

## D26 The Comprehensive Masonic CHIP Program (Child Identification): A Comprehensive Forensic Tool

David B. Harte, DMD\*, 480 Adams Street, Milton, MA 02186

**Learning Objective:** To present to the forensic community the comprehensive Masonic CHIP (Child Identification Program) Program, featuring Toothprints®, now operational in 13 states, being implemented in 17 additional states, and approved in 13 additional states, and being considered in Mexico and the 13 Provinces of Canada.

**Text:** The Masonic CHIP Program is now recognized as the most comprehensive child recovery and identification program in the country, and is hailed by the recovery officials of the National Center for Missing and Exploited Children, as well as law enforcement, dental, forensic, and prosecution authorities alike.

A child is reported missing every 43 seconds in the United States according to the National Crime Information Center (NCIC) and the National Center for Missing and Exploited Children (NCMEC). Alarmingly, the NCMEC receives diagnostic photos in only 1 of every 2 missing children's cases! The need for a comprehensive recovery and ID kit readily available is paramount when children are lost, missing, or abducted.

The Masonic CHIP Program provides at no cost to parents:

- 1. A 3-minute TV-quality videotaped interview with the child
- 2. Fingerprints
- 3. A Toothprint® with salivary scent tracer and DNA
- 4. A DNA cheek swab

The core of the program is TV-quality videotape of the child. Videotape captures mannerisms, expressions, speech patterns, profiles of the child, and gives immediate leads to law enforcement officials tracking missing children. If a picture is worth a thousand words, then a videotape is worth a million; it's easily transportable, can be taken on vacation, or given to grandparents if they become caretakers for any period of time. Videotape can be easily integrated into the AMBER alert system which is now online nationwide. America's Missing Broadcast Emergency Response System (AMBER) can reach millions quickly, and has saved more than 100 children to date. The videotape portion also offers a strong forensic component. Because children are asked to give "their biggest smile" during the interview, the alignment, shape, color, and spacing of teeth can be used to make a positive forensic identification. If skeletal remains need to be identified, a photographic superimposition technique can be used to overlay the videotape onto a skull via use of computers to make a positive forensic identification.

Fingerprints are taken, which are invaluable in tracking lost, missing, or abducted children. Fingerprints are seldom used for identification. They are critical and essential in investigation, tracking and for prosecution purposes.

The third component of the program is Toothprints<sup>®</sup>. It adds a very strong recovery and forensic aspect to this program. A Toothprint<sup>®</sup> records individual tooth characteristics, tooth position within the arch, upper and lower teeth relationships, gum contour and anatomy, as well as marginal outlines of individual restorations and dental sealants. Every Toothprint<sup>®</sup> is unique, even identical twins can be easily differentiated by their Toothprints<sup>®</sup>. Seventy (70%) percent of American children are now cavity-free and filling-free and thus have literally blank dental records reported to the NCIC when lost or missing.

Saliva on the Toothprint® wafer serves as a DNA sample for at least 3 years, but more importantly, serves as a scent tracer for recovery bloodhound dogs which can easily track saliva scent/skin cell scent. Bloodhounds typically track individual skin cells falling from humans at a rate of 100 cells/minute. Bloodhounds can distinguish even identical twins apart by smelling their scent. Children are taught to leave a "spit trail" if lost in the woods; or if age appropriate, leave their saliva, fingerprints, and hair behind if abducted. Recovery, identification, and prosecution gain much with such evidence.

The fourth component of the program is the DNA cheek swab which will provide DNA material for both mitochondrial and nuclear DNA matching for more than 20 years when properly frozen in a home freezer.

Last October, the American Dental Association passed a Resolution asking all State Dental Associations to join with community child ID programs on a complimentary basis to keep American children safe. To date, the Masonic CHIP Program has ID'ed more than 192,000 children in the Commonwealth of Massachusetts; and 43 Public School systems have adopted the program for all students grades K – 12. Last year 258 CHIP events were conducted in 142 communities in the Commonwealth. The program is free; the organizers keep no ID records - all ID materials are given to the parents. Parents can elect to participate in any of the four components of the program. Children from birth to college-age may participate.

CHIP offers maximum peace of mind for parents, community leaders, and the children themselves, while

Copyright 2005 by the AAFS. Unless stated otherwise, noncommercial *photocopying* of editorial published in this periodical is permitted by AAFS. Permission to reprint, publish, or otherwise reproduce such material in any form other than photocopying must be obtained by AAFS. \* *Presenting Author* 



giving comprehensive materials to rescuers and forensic scientists. Masonic CHIP Program, Toothprints $^{\textcircled{R}}$ , Child Identification