# **NATO STANDARD**

# AMedP-4.4

# DENTAL FITNESS STANDARDS FOR MILITARY PERSONNEL AND THE NATO DENTAL FITNESS CLASSIFICATION SYSTEM

**Edition B, Version 1** 

**APRIL 2023** 



NORTH ATLANTIC TREATY ORGANIZATION

**ALLIED MEDICAL PUBLICATION** 

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# NORTH ATLANTIC TREATY ORGANIZATION (NATO) NATO STANDARDIZATION OFFICE (NSO) NATO LETTER OF PROMULGATION

4 April 2023

- 1. The enclosed Allied Medical Publication AMedP-4.4, Edition B, Version 1, DENTAL FITNESS STANDARDS FOR MILITARY PERSONNEL AND THE NATO DENTAL FITNESS CLASSIFICATION SYSTEM, 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 2466.
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Lieutenant General, GRC (A)
Director, NATO Standardization Office



# RESERVED FOR NATIONAL LETTER OF PROMULGATION

# **RECORD OF RESERVATIONS**

CHAPTER	RECORD OF RESERVATION BY NATIONS

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.

# **RECORD OF SPECIFIC RESERVATIONS**

[nation]	[detail of reservation]							
LTU	Lithuania will not use dental fitness classification system presented in AMedP-4.4(B) annex B.							
NOR	NOR is implementing the EMAR requirements, and the applicable Airworthiness criteria from EMAR will be used when appropriate. Design organizations applying for Airworthiness Certification may use this STANAG when not in conflict with EMAR							

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.

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### CHAPTER 1 INTRODUCTION

### 1.1. AIM

The aim of this Allied Medical Publication (AMedP) is to create standards for dental fitness among military personnel of NATO countries and a corresponding dental fitness classification system such that the number of dental emergencies in the field can be reduced to the lowest level possible. This sets the basis for interoperability.

### 1.2. GENERAL

Experience confirms that dental disorders reduce the operational capability and effectiveness of those affected. Routine dental examinations, preventative measures and treatment programmes can reduce the risk of personnel experiencing dental disorders on deployments. Such programmes have been successful in reducing the incidence of dental conditions requiring analgesic or antibiotic therapy, absence from duty and evacuation to available dental facilities. With an increase in allied and combined operations there is the potential for large numbers of dentally unfit individuals to overwhelm allied dental facilities. A standardized approach to dental fitness and a focus on preventive care will significantly reduce this problem.

# CHAPTER 2 DETAILS OF THE AGREEMENT

# 2.1. AGREEMENT

Participating nations agree to:

a. Adopt the definitions of dental fitness and the system of classification of dental fitness outlined in this AMedP.

# 2.2. **DEFINITIONS**

The lay definition of dental fitness is given at Annex A.

The lay definition of a dental emergency is given at Annex C.

# 2.3. IMPLEMENTATION

This AMedP is considered implemented when a nation has issued the necessary orders or instructions to the forces concerned, putting the principles and protocols of this agreement into effect.

# ANNEX A LAY DEFINITION AND DEFINITION FOR THE POLICY OF NATO COUNTRIES MILITARY DENTAL SERVICES

# A.1. LAY DEFINITION

1. The term "DENTALLY FIT" (Dental Fitness Class 1 and 2) describes a state of oral health which, once attained and maintained, ensures that Service personnel are fit to carry out all military duties with minimal risk of lost time or effectiveness attributable to dental conditions.

# DEFINITION FOR THE POLICY OF NATO COUNTRIES MILITARY DENTAL SERVICES

- 2. The award of a "DENTALLY FIT" categorisation for Service personnel is appropriate where:
  - a. Personnel are free of oro-facial pain.
  - b. Personnel have adequate masticatory function.
  - c. There are no carious lesions that are likely to result in a dental emergency within the next 12 months.
  - d. There are no restorations likely to result in a dental emergency within the next 12 months.
  - e. Non-surgical root canal treated teeth are asymptomatic and structurally sound.
  - f. There is no evidence of pulpal or periapical disease.
  - g. There is no evidence of periodontal disease likely to result in a dental emergency within the next 12 months.
    - There is no evidence of periimplant disease likely to result in a dental emergency within the next 12 months.
  - h. Dental prostheses are retentive, stable and functional
  - i. There are no partially erupted third molars with a history of repeated pericoronal infections.
  - k. There are no functionless roots in communication with the oral cavity and when retained, there is no associated pathology.

- I. The soft and hard oro-facial tissues are free from pathologically significant abnormality.
- 3. Subject to any change in clinical status, the award of the "DENTALLY FIT" category to an individual is normally valid for a period of twelve months, but may be set at any period between 3 and 24 months depending on dental history and National Guidelines on dental recall. Only patients categorized as Class 1 may be given a recall date in excess of 12 months. Unless considered necessary by the examining dental officer, screening radiographic examinations should comply with the criteria laid down in the policies of individual NATO countries and also consider the clinician's clinical judgement.

# ANNEX B DENTAL FITNESS CLASSIFICATION SYSTEM

# DENTAL FITNESS CLASS (DFC) 1

1. Service personnel who require no dental treatment. (On examination, no further dental appointments are given or recommended, for example if there are missing teeth and no replacement is recommended, Service personnel can still be DFC 1). The risk of a dental emergency within the dental recall period is considered to be low.

DFC 1 Service personnel are considered deployable.

# **DENTAL FITNESS CLASS 2**

2. Service personnel who may require dental treatment but whose existing dental condition is unlikely to result in a dental emergency within 12 months.

DFC 2 Service personnel are considered deployable.

# **DENTAL FITNESS CLASS 3**

3. Service personnel who require dental treatment to correct a dental condition that is likely to cause a dental emergency within 12 months.

DFC 3 includes patients currently under care for a dental condition where, if not completed, the patient would likely experience a dental emergency. ("Potential emergency patients")

DFC 3 patients are not considered deployable.

### DENTAL FITNESS CLASS 4

4. Service personnel who require a periodic dental examination, have an undetermined dental status, or whose dental records are missing or incomplete.

DFC 4 Service personnel are not considered deployable.

# ANNEX C LAY DEFINITION OF A DENTAL EMERGENCY AND EVIDENCE BASE FOR PREVENTION OF DENTAL EMERGENCIES

### C.1. LAY DEFINITION

1. A DENTAL EMERGENCY is defined as a condition of oral disease, trauma or loss of function or other concern that needs immediate dental treatment.

# THE OPERATIONAL IMPERATIVE FOR DENTISTRY

- 2. The following evidence based statements underpin the requirement for the provision of dentistry to meet operational requirements:
  - a. The risk of a dental emergency occurring in an individual who is dentally unfit (DFC 3) has been shown to be between 39% and 51% higher than that of an individual who is dentally fit (DFC 1 and 2).<sup>1</sup>
  - b. Even when dental conditions are treated, there remains an irreducible residual risk of a dental emergency occurring which equates to approximately 10-15% dental casualties experienced per year.<sup>1,2</sup>
  - c. This residual dental risk highly correlates with an individual's disease experience as reflected by the Decayed, Missing due to caries, and Filled Teeth (DMFT) index.
  - d. Even a dentally well prepared Force can expect to experience dental casualties proportionate to the number of personnel deployed and the duration and nature of the deployment. A proportion of these may require medical evacuation.<sup>3,4</sup>
  - e. The incidence of dental casualties may also be increased on deployments where there is a risk of dental trauma or battle-related cranio-facial injury.<sup>5</sup> Evidence has shown that almost one quarter (23%) of military trauma cases involved injury to the head, neck, or dentition<sup>6</sup>. Findings from deployed and Firm Base settings indicate that up to 25% of service personnel experienced oral or peri-oral trauma during their service careers<sup>7</sup>.
  - f. Service provision of dentistry in both the Firm Base and the operational space can facilitate management of the unavoidable dental emergencies arising from disease non-battle and battle injuries.<sup>8,9</sup>

# THE NEED FOR PREVENTIVE-FOCUSED SERVICE DELIVERY

- 3. Military recruits may have experienced dental disease before they joined the military.
  - a. Early management of dental disease in those joining the military can reduce the risk that personnel develop new disease during their service<sup>10</sup>.
  - b. A preventive approach focused on mitigating the impacts of a poor diet, improving oral hygiene, reducing tobacco and alcohol use, increasing access to fluoride and prevention of dental trauma, forms the foundation of a dental emergency reduction strategy.
  - c. Restorative treatment alone will not prevent future disease and the risk of a dental emergency has been shown to increase by 5% for each additional DMFT.<sup>1</sup>

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