1, is effective upon receipt and supersedes AMedP-8.5, Edition A, Version 2, which shall be destroyed in accordance with the local procedure for the destruction of documents.
3. This NATO standardization document is issued by NATO. In case of reproduction, NATO is to be acknowledged. NATO does not charge any fee for its standardization documents at any stage, which are not intended to be sold. They can be retrieved from the NATO Standardization Document Database (<https://nso.nato.int/nso/>) or through your national standardization authorities.
4. This publication shall be handled in accordance with C-M (2002) 60.



Dimitrios SIGOULAKIS
Lieutenant General, GRC (A)
Director, NATO Standardization Office

INTENTIONALLY BLANK

RESERVED FOR NATIONAL LETTER OF PROMULGATION

INTENTIONALLY BLANK

INTENTIONALLY BLANK

RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
CZE	CZE has not the equipment for performing of crossmatch and blood group testing at Role 2F (FSE).
FRA	<p>1. France reserves the right to express the results of biological or biochemical tests in international units (IU) of the WHO International System of Units (SI) whenever conventional units (CU) are mentioned in AMedP-71 covered by STANAG 2571. A conversion table CU-WHO SI could be added to AMedP-71 for convenience.</p> <p>2. As far as the pancreatic function test is concerned, France will measure lipase, not amylase.</p> <p>Regarding the cardiac function test, France will not measure the CKMB fraction.</p> <p>3. As far as cardiac tests are concerned, France will study :</p> <ul style="list-style-type: none"> • either the Troponine I Qual (cTnI) ; • or the Troponine T Qual (cTnT). <p>4. As crossmatch at Role 2F is done at an early stage in management, France reserves the right to consider it as optional rather than strictly necessary as state of the art, due to the conditions surrounding medical deployment and to the therapeutic purposes.</p>
GBR	<p>1. Role 2F – GBR Role 2F Medical Treatment Facilities do not always deploy with a laboratory capability, where this is the case cross-matching and blood grouping are not available. All tests are available when a Laboratory capability deploys with the facility.</p> <p>2. Role 2B - GBR Role 2B Medical Treatment Facilities always deploys with a laboratory capable but do not currently provide CRP or CKMB.</p> <p>3. Role 2E and Role 3 – GBR is currently fully compliant. GBR Role 1s usually provide the advised point of care testing.</p>
HRV	Military health service of Croatian Armed Forces currently does not have its own laboratory diagnostic capacity and for the purpose of medical support in the area of operations the capacity of laboratory diagnostics will be developed within the development of Role 2 B capability, when personnel, material and financial required conditions are met in the future.
LTU	Lithuanian Armed Forces Role2 military medical treatment facilities are not planning to perform Urine tests according to AMedP-8.5 (B).

NLD	NLD SOST does not perform the following diagnostics: cross match, qualitative urine parameters, urine sediment and pregnancy test.
SVK	To date, the Armed Forces of the Slovak Republic have at their disposal medical assets and capabilities responding to ROLE1 and ROLE2B and ROLE2E. The Slovak Republic reserves the right not to involve in the efforts aimed at reaching compliance with the requirements of ROLE2F and ROLE3.
TUR	Turkish Naval Forces does not have Role-3 MTFs. Role-3 medical support is provided ashore by national health system.
<p>Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.</p>	

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION 1-1
1.1. RELATED DOCUMENTS 1-1
1.2. PRELIMINARY REMARKS 1-1
1.3. AIM..... 1-1
1.4. GENERAL 1-1
ANNEX A MINIMUM TEST REQUIREMENTS OF MILITARY MEDICAL
TREATMENT FACILITIES A-1

INTENTIONALLY BLANK

CHAPTER 1 INTRODUCTION

1.1. RELATED DOCUMENTS

MC 326/3
STANAG 2228 -AJP-4-10 (C)
STANAG 2061
STANAG 2517
STANAG 2543
STANAG 2348
STANAG 2132

1.2. PRELIMINARY REMARKS

NATO with its new participants now has 30 member nations and many MTFs. NATO has various operations in different geographic areas which are currently taking place at the same time. In order to ensure appropriate medical support, MTFs will be required to leverage technology to maximise medical capabilities while minimising logistical burden. NATO forces should be able to work together in a multinational environment to provide appropriate medical care to their deployed forces.

1.3. AIM

The aim of this Allied Medical Publication (AMedP) is to define the minimum requirements for laboratory services for in-theatre MTFs.

1.4. GENERAL

1. Laboratory support in-theater must meet standards acceptable to all participating nations and provide a standard of medical care as close as possible to prevailing peacetime standards, taking into account the operational environment.
2. Nations are responsible for assigning the proper laboratory staff based on operational requirements.

INTENTIONALLY BLANK

**ANNEX A MINIMUM TEST REQUIREMENTS OF MILITARY MEDICAL
TREATMENT FACILITIES**

	Sample	Role 1	Role 2F	Role 2B	Role 2E	Role 3
HAEMATOLOGY						
Leukocytes (WBC) (Automated)	Blood				✓	✓
Erythrocytes (RBC) (Automated)	Blood				✓	✓
Hemoglobin (Hb)	Blood			✓	✓	✓
Hematocrit (Hct)	Blood			✓	✓	✓
Mean Corpuscular Volume (MCV)	Blood				✓	✓
Mean Corpuscular Hemoglobin (MCH)	Blood				✓	✓
Mean Corpuscular Hemoglobin Concentration (MCHC)	Blood				✓	✓
Red Cell Distribution Width (RDW)	Blood				✓	✓
Mean Platelet Volume (MPV)	Blood				✓	✓
Platelets (PLT)	Blood				✓	✓
WBC diff (Automated)	Blood				✓	✓
WBC diff Manual Differential (Manually): Segs. Bands, Lymphs, Atypical Lymphs (if present), Eos, Basos, RBC Morphology, WBC Morphology, Plt Estimate (only by request for abnormal CBCs)	Blood				✓	✓
BIOCHEMISTRY						
Ions						
Sodium (Na)	Blood			✓	✓	✓
Potassium (K)	Blood			✓	✓	✓
Chloride (CL)	Blood			✓	✓	✓
Ionised calcium (iCa)	Blood			✓	✓	✓
Renal function						
Blood urea nitrogen (BUN) or Urea	Blood			✓	✓	✓

**ANNEX A TO
AMedP-8.5**

	Sample	Role 1	Role 2F	Role 2B	Role 2E	Role 3
Creatinine	Blood			✓	✓	✓
Liver Function						
Gamma GT	Blood					✓
ALT/GPT	Blood					✓
AST/GOT	Blood					✓
Alk. Phosphate (ALP)	Blood					✓
Total Bilirubin (TBil)	Blood					✓
Pancreatic function						
Amylase	Blood					✓
Plasmatic Biochemistry						
Glucose	Blood	✓ *	✓	✓	✓	✓
Lactate	Blood		✓	✓	✓	✓
Inflammatory tests						
CRP	Blood			✓	✓	✓
Coagulation						
Activated Partial thromboplastin time (APTT)	Plasma					✓
Partial thromboplastin time (PTT)	Plasma					✓
INR	Plasma					✓
D-Dimer	Plasma					✓
Blood gas						
pH	Blood		✓	✓	✓	✓
PCO ₂	Blood			✓	✓	✓
PO ₂	Blood			✓	✓	✓
HCO ₃	Blood			✓	✓	✓
Base Excess (BE)	Blood		✓	✓	✓	✓
O ₂ Saturation	Blood			✓	✓	✓
Anion gap	Blood			✓	✓	✓
Cardiac tests and muscle damage markers						
Total creatine kinase (CK)	Blood					✓
CKMB Qual	Blood			✓	✓	✓
Troponine I Qual (cTnl)	Blood			✓	✓	✓

**ANNEX A TO
AMedP-8.5**

	Sample	Role 1	Role 2F	Role 2B	Role 2E	Role 3
Hormones						
Pregnancy test (HCG)	Blood					✓
Transfusion						
Blood group, Rh	Blood		✓	✓	✓	✓
Crossmatch	Blood		✓	✓	✓	✓
Urine						
Specific Gravity (Density)	Urine	✓ *	✓	✓	✓	✓
pH	Urine	✓ *	✓	✓	✓	✓
Leucocytes	Urine	✓ *	✓	✓	✓	✓
Nitrite	Urine	✓ *	✓	✓	✓	✓
Protein	Urine	✓ *	✓	✓	✓	✓
Glucose	Urine	✓ *	✓	✓	✓	✓
Ketone	Urine	✓ *	✓	✓	✓	✓
Urobilinogen	Urine	✓ *	✓	✓	✓	✓
Bilirubin	Urine	✓ *	✓	✓	✓	✓
Blood	Urine	✓ *	✓	✓	✓	✓
Sediment	Urine	✓ *	✓	✓	✓	✓
Pregnancy test (hCG)	Urine	✓ *	✓	✓	✓	✓

- All tests with a check mark are necessary, while the rest of them both included and not included in the table are optional. A check mark with a star(*) indicates a recommendation.
- Microbiology and other specialized testing (CBRN, Pathology, Drugs) should be considered on an operational basis.

AMedP-8.5(B)(1)