

# Attitudes of Irish and European dentists to water quality of dental unit water systems

## Authors:

F.M. Burke, BDentSc, MSc, PhD, FDSRCSEd, FFDRCSI<sup>1</sup>; D. O'Mullane, BDS, PhD, FDSRCSEd, FFDRCSI<sup>2</sup>; M. O'Sullivan, BDS<sup>3</sup>

<sup>1</sup>Department of Restorative Dentistry,  
National University of Ireland, Cork

<sup>2</sup>Oral Health Services Research Centre,  
National University of Ireland, Cork

<sup>3</sup>Southern Health Board, Cork

## Address for correspondence:

Dr F.M. Burke

Department of Restorative Dentistry  
University Dental School and Hospital  
Wilton

Cork

Ireland

Telephone: +353-21-4901145

Fax: +353-21-4345737

Email: f.burke@ucc.ie

## Precis

A survey revealed that dental practitioners would welcome regular microbiological water tests and clear advice on cleaning/disinfection of the water supply in their dental units.

## Abstract

**Background:** dental unit water systems (DUWS) are used in dental practices to provide water to irrigate the oral cavity. Dental surgeries across the European Union (EU) use DUWS that may be prone to microbial contamination.

**Objectives:** to determine Irish dental practitioners' attitudes to perceived risk from working with DUWS and their protocols for the management of biofilm in their DUWS and compare these with other European dentists.

**Design:** a questionnaire was used to determine DUWS types in use, practitioners' attitudes to risks associated with using DUWS and their DUWS management protocols.

**Results:** there were six different types of DUWS, 40 per cent of which were >5 years old, 42 per cent of DUWS were fed by purified or distilled water. Only four per cent of practitioners carried out microbiological analysis on their water, but 38 per cent indicated that they cleaned or disinfected their DUWS. One-hundred per cent of practitioners were not aware of national/international guidelines for microbial contamination of DUWS but 77 per cent were concerned about DUWS water quality.

**Conclusions:** the majority of practitioners were working with equipment that is <5 years old. The majority of DUWS were not treated but practitioners were concerned about dental unit water quality and would welcome regular microbiological water tests and clear advice on cleaning/disinfection of the water supply in their dental units. Practitioner attitudes and behaviours were broadly similar in the other European countries studied.

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