# The Canary System

## With PTR-LUM **POWERFUL DENTAL CARIES DETECTION**



# A New Era in Dental Care **Takes Flight**



The Canary System with PTR-LUM technology is an accurate, repeatable and highly sensitive approach to the detection, monitoring and treatment of carious lesions. The system is centred around a painless, safe and non-invasive diagnostic tool.

The Canary System detects and monitors caries on all tooth surfaces – approximal, occlusal pits and fissures, smooth surface enamel and dentin, under sealants, and around restorations. It is the only system that combines detection, remineralization treatment, and reports for the patient and oral healthcare provider, to create a paradigm shift in caries management.

The oral healthcare team can set up an early detection and remineralization program in the office, while the dentist continues to treat the more traditional lesions with conventional techniques. Oral healthcare providers, and their patients, will benefit from this entirely new preventative service.

#### **DENTAL CARIES TREATMENT:** SHIFTING FROM INTERVENTION TO **REMINERALIZATION AND PREVENTION**



- · Routinely miss the vast majority of occlusal caries, including smaller early lesions
- · Issues with radiation exposure
- Typically 40-60 percent of tooth surface needs to be demineralized before visible on x-rays

#### Explorers

- Can damage enamel by probing or by transferring bacteria from tooth to tooth, or deeper into fissures on tooth surface
- Unable to detect small lesions

#### Visual Examinations

- Unable to detect early demineralization
- Unable to detect lesions around restorations. or in pits and fissures
- No means of recording subtle changes

#### Other Laser-Based Devices

- Limited tooth surface coverage
- Less accurate, less sensitive and not repeatable
- May require teeth be cleaned, dried, or isolated
- No patient reports available

#### **The Canary System**

- J Sensitive, repeatable measurements to monitor lesion changes
- Monitor remineralization and alter therapy as needed
- Create new patient treatment programs, run by members of dental team, that engage patients in their treatment

#### HEAT + LIGHT = THE CANARY SYSTEM WITH PTR-LUM

The Canary System is not simply another laser system, but a unique method of measuring the converted heat (PTR) and light (LUM) emitted from the tooth surface. Rapid, safe pulses of laser light allow one to examine the tooth surface, while slower pulses allow the laser light to penetrate up to 5 mm below the tooth surface. As a carious lesion grows, the Canary number increases. With remineralization, the Canary number decreases. The system is so sensitive it detects very small changes in heat, much less than generated by a dental curing light.

This patented technology is based on extensive past and ongoing research, including over 40 published research papers in peer-reviewed dental and clinical journals. It is the only system that is validated by two Health Canada approved clinical trials to demonstrate safety and efficacy.

"The Canary System allows us to move away from surgical and restorative intervention to preventative-based approaches for improved management of caries."

#### **BENEFITS**

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Detects caries on all tooth surfaces – approximal, occlusal pits and fissures, smooth surface enamel and dentin, under sealants, and around restorations

Can detect lesions as small as 50 microns up to 5 mm below the tooth surface

Does not require isolation or dry field Greater specificity than other detection devices, including classic visual exam or probing

Incipient caries detection earlier and more accurately than x-rays

YOUR DENTAL EARLY WARNING SYSTEM The Canary System encourages dialogue with patients and creates an opportunity for patients to have active involvement in their care.



The Canary System reports are displayed on an interactive, touch-screen monitor for immediate chairside review with the patient. Patient reports include an Odontogram, incorporating Canary numbers and colour coding for the teeth examined. Red, yellow and green colours convey a powerful message about which areas need attention. The highest Canary number for each tooth is displayed, allowing the patient and dentist to monitor treatment outcomes. The patient report also includes the recommendations for home and office treatment, and timing of the next visit.

The dental report contains images of the surfaces examined along with the Canary numbers. This information is stored on the system, or on the *Canary Cloud* for those offices with wireless Internet access. Data are merged into detailed, user-friendly reports, including information on risk factors and their impact on developing carious lesions. No other caries detection device on the market is capable of generating reports for dental staff and patients.

### **FEATURES**

Patented, clinically proven PTR-LUM technology Custom reports tailored for patients and dental office Sleek ergonomic design Intra-oral camera integrated into handpiece Data back-up and storage on *Canary Cloud* Optional cart for storage and ease of movement between operatories Online access to patient records via wireless Canary Web portal

# THE CANARY SYSTEM The New Era in Dental Care Takes Flight in Spring 2011

For discounted pre-orders or further information:

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