

## FDI POLICY STATEMENTS

In the year 2016, eight policy statements were released by FDI. The statements are presented below.

### 1. Dental Unit Water Systems and Microbial Contamination

Revision adopted by the FDI General Assembly: September 2016, Poznan, Poland.

Original version adopted by the FDI General Assembly: August 2005, Montréal, Canada

#### Context

Dental Unit Water Systems (DUWS) are used to rinse, clean and cool the operative site and equipment while working on soft and hard tissues. They can either be connected with the local water supply or to a self-contained system using bottled water.

A characteristic feature of a dental unit water line is the capacity to rapidly develop biofilms on the inner surfaces of its tubes and associated containers. Generally, these biofilms contain such microbes, which grow at ambient temperature, are relatively harmless saprophytic organisms. They cause disease only under exceptional circumstances, mainly in immune-compromised hosts.

The major source of microbes for biofilm development in DUWS is considered to be the municipal or the local water supply, which usually provides potable water with extremely low levels of saprophytic bacteria. Another possible source of organisms that may contaminate DUWS is a temporary drop of pressure in the local water supply. Contamination may also be due to retraction of patients' saliva or blood into the DUWS. However, this risk is reduced in modern dental units, which are now routinely fitted with anti-retraction valves. Patients and oral health care workers are regularly exposed to water and aerosols generated from the dental unit.

#### Definitions

- i. **Biofilm:** A biofilm is a community of microbes growing on a substrate and encased in a matrix of extracellular polymeric material. Biofilms are not very sensitive to disinfection agents. The growth of biofilms in DUWS is enhanced through contamination by retrograde bacterial reflux, (room) temperature ideal for bacterial growth, stop periods (weekends, holiday), high surface-volume-ratio of the water-carrying pipes, pipe material and low and discontinuous flow rate.

- ii. **Amoeba:** (Also ameba) A single-celled (protozoan) organism. Amoeba can infect the bowels causing diarrhea and the liver causing abscess formation. A single amoeba can contain hundreds of Legionellae (1) and set them free when it is dying off or being destroyed.

- iii. **Legionella:** (*Legionella pneumophila*) Pathogenic group of Gram-negative bacteria. The inhaling of legionella-containing aerosol can cause Legionnaires Disease or Pontiac Fever. There is one published case of a fatal infection related to a legionella contaminated dental unit (2).

#### Principles

The aim of this Policy Statement is to make dentists aware of the basic principles of the DUWS and provide guidance on how to minimize risk with easy-to-follow procedures.

#### Policy

There are no scientific studies on which pathogens (bacteria, fungi, protozoans) in what concentration in the DUWS will cause nosocomial infections. For healthy patients with normal risk for infection, recommendations sometimes use the acceptable amount of heterotrophic bacteria in drinking water, which is less than or equal to 500 colony forming units per milliliter of water (3) in DUWS for all interventions that need rinsing/cooling and for all minor intraoral surgical procedures without further primary wound closure. For patients with high risk of infections (e.g. by cystic fibrosis, granulocytopenia, aplastic anemia or immunosuppression) and, for all interventions with further primary wound closure, only sterile solutions (external cooling) are advised.

Removing existing biofilm and disinfecting DUWS to prevent the formation of biofilm according to the manufacturers' recommendations together with flushing all water lines every morning (without delivery devices) will significantly reduce the amount of heterotrophic bacteria and hence the probability of disease transmission. Monitoring microbial counts in dental unit water on a routine basis is advised.

It is recommended that all waterlines be discharged after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g. handpieces, ultrasonic scalers, and air/water syringes) (4).

Flushing of suction units is advised in between patients, especially when procedures performed were of a surgical nature. Dental manufacturers are responsible for equipment construction with materials suitable for disinfection. Furthermore, they should be prompted by legal requirements to use exclusively those materials for water pipes in dental systems that prevent formation of biofilms, or at least highly minimize it.

### Disclaimer

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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## 2. Minimal Intervention Dentistry (MID) for Managing Dental Caries

Revision adopted by the FDI General Assembly: September 2016, Poznan, Poland

Original version adopted by the FDI General Assembly: October 2002, Vienna, Austria

### Context

Since the appearance of the first policy statement on MID in 2002, its understanding has evolved and evidence-based outcomes of new and existing preventive and restorative treatments have become available.

### Scope

Visual/tactile assessment instruments and electronically driven devices are available to detect carious lesions and to assess caries risk and activity (1). The development and progression of carious lesions can be controlled. The outcome of the caries activity assessment, together with the usage of predictive power of validated caries risk assessment tools, will guide the dental practitioner in deciding which evidence-based carious lesion controlling measures to use and to determine the tailor-made recall sessions.

The demineralisation process of dental caries can be halted largely by the patient reducing the intake and frequency of sugar in the diet and removing the biofilm twice daily with a toothbrush and fluoride-containing toothpaste and dental floss. Evidence based measures to prevent carious lesions include fluoride in water, in gel, in varnish and paste, and in pits and fissures sealants. Some recently developed measures such as resin infiltration and CPP-ACP paste are promising (2).

Minimally invasive operative interventions are limited to the removal of friable enamel and soft dentine, which minimizes the cavity size. Sealing such a treated cavity with a quality adhesive dental material will prolong tooth survival (3). Evidence has shown that the long-term survival of repaired defective restorations is as good as that of replaced defective restorations. Replacement is therefore considered over-treatment in many cases while refurbishment and repairing are considered an appropriate minimal invasive operative intervention (2, 4).

### Definition

The concept of MID dental caries management is to conserve remineralisable and intact tooth tissue to help retain teeth throughout life. Tooth tissue should not be removed unnecessarily.

The major MID components include:

- i. early detection of carious lesions and assessment of caries risk and activity
- ii. remineralisation of demineralised enamel and dentine
- iii. optimal measurements to keep sound teeth sound
- iv. tailor-made dental recalls
- v. minimally invasive operative interventions to ensure tooth survival
- vi. repairing rather than replacing defective restorations (1).

### Principles

The aim of MID is to maintain as much healthy tooth structure as possible and keep teeth functional for life. This has become all the more important as life expectancy is increasing steadily. People should be able to continue enjoy the full function of a good natural dentition in old age (5-8).

### Policy

FDI World Dental Federation supports Minimal Intervention Dentistry (MID) as the contemporary manner to manage dental caries.

### Keywords

Minimal Intervention Dentistry, dental caries, caries prevention, restoration, caries assessment.

### **Disclaimer**

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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### **3. Partnering for Better Health - The Dentist-Patient Relationship.**

Revision adopted by the FDI General Assembly: September 2016, Poznan, Poland.

Original version of Basic Rights and Responsibilities Of Dental Patients; and Original

version of Basic Responsibilities And Right Of Dentists: October 2007, Dubai, UAE.

### **Context**

The ultimate goal of dentistry, like medicine in general, is the continuous improvement of populations' health and well-being. To do so, dentists should improve their competencies in research, preventive measures, and treatment techniques, underpinned by enhanced communication and patient-relation skills, to provide high quality patient-centered care.

### **Principles**

Achieving optimal quality care requires dentists and their patients to establish an effective relationship based on trust and mutual respect. A commitment must be defined based on each party accepting the rights and responsibilities of the other, well beyond the legal or ethical rules relevant to each country. This mutual commitment is needed to achieve the best results and the common goal of good oral health.

### **Policy**

The responsibilities and commitments of the dentist are:

- i. To make sure that the patient's basic right to choose their dentist freely has been respected.
- ii. To always work for the best interest of the patient, without any discrimination in "access to care" and "needed treatments".
- iii. Not to permit any external influences (commercial or otherwise) to supersede their professional responsibilities and freedom of practice.
- iv. To provide quality treatment in a competent manner, in a safe and secure environment. Dentists should only provide care for which they have the necessary qualifications and skills, which should be updated regularly throughout their professional life.
- v. To provide the patient or their legal representative with all the necessary information, including treatment costs, to enable them to take part in the decision making process.
- vi. To review and explain clearly the alternative treatment possibilities, to be able to obtain the informed consent of the patient.
- vii. To acknowledge the patient's right to have their own point of view regarding their treatment, to be offered alternative treatment options, and to seek a second professional opinion if they wish.
- viii. To provide confidentiality with respect to medico/dental information and patient records in their individual relationship with

- the patient and as the head of the dental team.
- ix. To provide access and make available to the patients their own medico/dental records.

The dentist's rights are:

- i. To treat and to be treated with respect and dignity.
- ii. To have the freedom of practice provided by the law and the health system relevant to the country. This freedom should give all patients equal access to oral healthcare.
- iii. To have the right to refuse to treat any patient whose demands may go against good medical and/or dental practices.
- iv. To put an end to the dentist-patient contract partnership in case of any loss of confidence, if possible with the terms of the national laws.

The patient's commitments are:

- i. To allow the dentist to practice in a relaxed and safe environment and to provide quality oral healthcare, the patient must:
- ii. Respect the wellbeing of other individuals, including members of the dental team.
- iii. Understand and accept the realities and limits of today's dentistry.
- iv. Accept their responsibility for their own oral health by following the advice, preventive measures and recommendations given by the dentist and members of the dental team.

Once these conditions are fulfilled, a trusting relationship between dentist and patient can be established and the common goal of optimal oral health becomes achievable.

#### Disclaimer

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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Dentists' rights and responsibilities:

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#### 4. Preventing Oral Diseases.

Revision adopted by the FDI General Assembly: September 2016, Poznan, Poland. Original version adopted by the FDI General Assembly: October 1998, Barcelona, Spain. Revised version adopted by the General Assembly: 26th September 2008, Stockholm, Sweden.

#### Context

Oral diseases have a negative impact on general health and well-being, with the greatest burden falling on the young, disadvantaged, underprivileged and ageing populations. The principal diseases are dental caries, periodontal diseases and oral cancer. Simple and relatively inexpensive measures such as education on oral hygiene practices and diet, use of fluoride, self-compliance, early screening and appropriate interventions prevent, or at least reduce, the high burden of oral diseases. In addition, studies have shown the existence of a relationship with systemic diseases such as cardiovascular diseases and diabetes. Furthermore, oral diseases have a negative impact on quality of life, affecting physical, psychological and social wellbeing. Since 2008, there has been an increase in knowledge on the subject and in particular on the understanding of the effect of risk/protecting factors in systemic diseases.

#### Scope

Barriers to achieving optimal oral health include: low socio-economic status, lack of oral health literacy and education, and lack of access to care. Furthermore, low prioritization of public oral health in relation to general health policy also

results in a lower perceived need and, at times, inadequate resource allocation and management. Preventive and health promoting approaches based on common protective factors such as brushing, flossing, fluoride rinse, healthy nutrition, reduction on sugar consumption, cessation of tobacco use and limiting the consumption of alcohol apply to maintain good oral and general health.

#### **Definitions**

Prevention, together with health promotion and treatment, are important ways in which to lower the risk of oral diseases and minimize their impact on general health.

#### **Principles**

This policy statement seeks to further oral health in all health policies at national and international level and emphasize the interaction with general health in achieving oral disease prevention.

#### **Policy**

FDI World Dental Federation supports the view that:

- i. General populations, health care providers, policy and decision makers, and other stakeholders should be educated towards the understanding that oral health is an integral part of general health.
- ii. Members of health professions, governments, intergovernmental, nongovernmental organizations, and the media, among- others, need to promote the understanding that most oral diseases can be prevented.
- iii. Inter-professional collaboration between stakeholders needs to adopt relevant and practical oral health approaches that are integrated into the prevention of other chronic non-communicable diseases.
- iv. Undergraduate training should emphasize prevention rather focusing on curative models
- v. National health policies and programmes should be aimed towards preventing oral diseases and promoting and maintaining oral health.

#### **Keywords**

Prevention, oral health policy, oral diseases, professional interaction, Non-communicable diseases, inter-professional collaboration.

#### **Disclaimer**

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#### **5. Evidence-Based Dentistry (EBD).**

Adopted by the FDI General Assembly: September 2016, Poznan, Poland.

### Context

Dentists have a responsibility to use evidence to inform practice and ensure that the basis for informed consent and treatment of patients reflects the best available evidence, applied in accordance with the clinical expertise of the dentist and the wishes of the patient. Dentists are also responsible for avoiding techniques and technologies that have been shown to be ineffective, unsafe and unethical. Dental practice should be based on a commitment to sound science and an ethical obligation to protect patient health. With rapidly evolving science and technology, information becomes more readily available, creating challenges for dentists to obtain, understand, evaluate and integrate this new information into daily clinical practice.

To address these challenges, dentistry and dentists should be encouraged to adopt an evidence-based approach in their clinical practice and oral healthcare. This is commonly known as Evidence-Based Dentistry (EBD), and is endorsed by FDI because it helps clinicians interpret and apply the best available evidence in everyday practice. It is recognized that there is insufficient evidence at present to guide all aspects of oral healthcare, and that gaps in knowledge exist.

### Scope

The goal of practicing EBD is to help dentists provide the best possible care for their patients. This systematic process requires the identification of a clinical question; retrieval of the most appropriate and available evidence from the scientific literature, following established eligibility criteria; assessment of the quality of that evidence; and subsequent use of the evidence to inform clinical practice decisions. The evidence is therefore integrated with clinical experience and other factors related to specific patient needs and preferences (1)

### Definitions

EBD is an approach to oral health care that requires the judicious integration of: systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise, and the patient's treatment needs and preferences (1). Available evidence will vary depending on the particular healthcare issue being addressed and the urgency demanded, with some clinical areas having little or no existing evidence base.

Rapid reviews and classic systematic reviews are the foundations of healthcare decision-making, irrespective of whether they are pre-existent or developed specifically to inform a new policy or clinical practice guideline.

A classic systematic review uses systematic and explicit methods to identify, select, critically appraise, and extract and analyze data from relevant research (2).

A rapid review is a form of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a timely manner (3).

Current systems and standards to assess the quality of evidence (i.e. the extent to which the estimates from clinical studies support a decision, recommendation or policy) and grade the strength of recommendations emphasize the need to consider the broadest range of study designs, depending on the type of decision to be made (4). This way, valuable information from government agencies, economic analysis, country or regional registries can serve in the process of formulating recommendations (4,5).

### Principles

The EBD process includes “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based dentistry means integrating individual clinical expertise with the best available external clinical evidence from systematic researches” (4). EBD does not provide a “universal panacea” that dentists must follow, nor does it establish a standard of care.

### Policy

FDI supports:

- i. The EBD approach to help dentists interpret and apply the best available evidence in everyday practice.
- ii. The concept of EBD developed through the best available scientific evidence.
- iii. The incorporation of the principles of EBD in the dental curriculum and in continuing professional education.

FDI recognizes that:

- i. Treatment recommendations should be determined by the dentist for each patient individually, and scientific evidence should be integrated with the dentist's clinical experience. These should take into consideration beliefs, values, patient preferences and the cultural context of the local environment.
- ii. Adopting the principles of EBD to guide development of clinical practice guidelines and policy will require dentists to possess the ability and means to access the best current scientific evidence in making clinical decisions, realizing that the quality of the available evidence can vary significantly

- depending on the clinical question of interest (5).
- iii. Barriers exist to the implementation of EBD in daily clinical practice. These barriers include a lack of an evidence base to certain clinical questions; a lack of access to evidence-based information; and for many clinical questions, a lack of evaluation of evidence and development of evidence-based information in a concise format that is useful to dentists. Individual dentists are not expected to review all scientific evidence to inform practice. It is incumbent on the leadership of the profession to identify and address barriers to effective EBD implementation and to ensure there are systems and processes in place to ensure the rapid and effective dissemination of information as this becomes available.

Although we have imperfect information, the guiding principles articulated in this PS are to encourage dentists to use available scientific evidence, with dentist's clinical expertise and the patient's treatment needs, values and preferences to inform clinical practice.

#### **Disclaimer**

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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#### **6. Grey Market and Non-Compliant Dental Products.**

Adopted by the FDI General Assembly:  
September 2016, Poznan, Poland.

#### **Context**

The dental profession is becoming increasingly aware of the potential harm from using non-compliant, grey and black market dental products. Dental providers are ultimately responsible for providing safe and effective oral healthcare and ensuring that the dental products used on their patients comply with professional specifications, international standards and government regulations. Substandard dental materials, instruments and devices are potentially dangerous for patients, dentists, providers and users. Products that have been diverted outside of an authorized distribution channel may have changed hands numerous times. They may not have been handled and stored in the required conditions. The diverted products may no longer meet the manufacturer's original specifications or national regulatory requirements. For example, a supplier may purchase products intended for a specific market with less stringent regulations, then import and sell the product in another country outside of the normal distribution channels. The manufacturer may not have intended the product to be sold in another country. The product may not comply with the regulations in the country where it is now being sold. Products outside of the authorized distribution channels can be improperly stored, repackaged or relabeled with false expiration dates. Some non-compliant products outside the authorized channels continue to be sold long past their real expiration dates and can result in poor clinical outcomes from improper handling, contamination, chemical decomposition and altered physical/mechanical properties. Illegal copies of manufacturers' original, safety-tested products with added counterfeit labels, and false expiration dates do not conform to international standards and regulations.

#### **Scope**

This policy statement covers key issues related to the manufacture, distribution, sale and use of dental products. The policy should be considered by National Dental Associations, the dental industry, government regulators and dental professionals. The policy is intended to help ensure dental products are safe for patient care and conform to manufacturers' specifications, international standards and government regulations.

#### **Definitions**

- i. Grey market is sometimes called a parallel market and is the trade of a commodity outside

- the established distribution channels. Outside distribution and marketing channels are legal but are unintended, unauthorized and uncontrolled by the original manufacturer or distributors.
- ii. Black market is the illegal manufacture, trade or sale of a product.
  - iii. Grey market product is a generic term that primarily refers to a product that is traded or sold outside of the manufacturer's authorized distribution channels.
  - iv. Black market product is an illegally manufactured, distributed or sold product.
  - v. Counterfeit product is a fake replica of a real product that has value.
  - vi. Non-compliant product is a generic term for a black market or grey market product that does not conform to local, national or international regulations. It may be a counterfeit or illegally manufactured, distributed or sold product (1-4).

### Principles

FDI supports the appropriate use of safe and effective dental products in oral healthcare. Helping to ensure patient and provider safety minimizes risks, improves oral health outcomes and reinforces the importance of purchasing products that comply with standards and regulations from reputable distributors and suppliers. Selling or purchasing products on the grey market isn't necessarily illegal, but providers and patients may not be receiving what they think they purchased. FDI is also concerned that individuals who are not properly licensed to practice dentistry are able to purchase professional dental products from grey, non-compliant, black and counterfeit market suppliers and/or the internet, for the illegal practice of dentistry.

### Policy

FDI urges all dentists and dental team members to understand and be aware of the risks they take by purchasing non-compliant products. FDI recommends that:

- i. Regulatory agencies develop and enforce policies governing the purchase of dental products to ensure that professional items sold for dental care meet regulatory standards and are restricted to licensed dentists and/or registered dental practices.
- ii. Manufacturers collaborate with industry stakeholders to certify supply chain integrity. This includes proper labeling of the products to fully include the chemical composition of dental materials.
- iii. Manufacturers support policies to combat the sale and distribution of noncompliant and grey market products with the goal of protecting patient safety.
- iv. National Dental Associations, manufacturers and regulators help to coordinate professional educational programmes for dentists, the dental industry and stakeholders on the risks and pitfalls of purchasing non-compliant and grey market dental products.
- v. National dental associations, manufacturers and regulators reinforce the adoption of ISO standards to ensure that dental products and equipment sold to dentists are of high quality.
- vi. Dental providers and all responsible parties use only regulated and compliant dental products that conform to manufacturers' specifications and international dental standards.
- vii. Dental providers refrain from purchasing non-compliant products.
- viii. Dental providers report suspect materials, instruments and devices to the appropriate regulatory agencies and professional authorities in a timely manner.

### Disclaimer

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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### 7. Oral Health and Dental Care of People with Disabilities

Adopted by the FDI General Assembly: September, 2016, Poznan, Poland.

### Context

Over 1 billion people, about 15% of the world's population, have some form of disability. Among them, between 110 and 190 million people experience functional difficulties. Disability rates



continue to rise globally due to increased life expectancy amongst children with disabilities and ageing populations, and a growth in prevalence and incidence of long-term health conditions.

### **Scope**

Global oral health goals to achieve by the year 2020 by FDI/WHO/IADR (2003) emphasized the importance of promoting oral health within groups and populations with the greatest disease burden. This is especially important for people with disabilities as they typically experience greater levels of oral disease. These groups are often under-served and experience high levels of unmet need for dental care, with the oral disease they experience often remaining untreated. Most dental care for people with disabilities is not complex and can be provided in primary care and community settings, by a dental workforce with the relevant attitudes and competencies.

### **Definitions**

The WHO International Classification of Functioning describes disability as an umbrella term, covering impairments, activity limitations, and participation restrictions. Disability is diverse, including those who have a range of impairments with or without additional needs. However, not everyone who is disabled will have complex needs. The scope is broad, covering people with physical, sensory, intellectual, medical, emotional or social impairments; or more often a combination of these factors. These groups are sometimes referred to as 'people with special needs', people with 'special healthcare needs', or people requiring 'special care dentistry'.

### **Principles**

All people have a fundamental right to health and access to healthcare services in their communities. People with disabilities should advise on the design and evaluation of healthcare services and healthcare information, to ensure that services are patient-centred and appropriate to their needs. People with disabilities should be recognized for their abilities, not their disabilities, and dental care should be offered to the same standard as for the general population. FDI and the International Association for Disability and Oral Health (IADH) support the United Nations Declaration on the Rights of Disabled Persons, that people with disabilities should have access to medical treatment without discrimination.

### **Policy**

FDI and IADH support the following guiding principles and associated recommendations:

- i. Encourage national health policies to consider the needs of people with disabilities.
- ii. Ensure that all oral health services are accessible to people with intellectual, physical, sensory, emotional and social impairments.
- iii. Raise awareness of the importance of oral health as an essential component of general health and quality of life amongst people with disabilities, families, caregivers and non-dental health professionals. Advocate for oral health risk assessment and oral health promotion skills training for all healthcare workers within multi-disciplinary care pathways for people with disabilities.
- iv. Acknowledge the specific skills, education and training, and facilities necessary to manage patients requiring complex special care dentistry.
- v. Encourage training in special care dentistry at the undergraduate, postgraduate, and continuing education levels through all dental disciplines.
- vi. Encourage private and public sponsors of oral health research to consider the needs of people requiring special care dentistry.

### **Disclaimer**

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

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## 9. Sports Dentistry.

Adopted by the FDI General Assembly: September 2016, Poznan, Poland.

### Context

Sports dentistry is the branch of sports medicine dealing with prevention and treatment of dental injuries and oral diseases associated with sports and exercise. Amateur and young athletes face greater risk of oral injuries, because they may not receive proper guidance and/or training. Although the indication of customized types of mouth guards has increased, and the effectiveness for preventing injuries has been demonstrated, there is a need to further specify the sport characteristic, age group, selected material, guard design, as well as time of use. Current evidence also shows that mouth guards may lose efficiency over time, due to use and regular maintenance.

Injuries, facial bone fractures and brain concussions should receive special attention, as sports-related blows may carry a considerable amount of energy. Aerial duels with projection of the body and consequent head and/or elbow contact completely change the impact received on the facial bone structure. Face shields, or customized masks made of scientifically determined cushioning materials, may be successfully applied and may be indicated for post-fracture use to reduce recovery time for the athlete. Customized sports mouth guards and face shields manufactured under the supervision of a dentist, should be favoured instead of commercially available pre-sized guards sold over-the-counter.

There is also a need to increase awareness of the potential indirect 'doping' effects of dental prescriptions, i.e. opioid drugs, as certain drugs widely indicated in dentistry may be transformed into banned doping substances. For example, codeine-containing drugs are not prohibited by the World Anti-Doping Agency (WADA). However, when they enter the body, these drugs are transformed into morphine, which is prohibited. There are also substances in the body that, when decompensated due to functional deterioration, can

promote reactions and indirectly affect the athlete's oral health.

Some dental problems, such as non-carious cervical lesions or caries, may also come from over training, an unfavourable diet, a parafunctional load, or a lack of education of oral hygiene. Swimmers are particularly exposed to dental erosion risk due to potentially acidic aqueous environment. For additional consideration, sports drinks and related products ingested in the form of liquids, or food supplements, can cause complications in the oral environment including dental hard tissues and dental materials, due to high content of free sugars and acidic ingredients. It should be noted that sugar-free varieties of sports and energy drinks are often still highly acidic and can therefore cause dental erosion. All aspects of an athlete's oral and general health may affect performance and should be addressed.

### Scope

This policy statement provides information about the global situation of sports dentistry and the role of dentists on the health of athletes.

### Definition

Sports dentistry is the branch of sports medicine dealing with prevention and treatment of dental injuries and oral diseases associated with sports and exercise.

### Principles

This policy statement contributes to FDI's aims to improve the oral health of athletes, as well as systemic and psychological health, increasing performance and safety in sports practice. Moreover, having dentists present in high performance sport teams is an important measure to ensure athletes general health, through oral preventive and curative action.

### Policy

FDI recommends to:

- i. Reinforce the importance of customized mouthguards, shock-absorbing material, and time of use.
- ii. Promote preventive measures for the maintenance of healthy oral tissues.
- iii. Introduce the indication of customized face masks and shields, made by dentists or under dental professional supervision.
- iv. Update the dental team on the metabolism of prescribed substances in potential conflict with WADA regulations.
- v. State the importance of an athlete's oral health status to their performance and the manifestation of oral lesions related to

- systemic reactions derived from sports conditions.
- vi. Reinforce the importance of the relationship between an athlete's oral and general health.
  - vii. Promote the benefits of well-balanced diets for good oral health.

#### **Disclaimer**

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