COVID-19 Update



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### Agenda

- Common presenting symptoms in children with COVID-19
- Personal Protection Equipment (PPE): from ideal to low resources settings

• Where to... after the initial shock







Google images; Personal file













Google images



COVID-19

Click on a country or territory to see cases, deaths, and recoveries.

asynchronously afflicting the entire world

demanding new availability of resources

following guidelines and legislation locally

https://www.covidvisualizer.com

955,219

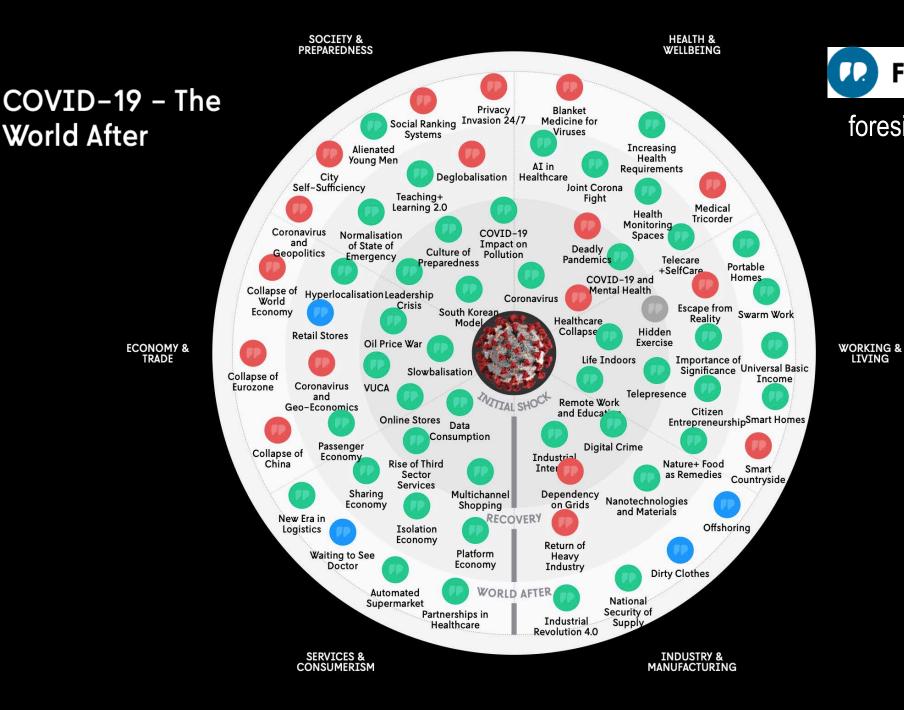
Legend (active cases)

0

May 4, 2020 – 19:25 Goiania, Brazil

> TOTAL COUNTS (as of a minute ago) ACTIVE: 2,193,430/3,635,986 • DEATHS: 251,614 (6.92%) • RECOVERIES: 1,190,942 (32.75%) •

> > **MORE INFORMATION**



foresight.futuresplatform.com "Amidst great turmoil lies potential tor renewal and growth"

**FUTURES PLATFORM** 



By Chris Stokel-Walker 29th April 2020

We'll be less touchy-feely and far more wary, but the transition will feel strange

https://www.bbc.com/future/article/20200429will-personal-contact-change-due-to-coronavirus

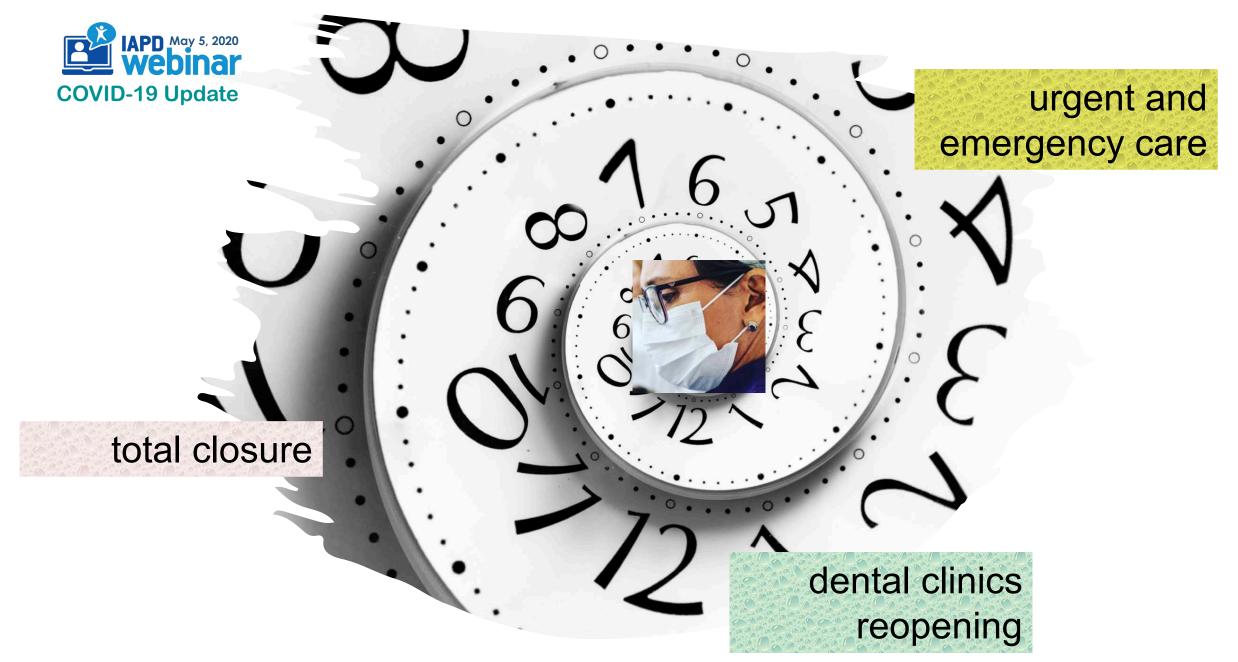


outdoor classes hourly hand-washing fewer teachers kids not allowed to touch each other one child per table (instead of two)



https://www.theatlantic.com/politics/archive/202 0/05/life-after-coronavirus-china-denmarksouth-korea/611011/

Parents and children wait to get inside Stengaard School north of Copenhagen, Denmark. (Ólafur Steinar Gestsson / Ritzau Scanpix / AFP / Getty)



Google images; Personal file



#### **%** BSPD

They will be wearing special clothes like this. The special clothes help keep germs away.





## **Recommendations for Paediatric Dentistry**



Some people think they look like superheroes when they wear this! Other people think they look like astronauts or wizards. What do you think?







A guide for re-entry into practice for pediatric dentists during the COVID-19 pandemic



Updated 4/28/2020



## **Recommendations - Principles**



Be aware of the evidences, regulations and restrictions – PPE etc

First things first

Establish Standard Operating Procedures (SOPs) and Clinical Pathways

Engage the entire staff in a systematic training for the new routine







### **Go digital!** teaching and practice

face-to-face interaction has been irreplaceable; should remain adequate when it comes to important negotiations or significant relationships

### **Recommendations - Principles**

### Telepresence

- Now: video conferencing
- Then: augmented reality, virtual reality and hologram

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### **Recommendations - Principles**

# Provision of care, as efficiently and minimally invasive as possible



Published April 30, 2020

**Expectations and Pathway for Patient Care during the COVID-19 Pandemic** 



### Recommendations Dental procedures

Pain or trauma (dental urgencies/emergencies)

Teledentistry triage

Prescription of antimicrobials and/or analgesics

NHS March 25, 2020

The key instructions from government agencies, which apply in both private and NHS practice, remain:

- Cease ALL routine dental care (including orthodontics) (UK-wide)
- Cease ALL aerosol generating procedures (UK-wide)
- Offer patients with urgent needs appropriate advice and prescriptions over the phone (UK-wide)



### Recommendations Behaviour guidance

- Positive behavior and/or low anxiety level
- Basic behaviour techniques
- Avoid parent in the dental office

Personal files



Recommendations Behaviour guidance

Negative behaviour and/or moderate-high anxiety level

Postpone the dental treatment and refer to the psychological therapy?

Protective stabilisation, sedation or general anaesthesia?

Minimal intervention dentistry or conventional procedure?



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April 7, 2020

Letter to the Editor/Oral Medicine and Dental Public Health

#### Dental Sedation Precautions and Recommendations during the COVID-19 Pandemic

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· Conflicts of interest: none declared.



1. Use non-pharmacological techniques to control the patient's anxiety, e.g., those associated or not with protective stabilization (children and people with disabilities), and use minimal intervention dentistry techniques, when indicated.<sup>13</sup>

2.Perform, in severe cases, dental care under general anesthesia using resolutive techniques to solve the patient's dental problem that avoid returns or additional treatments in the short term.



3. **Do not** perform dental procedures under inhalation sedation with nitrous oxide/oxygen during the COVID-19 pandemic in order to mitigate aerosolization and virus spread and the potential risk of performing life support measures that involve handling of airways and the use of hospital resources.

4. **Do not** perform dental procedures under pharmacological sedation due to the need to provide oxygen and the potential risk of needing life support measures that involve the manipulation of airways and use of hospital resources.





https://www.asdahq.org

Interim Guidance For Dentist Anesthesiologists Practicing In The Office-Based Setting During The COVID-19 Pandemic

Last updated 4/14/20

If a dental nitrous oxide-oxygen machine is being used, a filter may be place between the tubing and the machine although special connectors may be needed depending on the brand of machine used. It may be preferable to use disposable nasal cannula or other oxygen delivery device. All tubing should be properly disinfected.

A heat and moisture exchange filter (HMEF) which also provides viral filtration may also be appropriate (a separate viral filter should be used in conjunction with HME units which do not provide filtration). Since the HMEF may increase dead space and is more easily clogged, positioning an HMEF between the patient's airway and circuit may significantly increase the work of breathing, particularly for pediatric patients. Of note, while humidification may be a significant benefit for patients undergoing prolonged anesthesia and the ASA/APSF recommends HMEFs while using anesthesia machines as ventilators during long-term ventilation of COVID-19 positive patients, it likely provides less benefit during shorter anesthesia cases in dentistry.

#### **Dental sedation and general anaesthesia**

- Concern has been raised regarding the risk of the generation of aerosol on administration of nitrous oxide
- April 15, 2020 analgesia, as gas is delivered at a volume that often exceeds 51/min in a semi-closed circuit. There are, as yet, no studies directly pertaining to this potential problem (26). Clinical guidelines advise the use of nitrous oxide and other forms of conscious sedation if urgent care is required in patients unable to cope otherwise (29).



• Access to emergency dental treatment under general anaesthesia must be maintained where possible for patients whose poor oral health is likely to impact on their pre-existing medical conditions; for patients with behavioural difficulties leading to self-harm or aggression due to dental pain; for patients with dysphagia at risk of aspirating a tooth that cannot be removed under local anaesthesia (29).



WILEY- INTERNATIONAL JOURNAL OF PAEDIATRIC DENTISTRY

Evidence-

based

knowledge

#### DA/DF/DBMP assessment

- Child development
- Behavioural and anxiety concepts
- Parenting and family functioning
- Pain

Non-pharmacological approach

- Widely accepted techniques
- Techniques of restricted use

Multidisciplinary

care

Child with DA/DF/ DBMP

#### **Decision making**

- Dental needs
- Mental/physical problems
- Resources
- Integrated care
- Child/parent preferences

#### Training and practice

#### Pharmacological approach

- Definitions
- Provision (local anaesthesia/sedation)
- Co-responsibility (advanced sedation/general anaesthesia)
- Adverse events medical emergencies

Law and ethics

**FIGURE 1** Four-domain framework with keywords for incorporating a comprehensive approach for the child with dental anxiety (DA), dental fear (DF), and/or dental behaviour management problems (DBMP)

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#### ORIGINAL ARTICLE

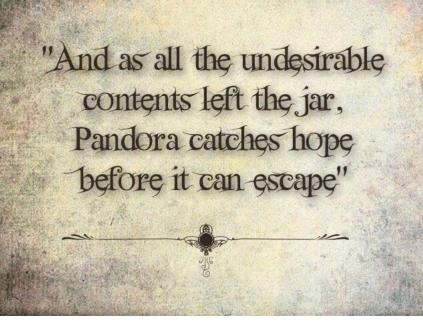
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A curriculum for behaviour and oral healthcare management for dentally anxious children—Recommendations from the Children Experiencing Dental Anxiety: Collaboration on Research and Education (CEDACORE)

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Google images

Casamassimo PS, Townsend JA, Litch CS. Pediatric Dentistry During and After COVID-19. Pediatr Dent. 2020 Mar 15;42(2):87-90.

most of us never imagined, nor prepared for in our training. As health care professionals who provide oral health care to children and licensed by the state, there is an implicit acknowledgment that every day pediatric dentists are exposed to various pathogens and other infectious agents, but that is accepted as one of the risks associated with the privilege of providing oral health care. In the aftermath of COVID-19, our hope is that guidance and education emerges to help in making these types of decisions.

