

Environmental Impacts of Oral Health Care: Making Sustainable Attainable

CareQuest Institute Continuing Education Webinar

April 11, 2024

Housekeeping

- We will keep all lines muted to avoid background noise.
- We will send a copy of the slides and a link to the recording via email after the live program.
- We'll also make the slides and recording available on carequest.org.

To receive CE Credits:

- Look for the evaluation form, which we'll send via email within 24 hours.
- Complete the evaluation by **Friday, April 19**.
- Eligible participants will receive a certificate soon after via email.

We appreciate your feedback to help us improve future programs!



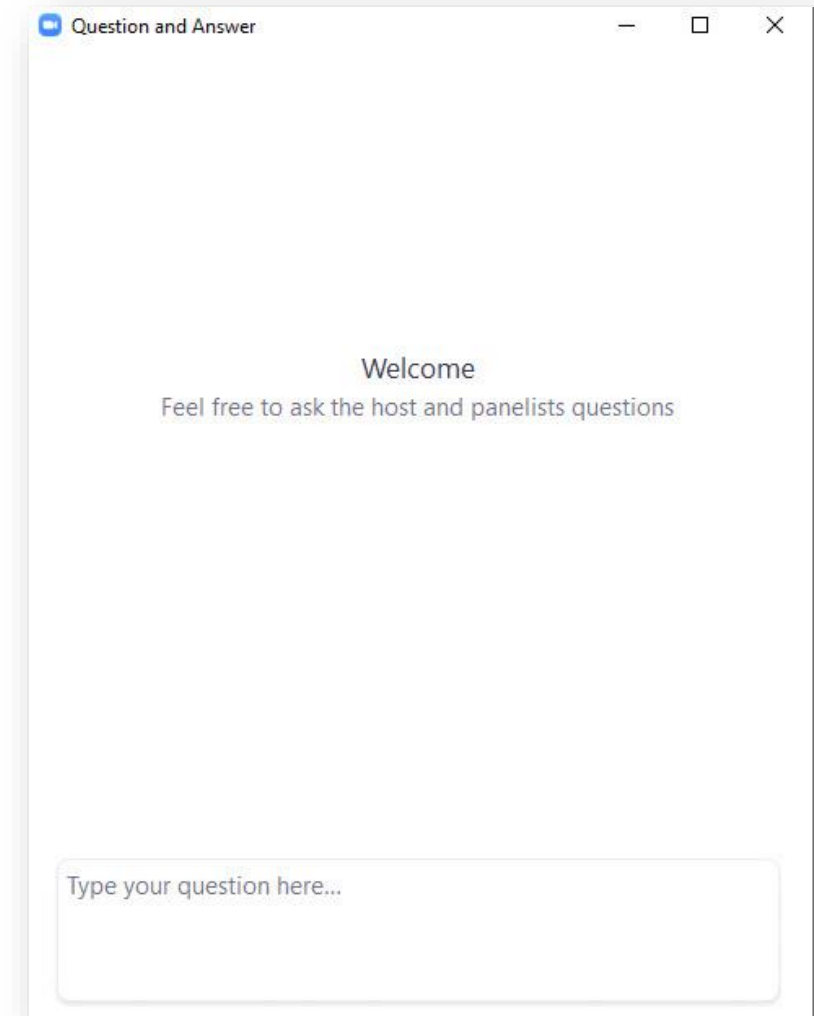
The CareQuest Institute for Oral Health is an ADA CER-P Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CER-P.

*Full disclosures available upon request



Question & Answer Logistics

- Feel free to enter your questions into the **Question & Answer box** throughout the presentations.
- We will turn to your questions and comments toward the end of the hour.



Learning Objectives

- Analyze the specific environmental challenges associated with dental practices, including waste generation, water usage, and energy consumption.
- Evaluate the effectiveness of sustainability efforts in dental practices and the dental team's role in monitoring and improving these efforts.
- Develop actionable strategies for implementing environmental sustainability in dental practices.

Environmental Impacts of Oral Health Care: Making Sustainable Attainable



WEBINAR | Thursday, April 11, 2024 | 7–8 p.m. ET | ADA CERP Credits: 1

MODERATOR



**Wai-Sum Leung,
RDH, MS**

Project Coordinator,
CareQuest Institute for Oral Health

PRESENTER



**Steven Mulligan,
BSc, BDS, Dip. MJDF, PhD**

University of Sheffield, FDI World Dental
Federation Sustainability Task Team Member,
Oral Healthcare

PRESENTER



**Donna M. Hackley,
DMD, MA, MPH**

Harvard School of Dental Medicine,
FDI World Dental Federation
Sustainability Task Team Member

Disclosure

- Dr. Hackley and Dr. Mulligan will receive an honorarium for this presentation.
- Dr. Hackley and Dr. Mulligan do not have any commercial interests with any of the products or companies that are included in this presentation.

Any visible products in this presentation are used as representative examples that support the education



Dr. Donna Hackley

- Assistant Professor, Harvard School of Dental Medicine (Global and Community Health; Pediatric dentistry)
- Team member of the FDI ‘Sustainability in Dentistry’ Task Group

Sustainability in Dentistry Task Team

The Sustainability in Dentistry Task Team provides guidance and scientific expertise to ensure sound implementation of the Sustainability in Dentistry project, which aims to map out strategies and implement solutions to help reduce the environmental impact of dentistry and the dental industry.



CHAIR
Jan 2023 - Dec 2023

Prof. Nicolas Martin
United Kingdom



MEMBER
Jan 2023 - Dec 2023

Dr Mick Armstrong
United Kingdom



MEMBER
Jan 2023 - Dec 2023

Assst. Prof. Duygu Ilhan
Türkiye



MEMBER
Jan 2023 - Dec 2023

Dr Steven Mulligan
United Kingdom



MEMBER
Jan 2023 - Dec 2023

Dr Hasan Jamal
Saudi Arabia



MEMBER
Jan 2023 - Dec 2023

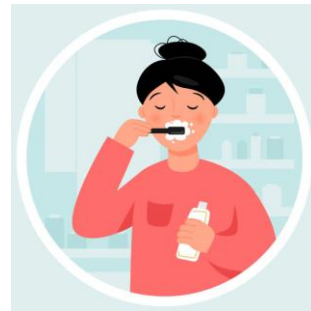
Asst. Professor Donna Hackley
United States of America

Learning Goal

Understand the importance of environmental sustainability and how to implement environmental sustainability in dental practices.

Introduction

Everything We Do Has an Environmental Impact



We cannot eliminate the impact, but we can mitigate it to a sustainable level.



A CO₂ equivalent (CO₂e) is a unit of measurement that is used to standardize the climate effects of various greenhouse gases based on their global warming potential.

Healthcare Systems

- Healthcare is responsible for about **4.5%** of GHG emissions globally
- US is responsible for **about one quarter** of global emissions
- US system contributes **more GHGs** than any other HC system
- US healthcare system contributes about **8.5%** of US GHG emissions

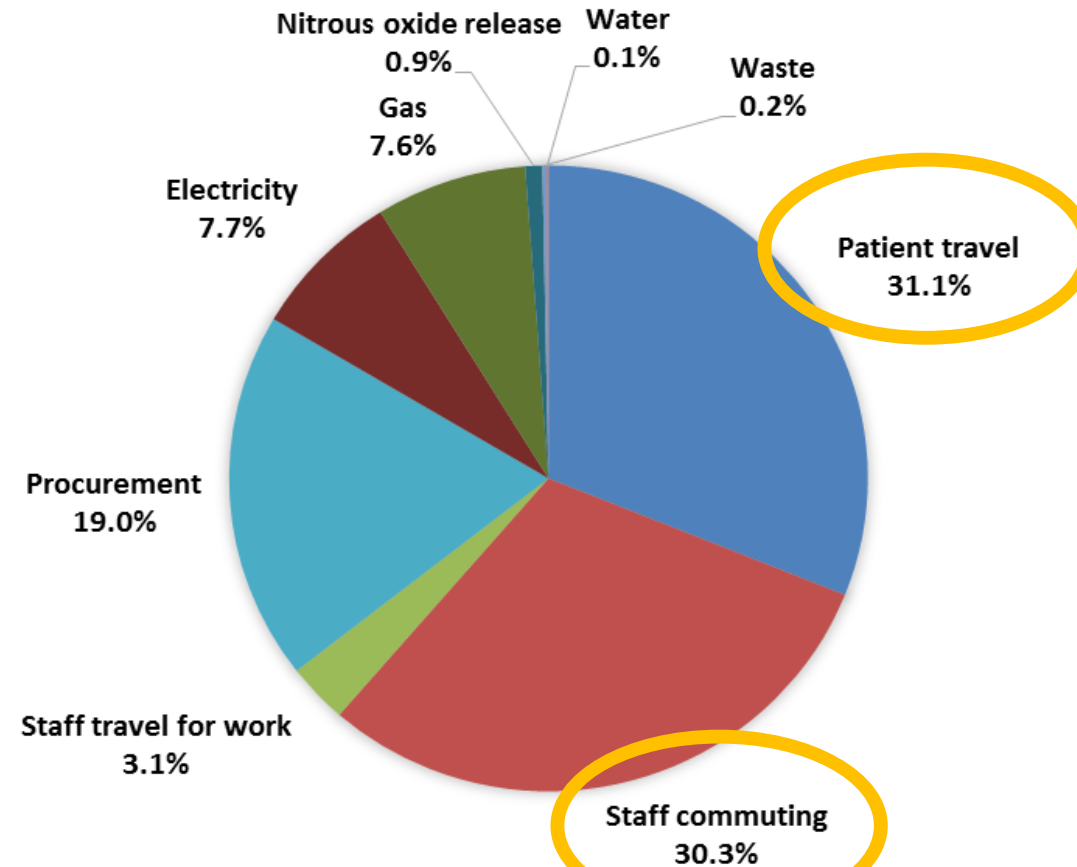
Where Do We Generate CO₂ in Dentistry?

An estimated carbon footprint of NHS primary dental care within England. How can dentistry be more environmentally sustainable?

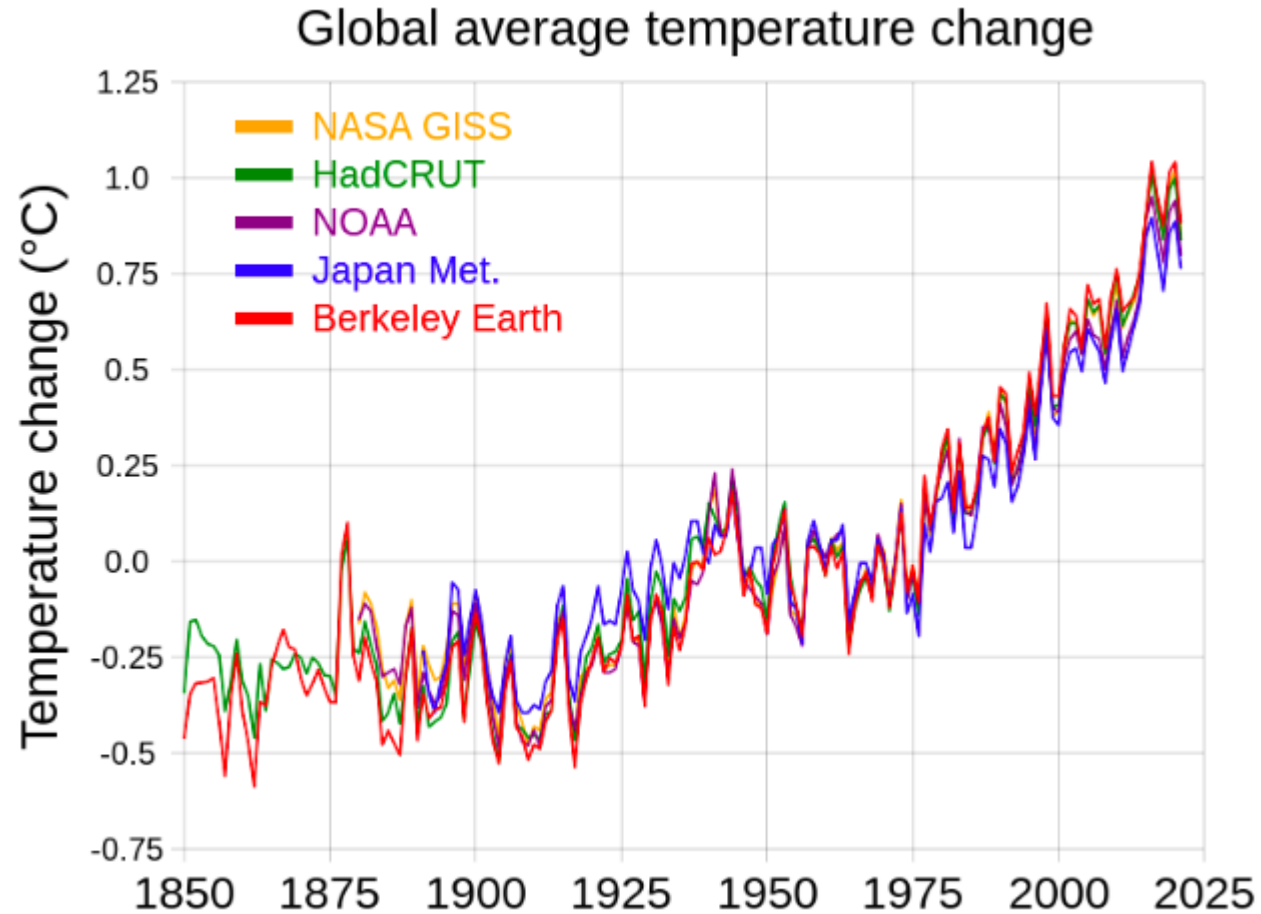
B. Duane,^{*1} M. Berners Lee,² S. White,³ R. Standcliffe⁴ and I. Steinbach⁵

BRITISH DENTAL JOURNAL | VOLUME 223 NO. 8 | OCTOBER 27 2017

Total Annual Carbon Footprint of Dental Services in England
675,706 tCO₂e



Global Mean Surface Temperature





"Humanity has opened the gates of hell."
UN Secretary General Antonio Guterres

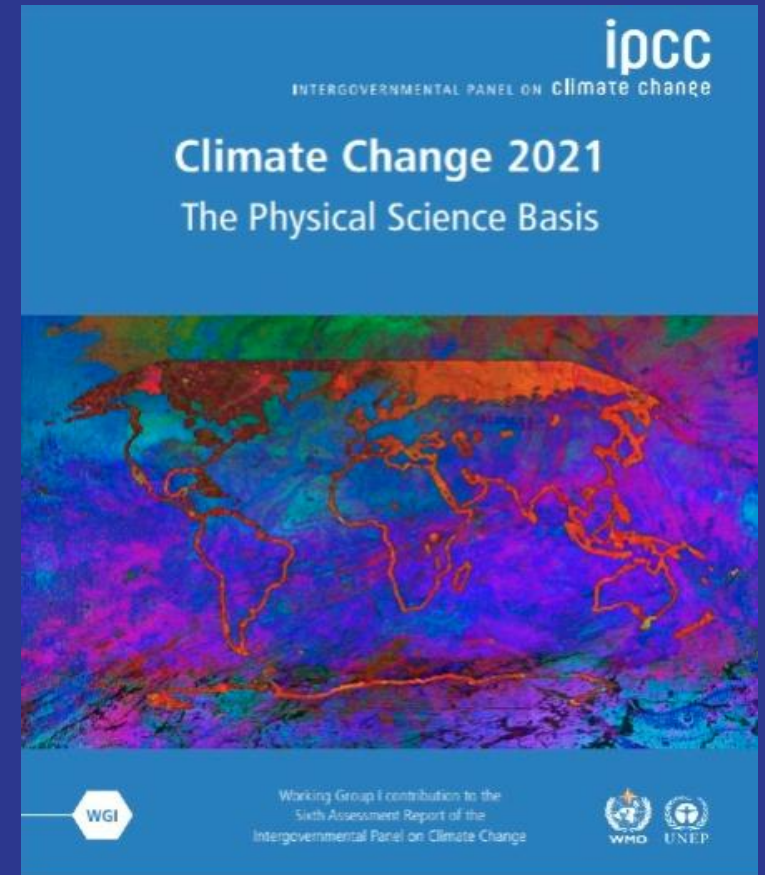
November-December 2023

SUSTAINABLE DEVELOPMENT GOALS

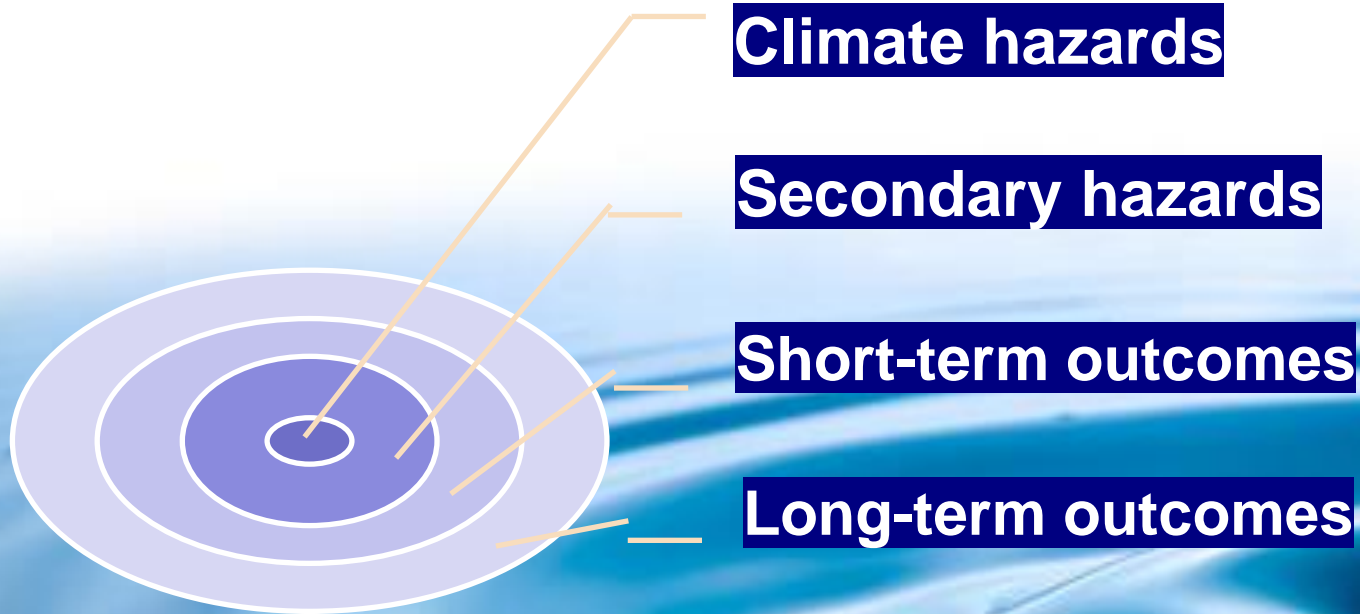
Home About Campaigns Goals Take Action Partnerships News And Media Learn More

Goal 13: Take urgent action to combat climate change and its impacts

13 CLIMATE ACTION



Ripple Effects of Climate Change



ATLAS OF
DISASTER



FEBRUARY 1, 2024 | 2 MIN READ

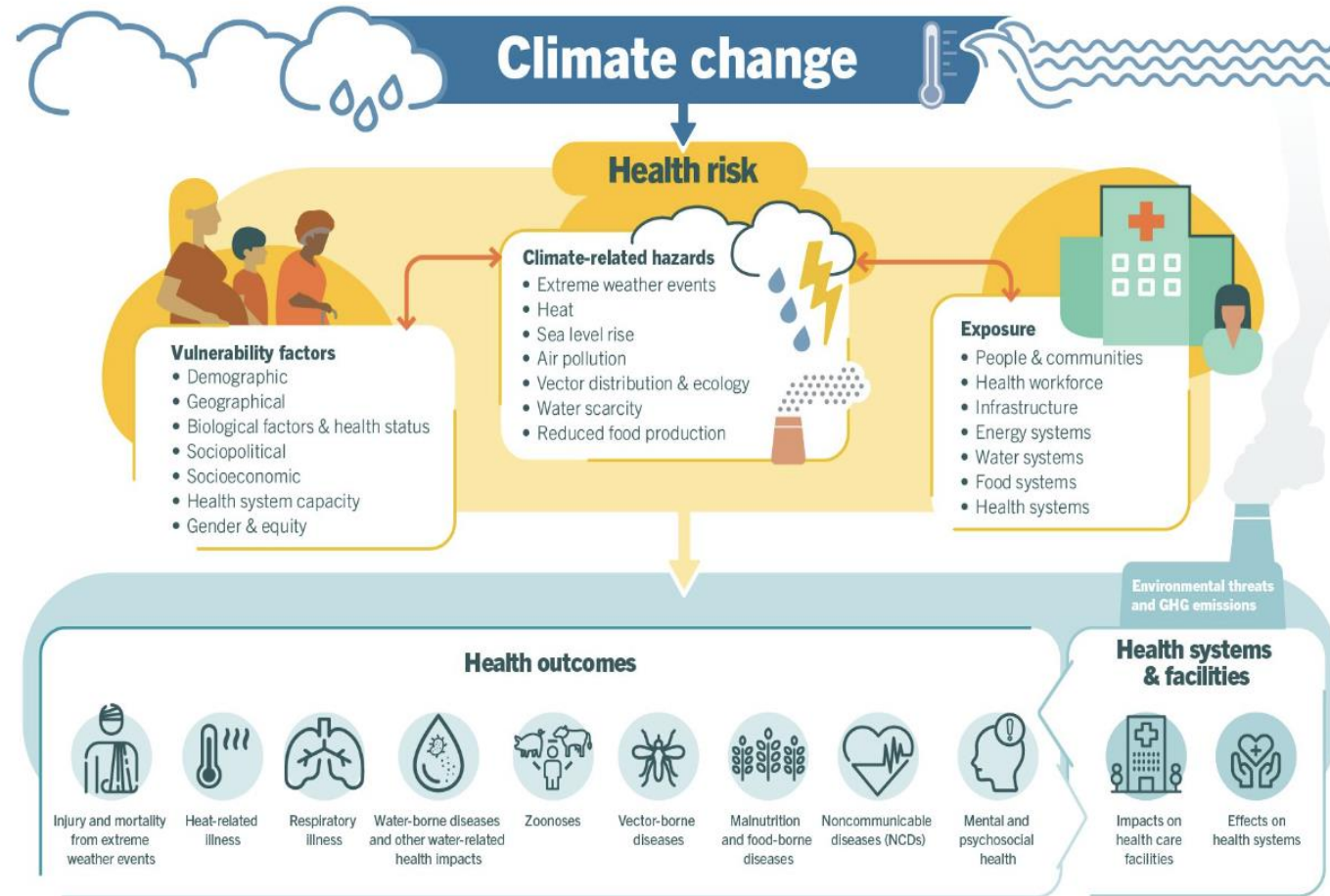
Visualizing Climate Disasters' Surprising Cascading Effects

See how climate disasters cause rippling effects far beyond the initial event

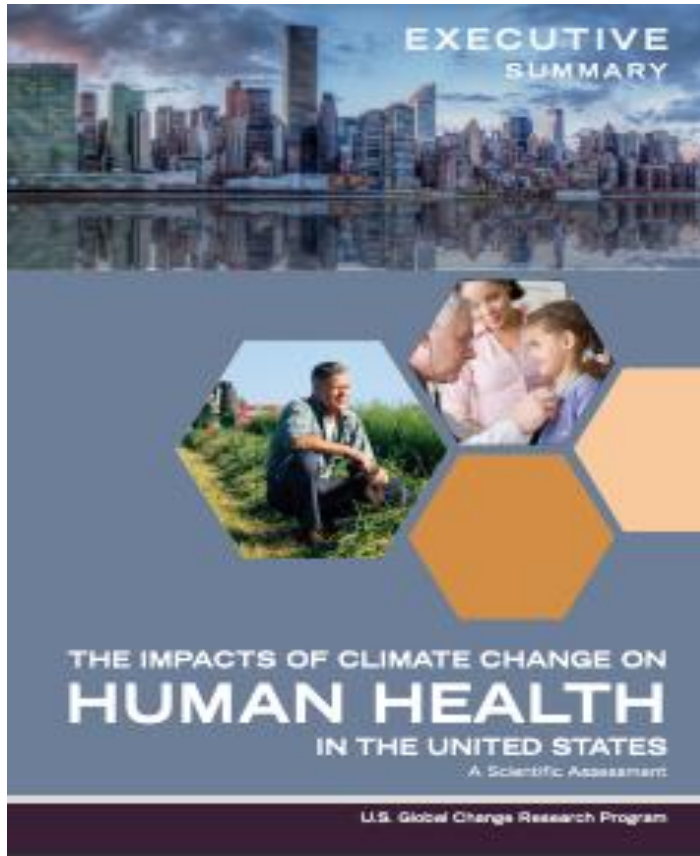
BY LORI YOUMSHAJEKIAN & FEDERICA FRAGAPANE



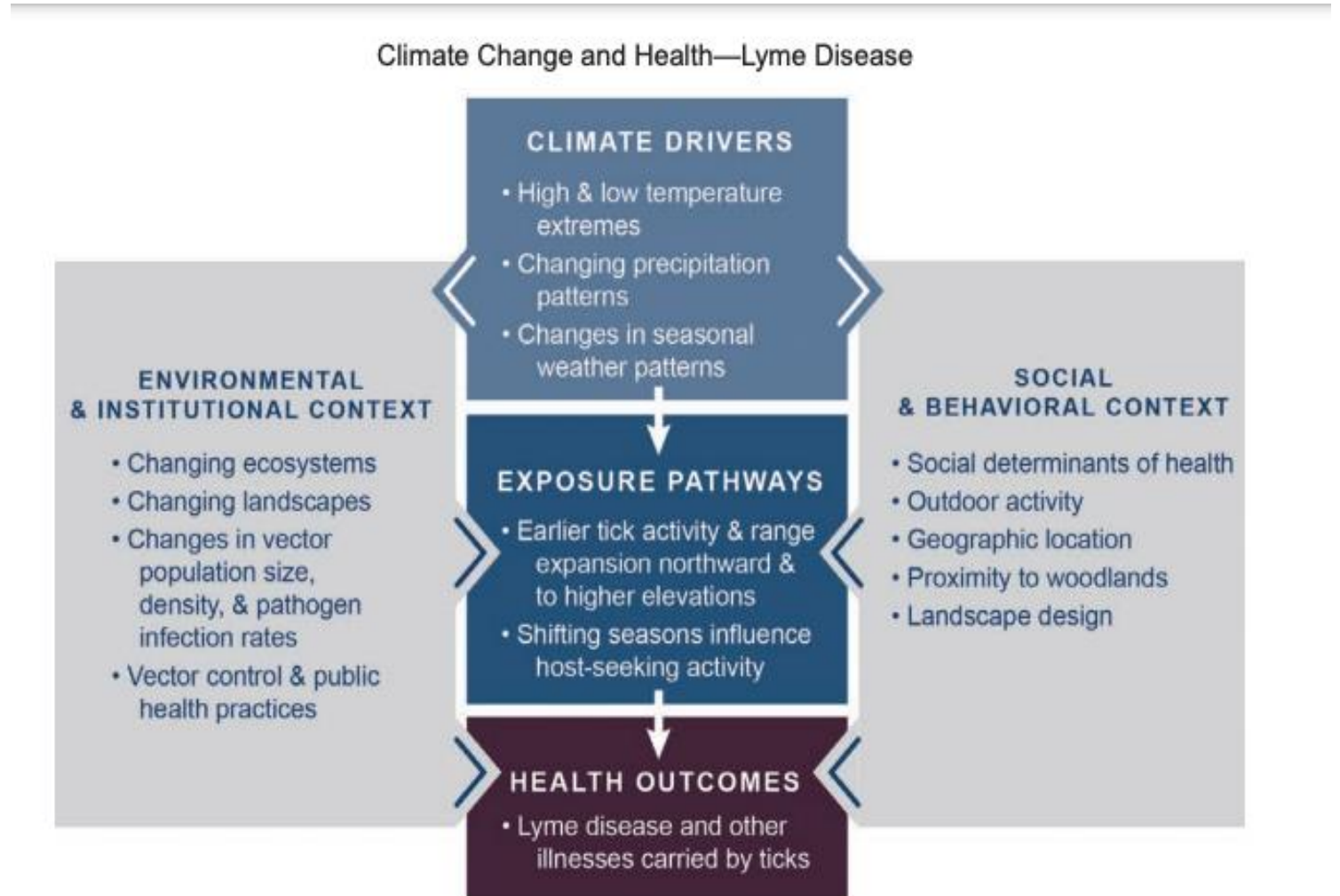
Climate and Health



Climate and Health 2016



GlobalChange.Gov



Lyme Disease and Oral Health

ADANews

Dentists can help fight against tickborne diseases

June 22, 2017

By David Burger



Infection alert: A deer tick, or blacklegged tick, perches on a blade of grass. The Lyme disease bacterium is spread through the bite of infected ticks. This particular tick spreads the disease in the northeastern, mid-Atlantic and north-central United States. The image is provided by the Centers for Disease Control and Prevention.

Associations: Climate Change and Oral Health

- Caries and air pollution (CO₂)
- Oral cancer and higher [PM_{2.5}]
- Human oral dirofilariasis
 - (mosquito borne - 1st reported oral case in India)
- Odontogenic abscess and outdoor temperature
- Periodontal abscess and low barometric pressure
- Cleft lip and palate and atmospheric ozone
- Chronic TMJ pain and weather conditions
- Behcet's oral ulcers and seasonal weather variation

Climate change and oral health

Donna M. Hackley^{1,2} 

International Dental Journal

doi: 10.1111/idj.12628



Pollution

Plastics

- Single-use plastics (SUPs)
- Plastic packaging
- Microplastics
- Dental hygiene aids



How Much SUP Waste Do We Generate?



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Dentistry

journal homepage: www.elsevier.com/locate/jdent

ELSEVIER

Quantification of single use plastics waste generated in clinical dental practice and hospital settings

Nicolas Martin*, Steven Mulligan, Peter Fuzesi, Paul V. Hatton

School of Clinical Dentistry & Grantham Centre for Sustainable Futures, Claremont Crescent, Sheffield, S10 2TA

- Average **21 pieces** SUP per procedure
- **2 billion items** (14.4 tonnes) UK/year
- **2.4 billion items** (27 tonnes) UK/year (+COVID)

Approximate number of SUPs and associated mass (kg) generated in the UK in one year (2020) from routine adult primary care operative interventions carried out by dentists and therapists, excluding associated plastic packaging.

A	Approximate number of dental healthcare professionals (Dentists & Therapists)	≈ 47,000	
B	Working days per year (40 weeks * 4 days)	160 days	
C	Approx. number of operative procedures per day	≈ 5 days	
D	Mean number of SUPs per procedure (including generic PPE, set up and decontamination)	≈ 55 items	
E	Additional PPE items per procedure (COVID-19)	≈ 9 items	
F	Mean mass of SUPs per procedure: Procedure specific	254 g	
G	Mean mass of SUPs per procedure: Generic set up and clean up	100 g	
J	Mean mass of SUPs: Generic PPE (g)	30 g	
K	Mean mass of SUPs: COVID-19 PPE (g)	305 g	
L	Total annual number of SUP items (including generic PPE, set up and decontamination)	$A*B*C*D$	≈ 2 billion items
M	Total annual number of SUP items (including COVID-19 PPE)	$A*B*C*(D + E)$	≈ 2.4 billion items
N	Annual mass of procedural SUPs (kg)	$A*B*C*(F + G) \div 1000$	13.3 tonnes
O	Annual mass of PPE SUPs (kg)	$(A*B*C*J) \div 1000$	1.13 tonnes
P	Total annual mass of PPE SUPs (including additional COVID-19 PPE (kg))	$A*B*C*(J + K) \div 1000$	12.6 tonnes
Q	Total annual mass of SUP waste (kg)	$N + O$	14.4 tonnes
R	Total annual mass of SUP waste (kg) (including COVID-19 PPE)	$N + O + P$	27 tonnes

Microplastic Pollution from Resin Based Composites

- RBC components have the potential to act as environmental pollutants as a consequence of their breakdown.
- Microparticles are easily dispersed in solution and can release monomers.
- Strategies to reduce their pollution impact should include:
 - a) Development innovative direct-placement restorative materials
 - b) Minimize waste
 - c) Provide good-quality preventive
- Dentistry that minimizes restoration failure and replacement.



Photo courtesy Dr. Steven Mulligan

General | [Open access](#) | Published: 13 May 2022

Resin-based composite materials: elution and pollution

[Steven Mulligan](#), [Paul V. Hatton](#) & [Nicolas Martin](#) 

[British Dental Journal](#) **232**, 644–652 (2022) | [Cite this article](#)

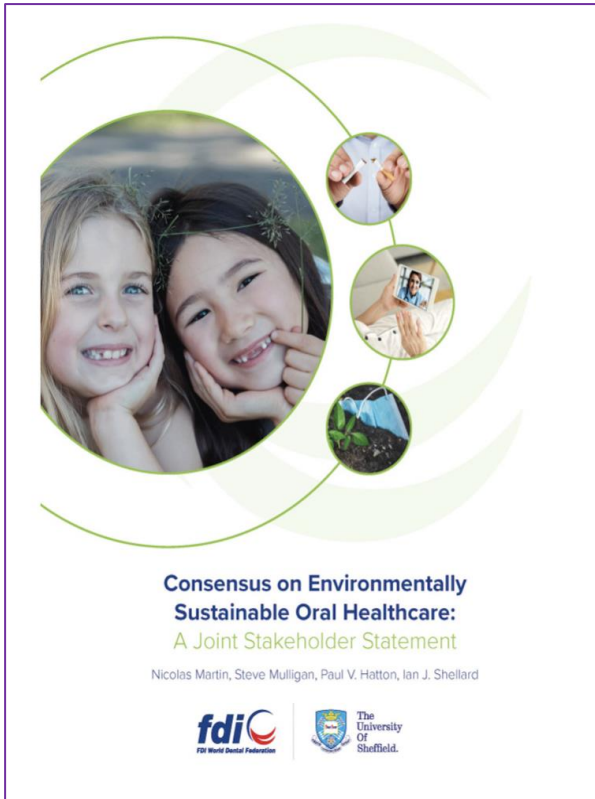
Waste



Linear economy: a system in which people buy a product, use it, and then throw it away. "Linear" refers to the straight progression that a product can follow with no thought along the line regarding recycling or reuse.

FDI World Dental Federation

Consensus on Environmentally Sustainable Oral Healthcare: A Joint Stakeholder Statement.



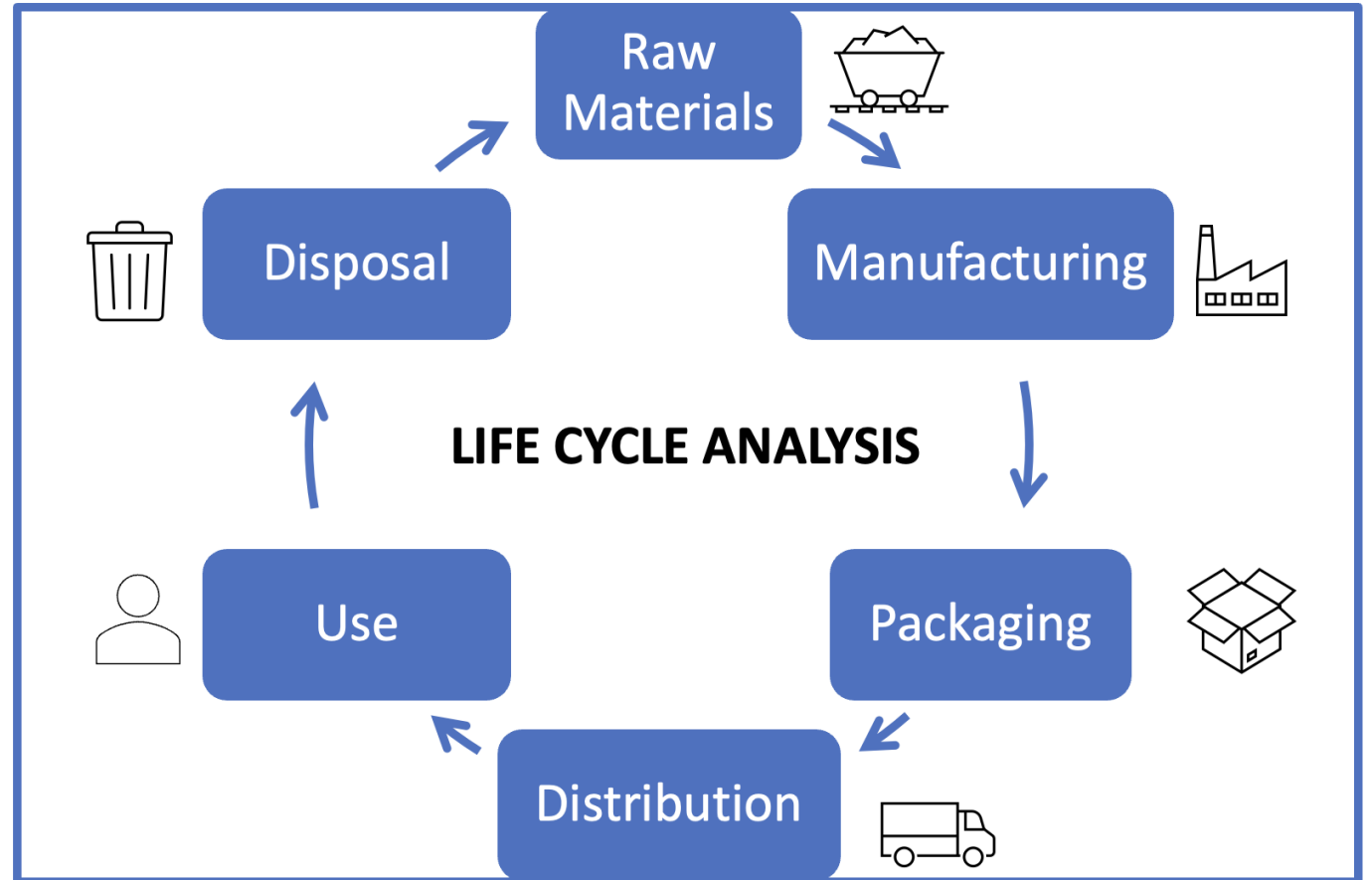
A recognition across all stakeholders in the supply chain of the need to work together in a truly collaborative way to reduce the environmental impact of oral health care.



How do we gather evidence on best practices?

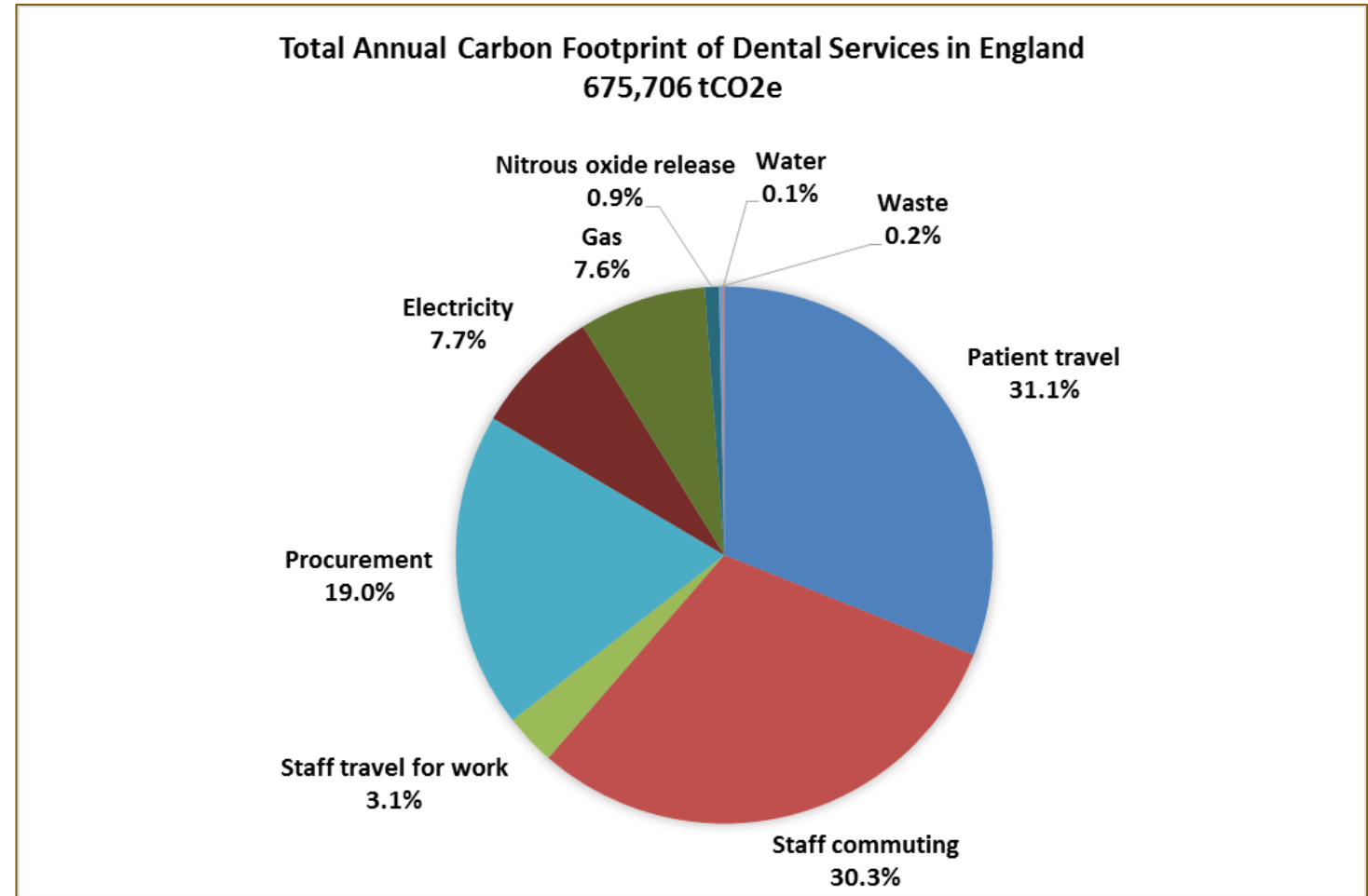
Life Cycle Analysis

A method for the environmental impact assessment of products and services, covering their entire life cycle from raw material extraction to waste treatment.



Carbon Footprint Analysis

Carbon footprint is the sum of direct and indirect greenhouse gas emissions, which are produced throughout the supply chain of activities and products expressed in carbon dioxide equivalents (CO₂e).



Carbon modelling within dentistry – Towards a sustainable future, PHE, 2018.

Waste Audits



Contents lists available at [ScienceDirect](#)

Journal of Dentistry

journal homepage: www.elsevier.com/locate/jdent



Quantification of single use plastics waste generated in clinical dental practice and hospital settings



Nicolas Martin^{*}, Steven Mulligan, Peter Fuzesi, Paul V. Hatton


School of Clinical Dentistry & Grantham Centre for Sustainable Futures, Claremont Crescent, Sheffield, S10 2TA

SUP waste generated from UK dental practices in a year

Total mass of SUP waste (UK/Year)	14.4 Tonnes	2 billion items
Total mass of SUP waste (UK/Year) Including additional COVID-19 PPE	27 Tonnes	2.4 billion items


Surveys

Exploring the Perception of Dental Undergraduate Students and Faculty on Environmental Sustainability in Dentistry: A Cross-Sectional Survey in 26 Dental Schools in Saudi Arabia

by Hasan Jamal ^{1,*} ✉, Abdullah A. Marghalani ² ✉, Ahmed Al-Sharif ³ ✉, Albatool Shinawi ⁴ ✉, Balgis Gaffar ⁵ ✉ , Ebtsam Abdullah Al-Edaili ⁶ ✉, Ghaliah Al-Baqami ⁷ ✉ and Mayson AlQarni ⁸ ✉

THE VOICE OF
DENTAL EDUCATION WILEY

US students' perceptions on environmental sustainability in dental school

Nicole C. Gershberg BA¹ | Jennifer Lee DMD²  | Jessica K. Murphree BS¹ |
Ashwini Parchure DMD² | Donna M. Hackley DMD, MA³

Exploring attitudes towards more sustainable dentistry among adults living in the UK

Harriet M. Baird,^{*1} Steven Mulligan,² Thomas L. Webb,¹ Sarah R. Baker² and Nicolas Martin²

Sustainability in Dentistry: Assessing knowledge, attitude, and practices of dental practitioners about green dentistry

Nighat Zia¹, Jennifer Geraldine Doss², Jacob John³, Jeneen Panezai⁴

FDI World Dental Federation Massive Online Open Course



fdi
FDI World Dental Federation

Module 1
Oral Healthcare and
the Environment

New MOOC: Sustainability in Dentistry

So, what should we do
in practice?



Dr. Steve Mulligan

Dentist, clinical teacher, and clinical academic

- Clinician (general practice in South Yorkshire, UK)
- School of Clinical Dentistry, University of Sheffield, UK
- Founding member of the FDI 'Sustainability in Dentistry' Task Group

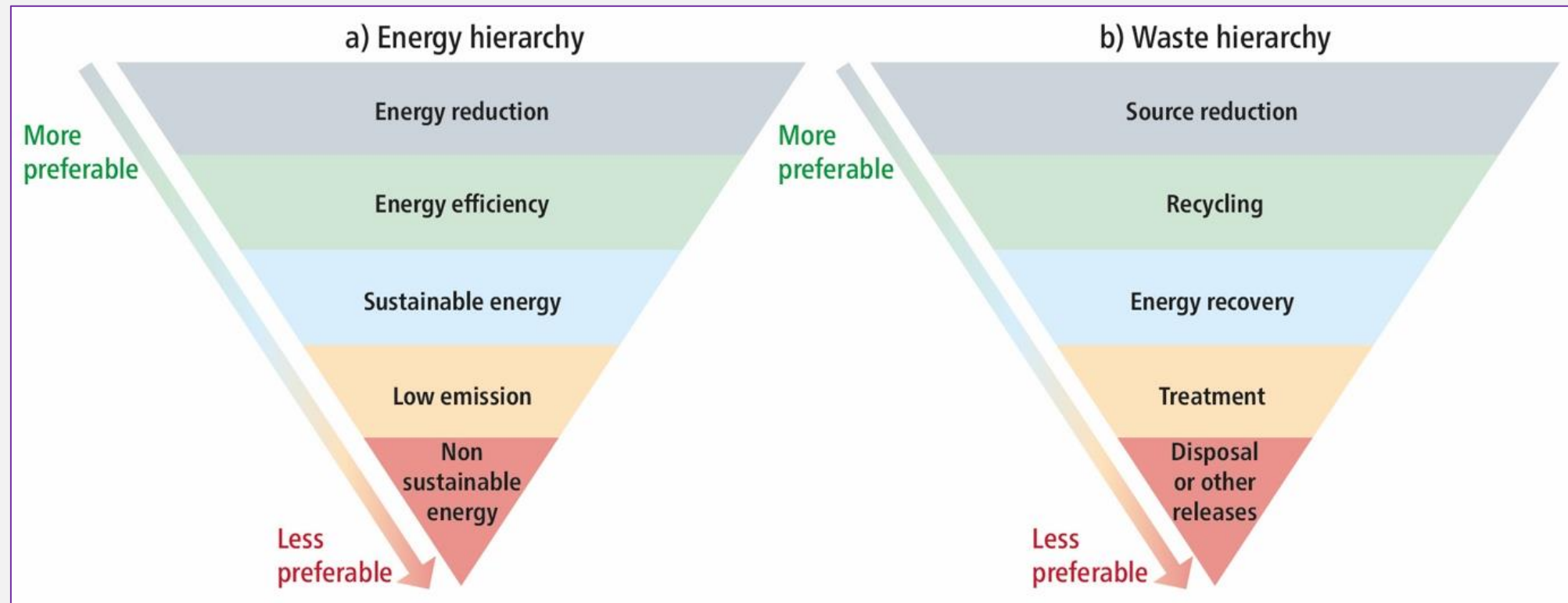
Sustainability in Dentistry Task Team

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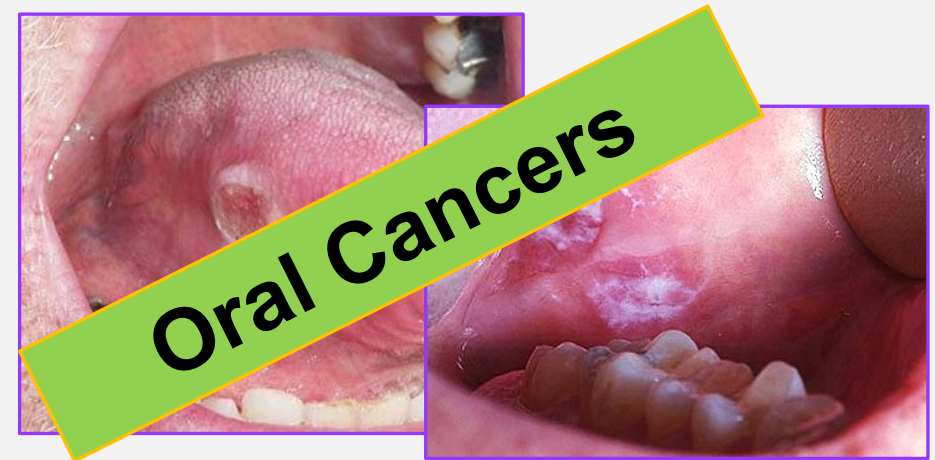


How Do We Mitigate the Environmental Impacts of Dentistry?

Reduction is the optimal way to limit environmental impacts



Reduction Through Prevention



Prevention of 'Preventable' oral/dental diseases
= Fewer interventions
= Reduced impact on the environment

Not proven with a cause-and-effect relationship

Sustainable Oral Health: Prevention and Reduction

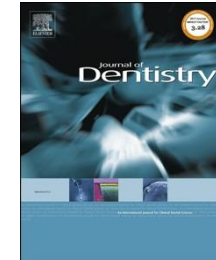
Journal of Dentistry 142 (2024) 104842



Contents lists available at [ScienceDirect](#)

Journal of Dentistry

journal homepage: www.elsevier.com/locate/jdent



The environmental consequences of oral healthcare provision by the dental team

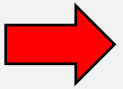
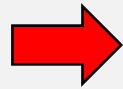
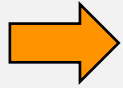
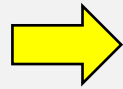
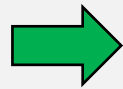
Nicolas Martin^{*}, Abigail Hunter, Zoe Constantine, Steven Mulligan

School of Clinical Dentistry, Claremont Crescent, University of Sheffield S10 2TA, UK



Sustainable Oral Health: Prevention and Reduction

Dental Experience



National average = HIGH

Dental experience (Disease and treatment)			
Estimated Status	Periodontal Status (ii)	Treated teeth	Extracted teeth
Very Low	Excellent (Periodontal Health)	0	0
Low	Good (Localised Gingivitis)	5	0
Moderate	Moderate (Generalised Gingivitis)	10	1
High	Mild-moderate Periodontitis (Code III Periodontitis)	15	4
Very High	Severe Periodontal disease (Code IV Periodontitis)	20	8

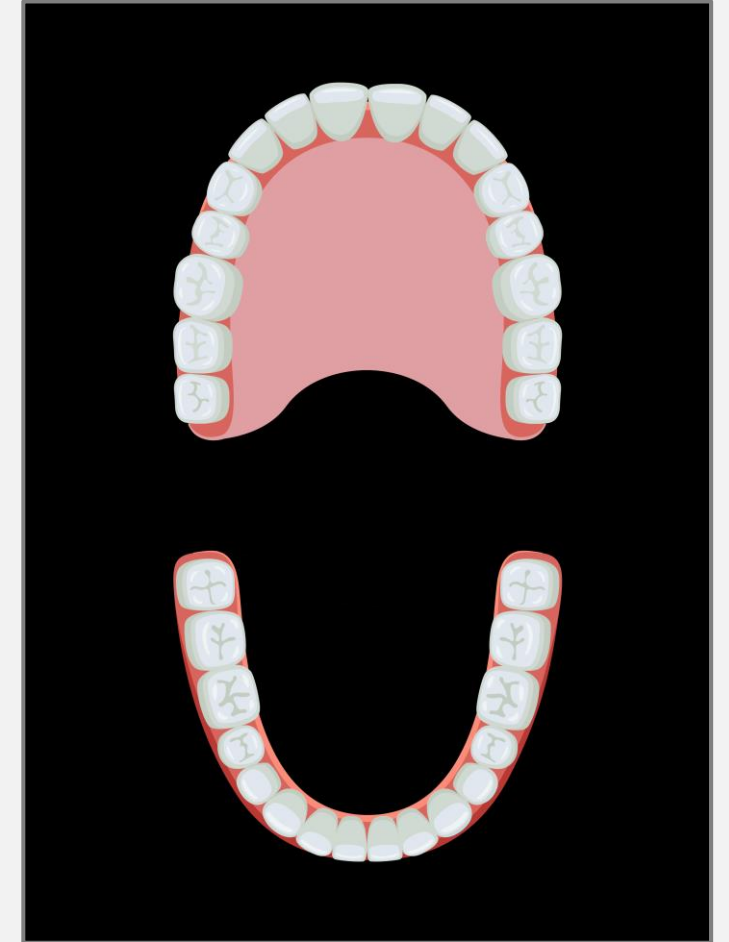
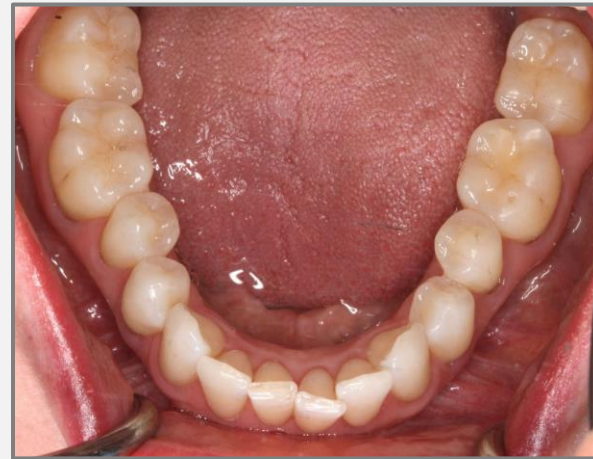
Sustainable Oral Health: Prevention and Reduction

Oral

Dental Disease and treatment Experience					
	VERY LOW	LOW	MODERATE	HIGH	VERY HIGH
Restorations	None	Some	Moderate	High	Very high
Periodontal status	Good	Good	Mild	Poor	Very poor
Risk level	Low	Low	Moderate	High	Very high

Sustainable Oral Health: Prevention and Reduction

VERY LOW



Sustainable Oral Health: Prevention and Reduction

LOW



Sustainable Oral Health: Prevention and Reduction

MODERATE



Sustainable Oral Health: Prevention and Reduction

HIGH



Mean Oral Health Status
of a 50-year-old in the UK



Sustainable Oral Health: Prevention and Reduction

VERY HIGH

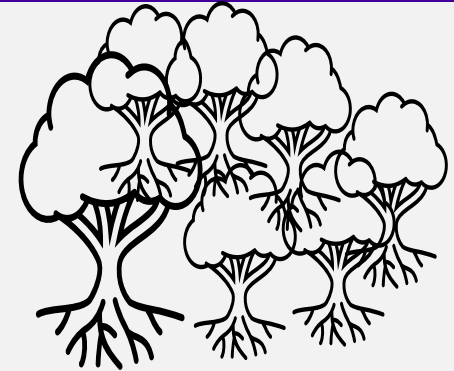
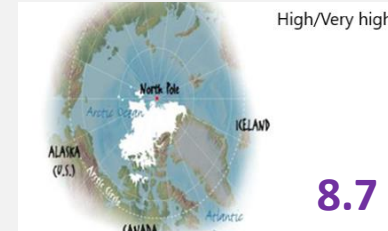


The Environmental Consequences of OHC Provision

High Risk



25,241 Km

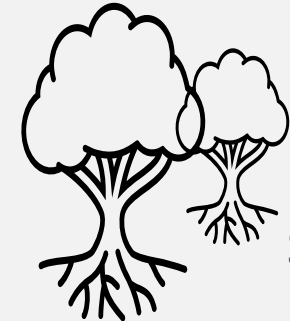
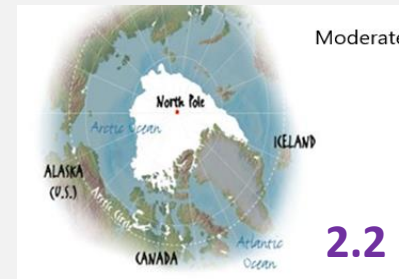


133

Moderate Risk



6,330 Km

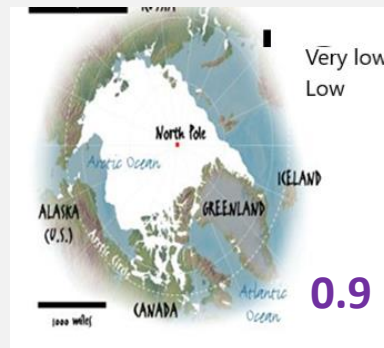


33

Low Risk



2,737 km



14

Provision of **Good** Oral Health...

Good for Your Patient,
Good for You...

**PREVENTIVE
CARE**

**OPERATIVE
CARE**

**INTEGRATED
CARE**

**OWNERSHIP
OF CARE**



Healthy mouths
fewer appointments



Improved patient
quality of life



Reduced materials,
therefore reduced costs



Better clinical
outcomes



Professional
satisfaction



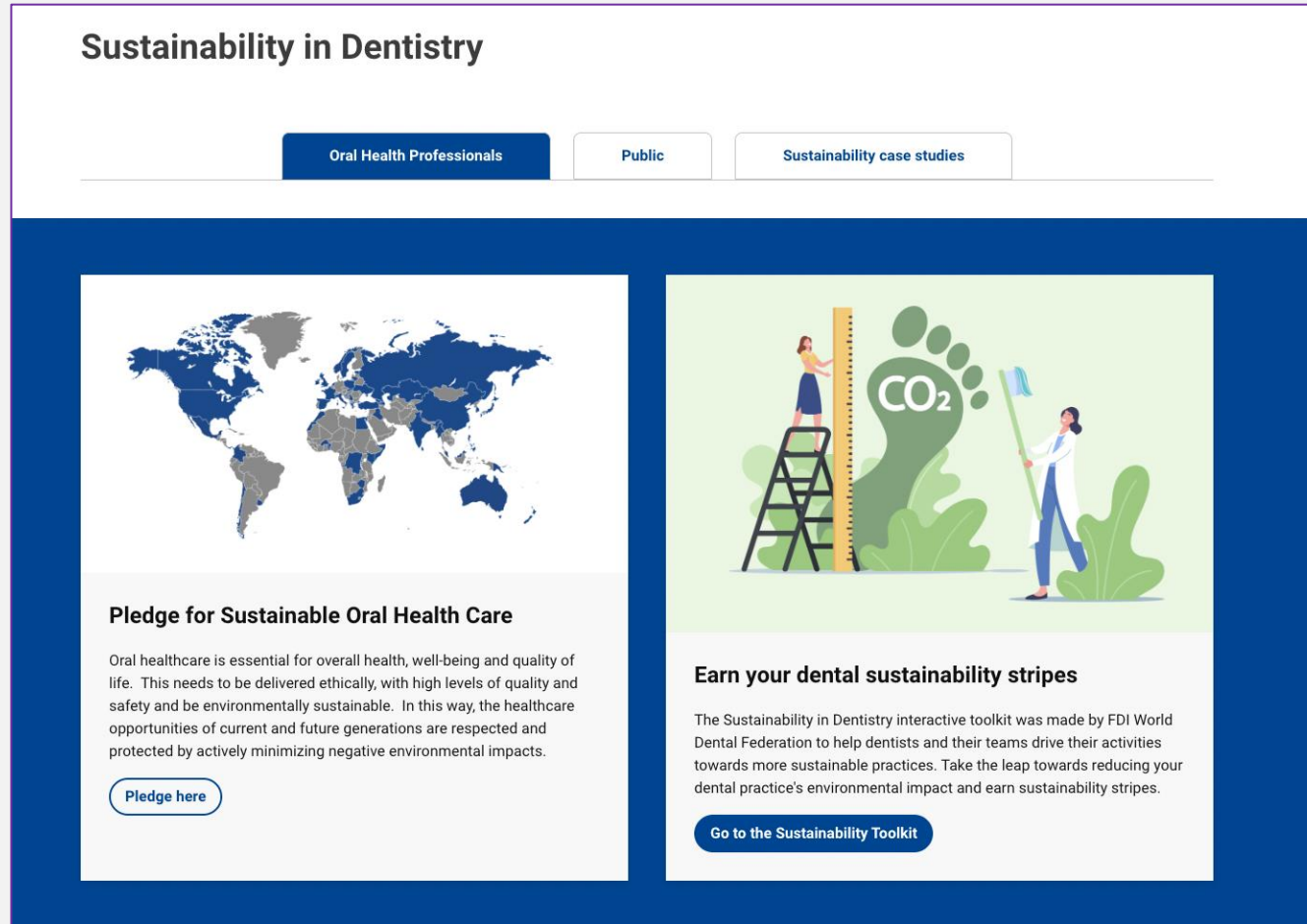
Durable care

What Can We Do, Together?

FDI
MOOC
&
FDI Sustainability Toolkit
&
FDI Sustainability Pledge

Sustainability in Dentistry

Oral Health Professionals Public Sustainability case studies



The screenshot shows a website interface for 'Sustainability in Dentistry'. At the top, there are three tabs: 'Oral Health Professionals' (selected), 'Public', and 'Sustainability case studies'. Below the tabs, there are two main content areas. The left area features a world map and a section titled 'Pledge for Sustainable Oral Health Care' with a 'Pledge here' button. The right area features an illustration of a person on a ladder measuring a large green footprint labeled 'CO2', and another person sweeping. Below this is a section titled 'Earn your dental sustainability stripes' with a 'Go to the Sustainability Toolkit' button.

Pledge for Sustainable Oral Health Care

Oral healthcare is essential for overall health, well-being and quality of life. This needs to be delivered ethically, with high levels of quality and safety and be environmentally sustainable. In this way, the healthcare opportunities of current and future generations are respected and protected by actively minimizing negative environmental impacts.

[Pledge here](#)

Earn your dental sustainability stripes

The Sustainability in Dentistry interactive toolkit was made by FDI World Dental Federation to help dentists and their teams drive their activities towards more sustainable practices. Take the leap towards reducing your dental practice's environmental impact and earn sustainability stripes.

[Go to the Sustainability Toolkit](#)

The FDI World Dental Federation serves as the principal representative body for more than one million dentists worldwide, developing health policy and continuing education programmes, speaking as a unified voice for dentistry in international advocacy and supporting member associations in global oral health promotion activities.



Massive Open Online Course (MOOC)

A three-hour course to grasp the significance of sustainable practices in oral healthcare.

Together, let's strive to leave behind not just healthier smiles, but also a healthier planet for the generations to come.

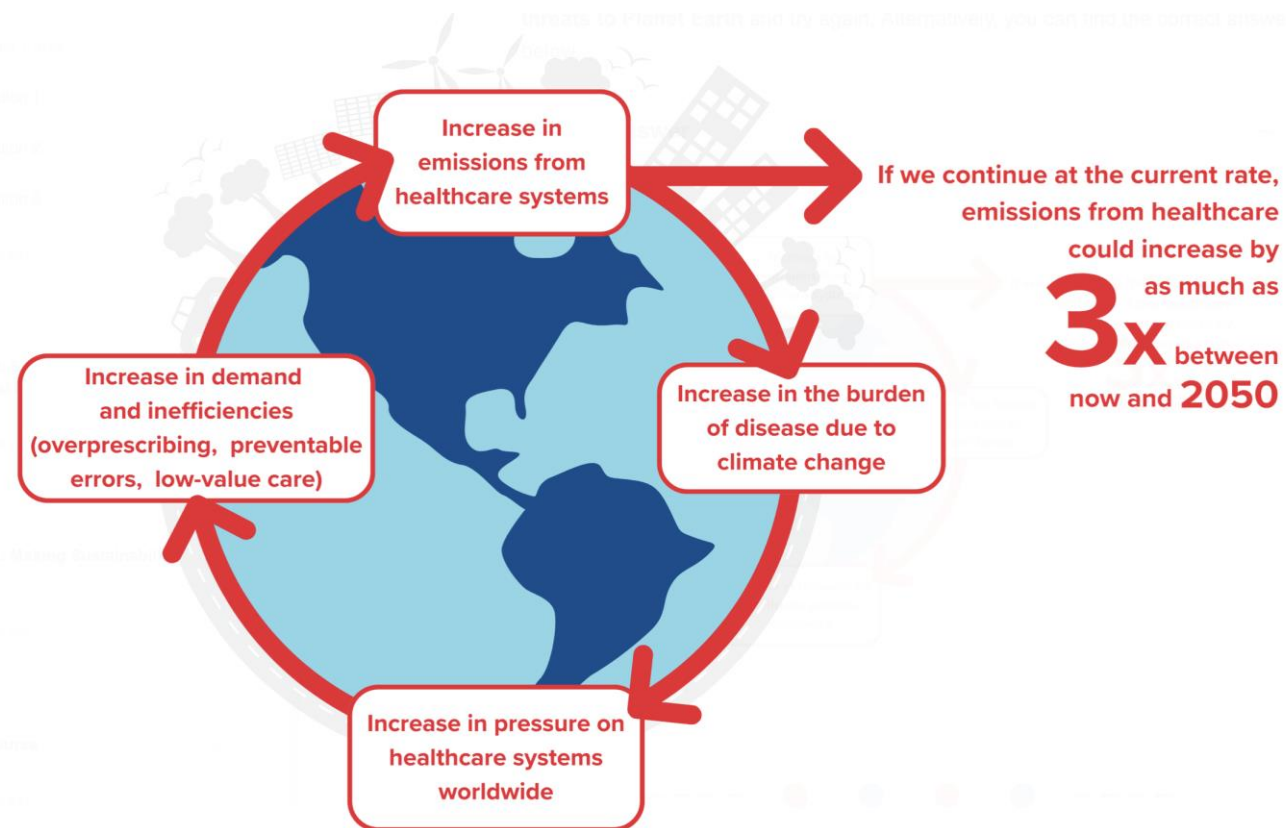




Massive Open Online Course (MOOC)

Main Objective

To help dental professionals, dental teams, and students to understand the importance of sustainable practices and their own role in championing environmental responsibility within dentistry.



Massive Open Online Course (MOOC)

Learning Outcomes

- Understand the role of dental professionals and dental teams in environmental sustainability.
- Understanding the impact of oral healthcare on the environment.
- Utilize evidence-based dentistry to improve oral health of your patients in an environmentally conscious way.



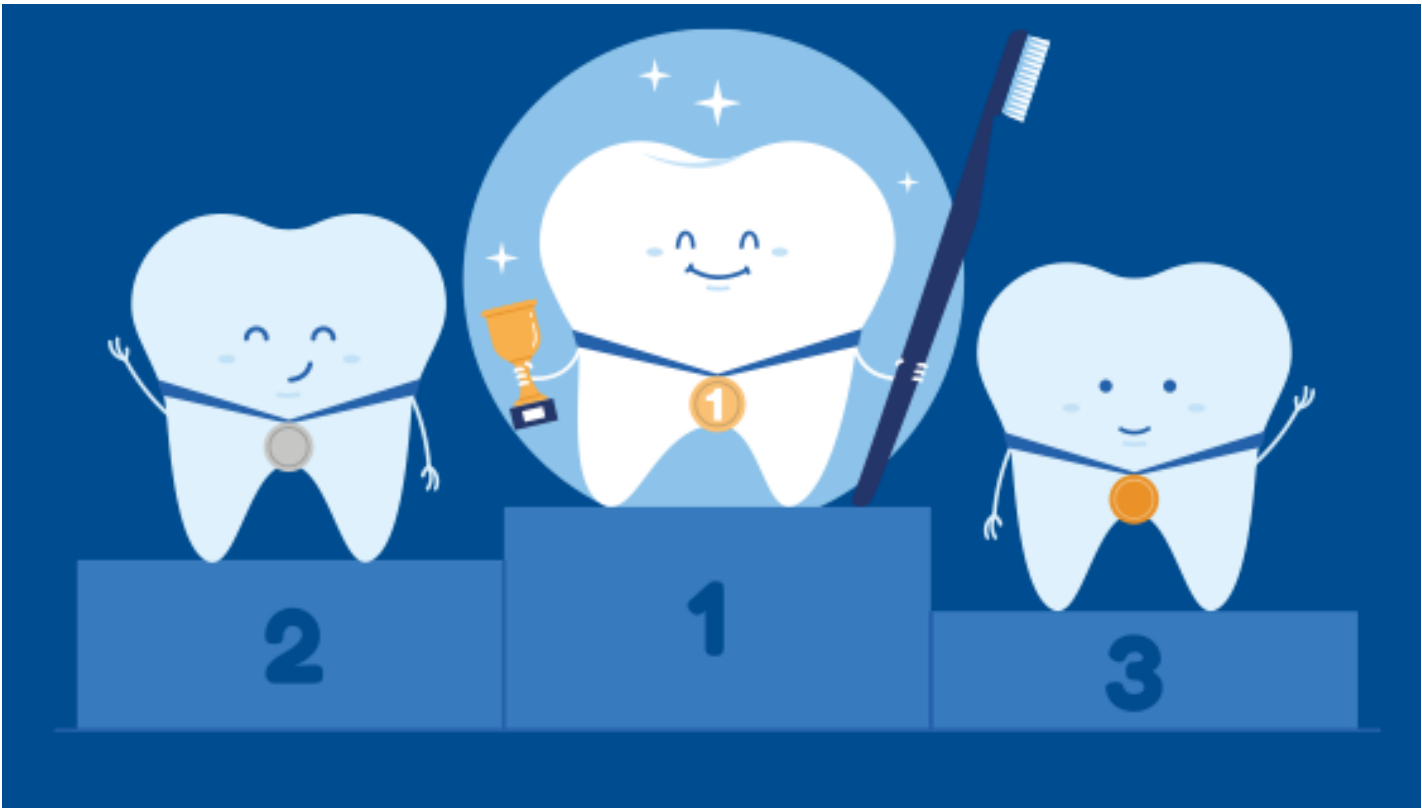
Module 1 Oral Healthcare and the Environment





The Sustainability Toolkit

Provides dentists and their teams with a set of challenges that you can undertake to earn bronze, silver, or gold recognition awards for your practice.



Evidence-Based Advice

Contents lists available at [ScienceDirect](#)



Journal of Dentistry

journal homepage: www.elsevier.com/locate/jdent

Review Article

Awareness and barriers to sustainability in dentistry: A scoping review

Nicolas Martin^{*}, Madison Sheppard, GaneshParth Gorasia, Pranav Arora, Matthew Cooper, Steven Mulligan

School of Clinical Dentistry, The University of Sheffield, S10 2TA, UK

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Drivers, opportunities and best practice for sustainability in dentistry: A scoping review

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School of Clinical Dentistry, The University of Sheffield, S10 2TA, UK

Enhanced CPD DO C Sustainability/OralHealth



Steven Mulligan
Lucy Smith and Nicolas Martin

Sustainable Oral Healthcare and the Environment: Challenges

Abstract: Oral healthcare has an environmental impact that is specific to the profession and is currently unsustainable. This impact results in unwanted and difficult-to-manage waste, carbon emissions and other environmental impacts that contribute to climate change. Contributions to this pollution come from the supply chain that provides the required materials and sundries, patient and staff commuting/travelling, direct patient care, the use and end-of-life management of restorative materials and single-use plastics (SUPs) such as personal protective equipment (PPE). This article explores these various contributors to pollution arising from oral healthcare.

CPD/Clinical Relevance: The provision of oral healthcare has an environmental impact that requires consideration and action in order to become sustainable.

Dent Update 2021; 48: 493-501

Sustainability/OralHealth Enhanced CPD DO C



Nicolas Martin
Lucy Smith and Steven Mulligan

Sustainable Oral Healthcare and the Environment: Mitigation Strategies

Abstract: Carbon emissions and single-use plastics (SUPs) are the main forms of environmental pollution relating to waste arising from oral healthcare. Ownership of this problem is shared with the whole supply chain, from manufacturing to distribution, procurement, clinical use and finally, waste management. Mitigation strategies focus on the individual stakeholders in the supply chain, including the provision of clinical care. Key to this is establishing a baseline analysis of the nature and the size of the problem through life cycle assessments (LCAs). Reduction of CO₂ emissions, other associated environmental impacts and plastic waste is considered through remote clinical consultations, recycling, patient education and the provision of high-quality care to achieve high impact environmentally sustainable outcomes.

CPD/Clinical Relevance: Environmentally sustainable oral healthcare requires the combined efforts of all stakeholders across the supply chain. The provision of good oral healthcare can deliver environmentally sustainable outcomes from a reduced need for interventions.

Dent Update 2021; 48: 524-531

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School
Of
Clinical
Dentistry.



FDI WDF & University of Sheffield
Sustainability Toolkit

Examples of coded
sustainability opportunities
...out a total of **250!**

Reduce, Reuse, Recycle and Rethink - Re-use	
4E	The purchase of high-quality durable equipment that is well maintained
4F	Use of cloth fabric alternatives for SUP barriers, cleaning, hand towels etc.
4G	Reusable PPE (including laboratory coats instead of disposable aprons, reusable face shields, reusable bibs for patients)
4H	Use of washable cups, dishes and cutlery in the staff break room
4I	Re-usable water bottles.
	Implementation of eco-friendly sterilisation programmes that reduces the need for disposable
10D	paper towels and office furniture, such as bamboo and from reforested wood.
10E	Purchase durable office equipment with long warranties
10F	Review use and buy accordingly to avoid unnecessary waste
10G	Purchase necessary stationery in bulk
10H	Purchase tea/coffee from Fairtrade or Rainforest Alliance sources
10J	Work and engage with suppliers to assess their sustainability practices
10K	Procurement should include environmental considerations in addition to fitness for purpose, financial and ethical considerations.
10L	Engage with suppliers to act in an environmentally sustainable manner.
10M	Consolidation of delivery items to avoid excessive journeys

Dental materials - Metals	
17A	Recycle waste clinical metals
17B	Use digital radiography to avoid the need for silver thiosulphate x-ray fixer
17C	Effective management of radiographic fixer:





The Sustainability Toolkit

Achievable challenges set mapped to a 'modified Ebel Grid'.

- Easy and Essential
- Moderate and Important
- Difficult and Aspirational

		Degree of Implementation Difficulty		
		Easy	Moderate	Difficult
Level of Importance = Environmental Benefit	Essential			
	Important			
	Aspirational			



The Sustainability Toolkit

Achievable challenges set mapped to a 'modified Ebel Grid'.

- Easy and Essential
- Moderate and Important
- Difficult and Aspirational

		Degree of Implementation Difficulty		
		Easy	Moderate	Difficult
Level of Importance = Environmental Benefit	Essential	1A, 3A, 6B, 4D ...	6A, 9A, 1B, 9B...	2A, 4A, 3B, C1, C3...
	Important	6A, 4B, F1, F2...	5B, 7B, C3, F4, 6E...	9A, 2C, 7E, 5A, 3F...
	Aspirational	7A, 8B, 4C, 2D, 3D...	8A, 10B, 6D, 8D, 4F...	2B, 7C, 9C, 5D, 3E...



The Sustainability Toolkit

1. Global example of sustainability in dentistry

2. How to create an ESG assessment in your practice

3. How to create an ESG assessment in your practice

4. How to create an ESG assessment in your practice

5. How to create an ESG assessment in your practice

6. How to create an ESG assessment in your practice

7. How to create an ESG assessment in your practice

8. How to create an ESG assessment in your practice

9. How to create an ESG assessment in your practice

10. How to create an ESG assessment in your practice



Essential



Important






Aspirational





The Sustainability Toolkit

The interactive challenges will give you tools to raise awareness, implement changes and move toward a more environmentally-friendly practice.

Gold  1 Task	Silver  1 Task	Bronze  4 Tasks
Minimize single use plastics as much as possible	Combine multiple elements of patient care into fewer appointments to provide multiple procedures in one visit	Engage in a conscious and deliberate effort to translate our 'home-based' behaviours to the work 'dental practice' environment.
▶ Start Challenge	▶ Start Challenge	▶ Start Challenge



The Sustainability Toolkit

Become a champion!

Become a Sustainability Champion for your dental practice with the sustainability champion challenge!





The Sustainability Toolkit

FDI Sustainability Award

- Individuals
- Dental Practices
- 4 awards per year
- Winners announced and celebrated at the FDI WDF Sustainability in Dentistry annual summit
- 500 CHF per individual
- 1000 CHF per practice



The Pledge

This pledge addresses the themes in the FDI WDF Sustainability Toolkit

For all members of the dental profession and supporting industry willing to support environmental sustainability within oral healthcare

Will you sign the pledge, too?





Sustainability
in Dentistry

Maintaining good oral health is good for YOU and good for the environment

You can help by making small changes that reduce your impact on the environment

Following a good oral health routine and healthy habits helps the environment.

Prevent Disease



Brush twice a day for 2 minutes.
Clean between your teeth daily.
Always use a fluoridated toothpaste.

Avoid frequent **sugary food** and **carbonated "f zzy", f avoured drinks**.

Moderate your intake of alcohol and **quit tobacco** (including vaping and other sources).



Recycle

Choose toothbrush, toothpaste tubes and packaging made from sustainable materials

Recycle packaging, brushes and toothpaste tubes **when possible**.



SAVE WATER!

Turn **water of** while brushing your teeth.
No need to rinse after brushing.
Place used floss in the waste bin, **not the toilet**.

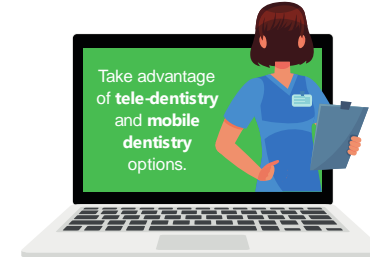
Promote Sustainability



Dentistry has an impact on the environment.

- ✓ Ask your dentist about their sustainability policy.
- ✓ Ask about booking family appointments to reduce the number of trips you take.
- ✓ Ask about combining several appointments (the dental check-up and hygienist cleaning, for example) into one
- ✓ Ask your dentist about a recycling scheme.
- ✓ Ask for electronic invoices and treatment plans

Reduce CO₂



Take advantage of **tele-dentistry** and **mobile dentistry** options.

If you are able to, opt to use **public transport, cycle** or **walk** to attend your appointment



The five founding partners of the Sustainability in Dentistry project are Colgate, GSK Consumer Healthcare, Procter & Gamble, Dentsply Sirona and TePe

Content developed by the Sustainability in Dentistry Task Team: N. Martin, J. Zenk, S. Darteville, S. Mulligan

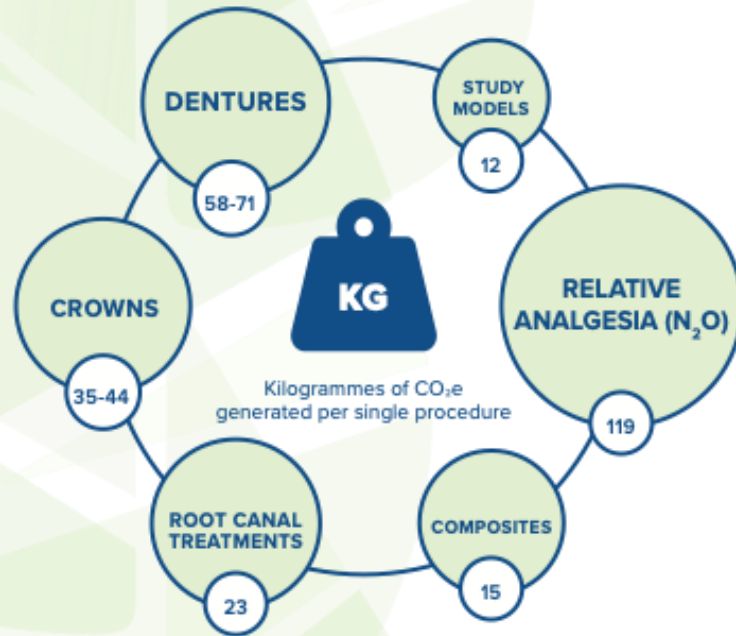


Sustainability
in Dentistry

Good oral health is good for the patient, good for the dental team and good for the environment

The carbon footprint of oral health

Dental interventions create greenhouse emissions



What can you and your dental team do?

- BUILD A STRONG PATIENT-CLINICIAN PARTNERSHIP
- CONDUCT ENERGY USE AUDITS
- TALK ABOUT SUSTAINABILITY
- RECYCLE WHERE POSSIBLE
- PROMOTE SUSTAINABLE TRANSPORT
- EMBRACE DIGITAL TECHNOLOGY
- FOCUS ON PREVENTION
- CONSERVE RESOURCES
- USE GOOD MATERIALS AND USE THEM WELL
- LEARN AND DEVELOP BEST PRACTICE



The founding partners of the Sustainability in Dentistry project.
Content developed by the Sustainability in Dentistry Task Team: N. Martin, J. Zenk, S. Dartevelle, S. Mulligan.
Reference: Carbon modelling within dentistry. Towards a sustainable future. Public Health England and Centre for Sustainable Healthcare. 2018.

To find out more follow the QR code



Question and Answer



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Dental Fear Is Real. Providers Can Help.	Expanding Access, Health Equity	Visual Report
Why We (Still) Need to Add Dental to Medicare	Adult Dental Benefit, Expanding Access, Health Equity	Report
A Cross-Sectional Analysis of Oral Health Care Spending over the Life Span in Commercial- and Medicaid-Insured Populations	Expanding Access, Health Equity	Article
Time Is on the Side of Change in Dentistry	COVID-19 and Oral Health, Health	Article

www.carequest.org/resource-library

Missed Connections

Providers and Consumers Want More Medical-Dental Integration

Oral health and overall health are inextricably linked. There is mounting evidence to suggest that poor oral health is related to a variety of chronic health conditions, such as high blood pressure, dementia, diabetes, and obesity. Despite this known connection, dental care is still largely siloed from medical care. The Centers for Disease Control and Prevention (CDC) estimates that integrating basic health screenings into a dental setting could save the health care system up to \$100 million every year.¹

CareQuest Institute for Oral Health conducted a nationally representative survey in January and February 2021 to assess consumers' perspectives on oral and overall health (n=5,320). CareQuest Institute also conducted a nationwide survey of oral health providers to assess perspectives and current behaviors related to interprofessional practice (n=377). Consumers and oral health providers described a lack of integration between medical and oral health care, and a desire for increased interprofessional collaboration.

Key Findings:
Medical-dental collaboration is currently uncommon.

- 63% of consumers report that their primary medical doctor "rarely" or "never" asks about their oral health.
- 33% of consumers report that their oral health provider "rarely" or "never" asks about their overall health.
- 45% of responding oral health providers report "rarely" integrating their care with clinicians outside of dentistry, with only 14% reporting it is part of their "daily" practice.
- Less than a third of consumers report receiving general health screenings from their oral health provider.
- A majority (89%) of adults report never receiving a referral from their oral health provider to a non-oral health professional.
- Almost a fourth (24%) of participating oral health providers report currently implementing interprofessional practice.

Webinar Evaluation

Complete the evaluation by **Friday, April 19** to receive CE credit. You will receive a link to the survey within 24 hours.

Next Webinar:

Exploring the Myths and Misconceptions about Oral Health and Pregnancy **on April 25 at 7:30 p.m. ET**

And we invite you to take a minute to sign up for our newsletter to get more information on future webinars!

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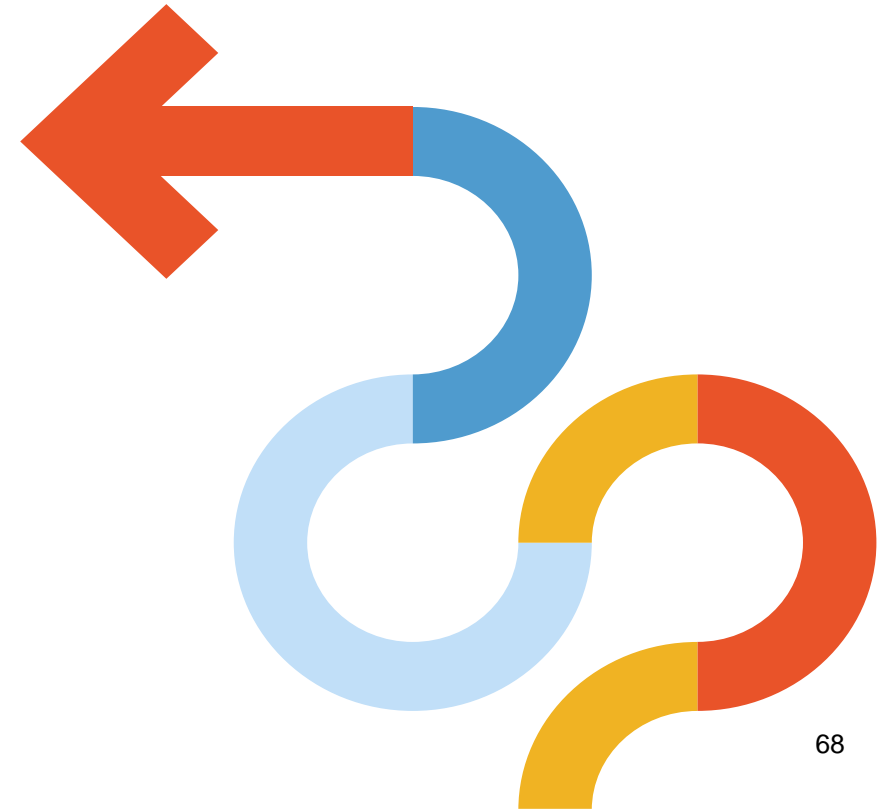
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