FLORIDA DENTAL BOARD RETREATS ON AMALGAM RULES!

On Friday, 18 January 2002 the Florida Board of Dentistry (BOD) withdrew its last two proposed Rules that would have severely impacted on mercury-free dentistry.

Under Florida Law, the Board of Dentistry has the right to provide Rules governing the practice of dentistry in the state. As previously reported [BPNL, Vol. 17, Issue 6, November 2001], the BOD proposed Rules that would have: 1) Banned advertising by dentists that they were mercury-free; 2) defined "scientifically valid" evidence as only that which is acceptable to the majority of the dental boards and dental schools; 3) declared that the removal of amalgam fillings for the purpose of eliminating a toxic substance does not meet the minimum standards of performance for competent dental practice in Florida; and 4) banned statements that mercury from dental amalgam causes any systemic harm.

The first two of these proposed Rules were withdrawn prior to the BOD meeting in Tampa on 18 January 2002. It appears that attorneys for the Florida Department of Health convinced the BOD that these two were totally indefensible. Meanwhile, Florida mercury-free dentists contracted with Citizens for Health Freedom (CHF), the group that had spearheaded passage of the "Patients' Freedom of Choice" Law that provided Florida citizens access to alternative health care. [BPNL, Vol. 17, Issue 5, Sep 2001] CHF did a magnificent job in informing Florida Legislators that the Florida BOD was clearly trying to usurp the authority of the Legislature, as well as circumvent the new Florida Law on alternative health care. Numerous strong letters from Florida Legislators were provided to the BOD. It was perfectly clear that the Florida Legislature was not pleased with the intentions of the BOD.
At the BOD meeting on 18 January, strong presentations were made by attorney Julie Hilton of CHF, Professor Boyd Haley, and Dr. Bernie Windham, an employee of the Florida Department of Environmental Protection. Additional presentations were made by several citizens, two physicians, and a retired dentist. A great deal of scientific evidence, legal issues, and matters of Florida Law were placed on the public record at the BOD meeting.

Members of the Florida BOD, polite and subdued, voted to withdraw the two remaining proposed Rules. Comments were made that the two Rules would be modified, hopefully more acceptable to the Legislature, and submitted again at a later date.

Although it is possible that the BOD will submit these proposed Rules again, their task is now a great deal more difficult. They now know of serious opposition from the Florida Legislature, as well as the numerous concerns of science and law now on the public record. Congratulations to Florida mercury-free dentists and, especially, to Citizens for Health Freedom.

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DENTISTS LEFT TWISTING IN THE WIND ON AMALGAM!

It is time for all practicing dentists to evaluate their position regarding the use of mercury/silver amalgam dental fillings. Clearly the controversy over the use of amalgam is coming to a finale. Consider the following:

- The governments of several nations have already issued directives advising against the use of amalgam in certain circumstances; notably in children and pregnant females. (It should be noted that, contrary to the opinions of some people, no country has as yet banned the use of amalgam.)
- Amalgam manufacturers are including warnings and contraindications to the use of amalgam in their "Directions for Use" inserts.

- A United States Representative is directing a Congressional Investigation, through a key committee, on the use of mercury in vaccines and dental amalgam. Evidence has appeared suggesting that mercury may be implicated in the occurrence of autism and possibly Attention Deficit Disorder in children.
- Another United States Representative has announced plans to propose national legislation to warn consumers of exposure to amalgam mercury, and to phase out the material within five years.
- A national organization of state legislators has issued a resolution calling for the full disclosure and future ban of amalgam from state legislatures. [The National Black Caucus of State Legislators. See BPNL, Vol. 18, Issue 1, Jan 2002]
- Some states (California, Maine) have already passed informed consent legislation on dental mercury amalgam.
- Numerous states have passed, or are proposing, legislation addressing mercury in the environment, including dentistry as a source in some cases.
- Dental Boards have been challenged regarding their attempts to discipline mercury-free dentists. Moreover, they are losing cases of attempted discipline, as well as their self-perceived "carte blanche" to eliminate consideration of amalgam mercury.
- The lead article in this issue on the Florida BOD is a prime example, as is the 2001 action of the California Legislature against the BOD for ignoring the California Law Proposition 65. In other states, such as Arizona and Colorado, State Legislatures have intervened against the Dental Boards.
- Several class action law suits have been filed. These suits are not for patient relief, but rather against dental authorities for not providing full disclosure on amalgam. At the very least, these do draw public and media
attention to the issue.

- Publication of research studies casting doubt on the safety of dental amalgam mercury continues. These have been published in reputable, peer-review medical scientific journals. Studies and articles claiming the safety of amalgam mercury are published, virtually without exception, in dental journals. As the issue at hand is one of toxicology, dental journals are hardly the appropriate venue for these studies.

- More and more scientists and health care professionals are acknowledging a potential health risk from dental amalgam mercury.

- The public is becoming increasingly aware of the controversy over dental mercury.

And, perhaps the most intriguing point:

- The controversy continues, and increasingly heightens, in spite of the strongest efforts of organized dentistry to end it. Indeed, a massive effort to utilize all of the authority of the dental profession, including the dental boards and government agencies, has not ended the controversy.

All of these factors listed above present a clear and compelling message:

**Any dentist who continues to place mercury/silver amalgam dental fillings would be well advised to pay attention to information from sources other than organized dentistry!**

It is incumbent on dentists to view their position on four grounds; moral, ethical, legal and financial. Many, if not most, dentists who continue to place amalgam most likely believe that they are protected by the positions taken by organized dentistry. Those dentists are in for a big surprise! Consider the following facts:

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**The American Dental Association (ADA):**

While the ADA has been leading the fight to preserve the use of amalgam, it has been careful to extricate itself from the potential for liability for its continued use. In a tort liability suit, the ADA attorneys pleaded: "The ADA owes no legal duty of care to protect the public from allegedly dangerous products used by dentists. The ADA did not manufacture, design, supply or install the mercury-containing amalgams. The ADA does not control those who do. The ADA’s only alleged involvement in the product was to provide information regarding its use.” [Case No. 718228, In The Superior Court of California In And For The County Of Santa Clara, 22 October 1992] The Judge agreed and dismissed the ADA from the lawsuit.

In addition, the ADA clearly has washed its hands regarding the final product, mixed dental amalgam. The ADA has stated: "There appears to be confusion regarding both the role of the Council and the scope of ANSI/ADA Specification No. 1 for Alloy for Dental Amalgam. The Specification is not for dental amalgam. It is only for the alloy for dental amalgam. The amalgam does not form until the dentist mixes the alloy with mercury. Therefore, dental amalgam per se cannot be certified. We cannot certify a reaction product made by the dentist.” [ADA Letter, John W. Stanford, Ph.D., Secretary. Council on Dental Materials, Instruments and Equipment, 22 May 1986]

The ADA has obviously taken steps to distance itself from mixed dental amalgam, possibly in order to protect itself from potential liability. It has laid all responsibility directly on the shoulders of the practicing dentist.

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**The Food and Drug Administration (FDA):**

As with the ADA, the FDA has distanced itself from mixed dental amalgam and placed the responsibility for its use on the shoulders of the practicing dentist.

The FDA has steadfastly refused to address mixed dental amalgam. Instead, it has accepted "Dental Mercury" as a safe and effective dental device (Class I; meaning that the device presents
no potential for toxic effects) and "Amalgam Alloy" as a safe and effective dental device (Class II; meaning that Performance Standards are necessary to ensure safety and effectiveness.) [FDA, Dental Devices: General Provisions and Classifications of 110 Devices, FR 52(155):30082-30108, 12 Aug 1987] (Ed Note: The Chairman of the FDA Dental Devices Panel that arranged for this was John W. Stanford, Ph.D., who at the time was still with the ADA. [FR 40(97):21848, 19 May 1975])

FDA has placed the following in writing: "I must remind you that FDA regulates manufacturers of dental devices. No manufacturer produces mixed dental amalgams. The mixed dental amalgam is prepared by dental clinicians. FDA does regulate manufacturers of dental mercury and amalgam alloys, but the only control FDA has over the ultimate, mixed amalgam is through the labeling for dental mercury and amalgam alloys." [FDA Letter, Lillian Yin, Ph. D, Director, Division of On-Gyn, ENT, and Dental Devices, 2 April 1991]

So much for protection from the FDA and ADA for the use of mixed dental amalgam; it is an illusion that cannot be legally relied upon. Both the FDA and the ADA have, in writing, made it clear that they do not regulate mixed dental amalgam and have placed the responsibility on the dental practitioner, who they say actually "manufactures" the final product.

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The Amalgam Manufacturers (Actually, according to the FDA and ADA, the manufacturers of "Dental Mercury" and "Amalgam Alloy"): [Ed Note: To avoid semantic confusion created by FDA and ADA, we will refer to these companies as Amalgam Component (AC) Providers.] By their regulation of only the two components of dental amalgam (Dental Mercury and Amalgam Alloy), FDA and ADA have "accepted" these two products, thereby providing protection to the AC Providers. They are legal "dental devices" regulated by the United States Government and accepted by the ADA. Mixed dental amalgam is not.

FDA, the actual only real authority, has amazingly accepted Dental Mercury as a Class I Dental Device, meaning that it presents no health risk to patients and, therefore, requires no investigation of potential adverse effects. FDA, therefore has declared Dental Mercury to be non-toxic, while banning virtually every other medical use of mercury because of its extreme toxicity.

On 1-3 December 1993, the FDA Dental Products Panel met. One of the topics was the safety of dental amalgam. A strong presentation on the safety of amalgam was made by a representative of the American Dental Trade Association (ADTA), which includes the companies providing amalgam components. The representative of the AC Providers was John W. Stanford, Ph.D., the very same person who had chaired the ADA and FDA committees that developed their amalgam policies.

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Next, let us examine the actual findings of several U. S. government committees. The defenders of the safety of amalgam mercury cite these as "proof" that the safety has been well studied and established.

Food and Drug Administration, Dental Products Panel Meeting, 15 March 1991: [Transcripts] Panel Recommendations, page 208: "Without the addition of any statements that reflect that the Panel feels that there is any unsafety to the use of dental amalgam as a restorative material, I would ask the Panel, now, that the information under review today, if that information raises questions that warrant further research. I will poll the Panel for a yes or no vote."

All panel members voted "yes," therefore all agreeing that questions about the safety of
amalgam had arisen. The Panel made NO declaration of harmlessness of amalgam.

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Statement. Question 2, page 140: "There is little evidence that tooth restorative materials induce systemic toxicity. Elemental mercury can be released from amalgams, and mercury can be found in the brains and kidneys of humans and animals. However, except for dental personnel who have had excessive exposure due to repeated mishandling, altered brain or kidney function has not been correlated with dental amalgam exposure."

Conclusions, page 143: "Although mercury vapor is released from dental amalgam, the quantities released are very small and do not cause verifiable adverse effects on human beings. While the current evidence supports the concept that existing dental restorative materials are safe, it must be recognized that the supporting data are incomplete."

This is hardly the ringing endorsement of the safety of amalgam mercury that it is purported to be. Actually, two of the presenters at this conference did present significant documentation of adverse effects to amalgam mercury. In protest to the conclusion, one of the speakers wrote a letter of objection to NIH. The NIH response to him stated: "The recognition of the paucity of data on the subject, especially with regard to mercury, was the reason for using the term 'Technology Assessment' rather than 'Consensus Development.' Our guidelines for a Consensus Development Conference do require the statement to be data-based to the extent possible." - and - "In regard to the studies you presented being ignored, they were definitely considered and discussed at length, but not emphasized in the final statement."

So, in writing, NIH acknowledged: 1) Valid data to justify a conclusion of safety of amalgam mercury was lacking, but they made that conclusion anyway; 2) valid documentation of adverse effects of amalgam mercury was presented at the conference, but they chose to "not emphasize" that research; and 3) the conference conclusions could not be claimed to be a justifiable consensus on the safety of amalgam mercury. [Ed. Note: The Final Statement of this conference was written by W. D. McHugh and the Conference Editor was Joyce A. Reese; both were dentists.]

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The Public Health Service (PHS) CCEHRP Report on Dental Amalgam, January 1993: [Published Government Report] The use of this committee report to justify claims of the safety of amalgam mercury is a real travesty. Here are the actual report statements:

Amalgam Risks, Page 3: "In the absence of adequate human studies, the Subcommittee on Risk Assessment could not conclude with certainty whether or not the mercury in amalgam might pose a public health risk."

Subcommittee on Risk Assessment, Appendix III, page 29: "Available data are not sufficient to indicate that health hazards can be identified in non-occupationally exposed persons. Health hazards, however, cannot be dismissed." - and - "The margin of safety may, however be lower because body burdens of mercury are already high as a result of exposure to other sources; some persons may perhaps respond adversely to the incremental exposure to mercury derived from dental amalgams."

Even Assistant Secretary for Health and head of the Public Health Service Dr. James O. Mason stated in his introductory letter: "Because the possibility of adverse health effects resulting
from the use of dental amalgam cannot be fully
discounted based on available scientific
evidence, I am requesting the National Institutes
of Health, the Centers for Disease Control and
Prevention, and the Food and Drug
Administration to undertake an expanded and
targeted program of research, professional and
consumer education and product regulation." This was in 1993; no claim of safety of amalgam
mercury and calls for action to government
agencies, all of which have been ignored for the
ensuing nine years.

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The Agency for Toxic Substances and Disease Registry (ATSDR), Toxicological
Profile for Mercury TP-93/10, May 1994:
[Published Government Report] 2.4 Relevance To
Public Health, page 125: "The chronic
inhalation MRL is 0.014 micrograms/meter
cubed. The proposed acute MRL is 0.02
micrograms/meter cubed. Thus, both MRLs are
below estimated exposure levels from dental
amalgam." [Ed. Note: MRL is "Minimal Risk
Level, the mercury vapor standard for ATSDR] Clearly, this official risk assessment conducted
by the department of the Public Health Service
responsible for such standards found a clear risk
to general population exposures to mercury
from amalgam fillings. Interestingly, these
findings were eliminated from the next ATSDR
mercury profile in 1998. Apparently, politics
took precedent over the public health. Nonetheless, the 1994 report is on record.

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Published Science:
[See www.jaomt.org "References"]
As noted above in the discussion of the
government committees, broad based human
studies on the potential health effects of
amalgam mercury are lacking.
On the pro-safety side, there are a few
epidemiological studies from Sweden, but they
lacked control groups; all of the subject groups
evaluated had amalgam fillings, in varied
numbers. There are also the so-called "Nun
Study" reports on amalgam mercury and
Alzheimer’s Disease, but they were both
published in the Journal of the American
Association, which is hardly an appropriate
venue for research on neurologic pathology.
On the anti-safe side, there are also published
studies, primarily published in medical scientific
journals. Moreover, there are many published
studies on pathology that is caused by exposure
to non-amalgam mercury at levels that patients
receive from their amalgam fillings.
Most importantly, there are two formal Risk
Assessments on amalgam mercury conducted by
the governments of Canada and the United
States. Both of these concluded that patient
exposure to dental amalgam mercury was above
accepted risk standards. These studies are
critical, as they address the subject in the proper
manner.
Mercury is a poisonous heavy metal, and should
be addressed as such, in the same manner as one
evaluates exposure to lead, arsenic, or any other
heavy metal - by Risk Assessment!
If human studies have not conclusively proven
that exposure to lead causes Alzheimer’s Disease
(or any other named condition), would the
conclusion then be that lead is not toxic? Of
course not; that would be ridiculous. Yet, the
dental profession draws that conclusion with
amalgam mercury, and looks equally ridiculous
in the eyes of reputable medical scientists.

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Full Disclosure (Informed Consent):
[See www.jaomt.org "References"]
Although the potential for adverse effects that
may occur in patients from the daily exposure to
mercury from amalgam fillings is controversial,
there are two areas of this debate that are NOT
controversial.
1. It is agreed by all that patients with amalgam
fillings DO receive a daily dose of mercury.
Dental authorities claim that this exposure is 1-3 micrograms per day. Medical authorities, including mercury toxicologists say that it is an average of 10 micrograms per day. The important point is that everyone agrees that there is a daily exposure, with no contradiction. 2. Animal and human studies have demonstrated a transfer of mercury from the amalgam fillings of pregnant females to the tissues of unborn babies, and from mothers’ milk to nursing infants. There are no published studies contradicting these findings.

Moral, ethical, legal, and financial considerations require that ALL dental patients be informed of these two universally accepted facts. Not doing so might be considered failure to provide full disclosure, which is a defined aspect of fraudulent and deceptive practice. At the very least, it would be a breach of professional responsibility on the part of the dentist.

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The Final Analysis:
The debate over the safety of patient exposure to dental amalgam mercury has gone on long enough. Every practicing dentist must now be faced with critical questions regarding their continued use of amalgam, as well as their professional responsibility to their patients. The information provided in this newsletter is all documented, and referenced. This is the truth, not opinion.

Based upon all of the information provided herein, all documented, ask yourself -

WHO IS LEFT HOLDING THE BAG?

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SCIENCE

Tremor Frequency Patterns in Mercury Vapor Exposure, Compared With Early Parkinson’s Disease and Essential Tremor.
Beirne, H; Ellias, SA; Wermuth, L; Cleary, D; de Oliveira Santos, EC; Jorgensen, PJ; Feldman, RG; Grandjean, P.

ABSTRACT: A new portable tremometer allows determination of tremor intensities at different tremor frequencies. Based on past studies, two tremor frequency windows of similar size were chosen at 3.0-6.5 Hz and 6.6-10.0 Hz to reflect major tremor intensities in Parkinson’s disease and mercury vapor poisoning, respectively.

In 81 healthy controls, total tremor intensity was higher for the preferred hand and depended on age. Ten patients treated for Parkinson’s disease showed substantially increased tremor intensity, especially within the low-frequency window. This pattern was also apparent in 14 patients with de novo Parkinson’s disease whose overall tremor intensity was only mildly elevated. In contrast, ten patients with essential tremor had peak frequencies in both windows, and some patients had increased tremor on one side only.

Sixty-three Brazilian gold traders exposed to mercury vapor showed increased tremor predominantly in the high-frequency window. Three of the gold traders had a narrower tremor peak at frequencies of 7-8 Hz. While the urine-mercury concentration was significantly associated with the current number of burning sessions week, it did not correlate with tremor intensities. However, eight traders had greatly increased average tremor intensity within the high-frequency window. These patterns were statistically significant for relative tremor intensities, but were less clear when total intensities were used. These observations suggest that the relative distribution of tremor intensities in specific frequency bands may be a valuable supplement to current diagnostic methods for subjects with mercury vapor exposure.

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Mercury Vapour Release From a Dental Aspirator.

Stonehouse, CA; Newman, AP.
ABSTRACT: Objective: To investigate the release of mercury vapour from a dental aspirator which vented its waste air through its base directly into the surgery environment.

Methodology: Mercury vapour in air concentrations were measured at the breathing zone of the dentist during continuous operation of the aspirator. Further series of mercury vapour measurements taken at the
aspirator exhaust vent were carried out to determine
the sources of mercury vapour from this particular
device.

Results: At the dentist’s breathing zone, mercury
vapour concentrations of ten times the current
occupational limit of 25 microg/m^3 were recorded
after 20 minutes of continuous aspirator operation. A
build-up of amalgam contamination within the
internal corrugated tubing of the aspirator was found
to be the main source of mercury vapour emissions
followed by particulate amalgam trapped within the
vacuum motor. As the vacuum motor heated up with
run time, mercury vapour emissions increased. It was
found that the bacterial air exhaust filter (designed to
clean the contaminated waste air entering the
surgery) offered no protection to mercury vapour. In
this case the filter trapped particulate amalgam which
contributed to further mercury vapor contamination
as high volume air was vented through it.

Conclusion: It is not known how many dental
aspirators are in use that vent their waste air directly
into the surgery or if this aspirator is representative
of others in existence. The safety of dental aspirating
systems with regard to mercury vapour exposure
requires further investigation.

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FORUM

IAOMT 2002 MID-YEAR MEETING

Date: Friday-Saturday, 5-6 April 2002.
Site: Orlando, Florida.
Hotel: Sheraton World Resort, 10100 International
Specify IAOMT. Room rate/night: $119/1-2; $139/3;
$159/4. Deadline for IAOMT block: 1 March 2002!

Meeting Registration: IAOMT, P.O. Box 608531,
Orlando, FL. 32860-8531. T: 407-298-2450; F:
407-298-3075. Registration (U.S.): Members:
$445, non-members: $545; spouses/staff with
registrant: $135 each. Includes continental
breakfast and lunch on Friday and Saturday. Cancellation fee after 1 April: 10%

Welcome Reception (Cash bar): Thursday, 4
April 2002, 7:30-10:00 pm.
Program: Stephanie F. Cave, MD: "Clinical Aspects of
Mercury Toxicity in All Ages." Richard Chamin, DMD:
"Fundamentals of Biological Dentistry." Boyd Haley,
PhD: "The Biochemistry of Mercury." William Hirzy,
PhD: "Water Fluoridation: Right or Wrong?" Fritz L.
Lorscheider, PhD: "How Mercury Causes Brain Neuron
Degeneration." Michael G. Rehme, DDS: "The Tooth-
Body Connection." Wesley E. Shankland, DDS:
"Cavitations: Diagnosis and Treatment." Sam Ziff:
"How to Find and Evaluate Research." Mark A.
Breiner, DDS: "Biological Dentistry: Beyond the
Fundamentals." David Schenck, DO & Pam Floener, PT,
RMA, CNC, CT: "Management Of a Mercury/Metal
Burdened Patient."

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IAOMT 2002 ANNUAL MEETING

Date: Fri.-Sat., 27-28 September 2002.
Site: Calgary, Alberta, Canada.
Hotel: Hyatt Regency Calgary, 700 Centre Street South,
Calgary, Alberta, T2G 5P6, Canada. T: 403-717-1234; F:
403-262-3490. Specify IAOMT. Room rate/night
( Canadian): $205-275; Suites: $400-$1000. Deadline for
IAOMT block: 26 August 2002!

Meeting Registration: IAOMT, P.O. Box 608531,
Orlando, FL. 32860-8531. T: 407-298-2450; F:
407-298-3075. Registration (U.S.) to be announced.
Program: To be announced.

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Biocompatible Periodontal Therapy Seminar
Sponsored by IAOMT

Site/Date: Seattle, WA: 17 May 2002.
Friday: 8 am-5 pm.
Hotels: To be announced.
Meeting Registration: Send to: BPT c/o IAOMT,
PO Box 608531, Orlando, FL 32860-8531. One
attendee: $295. Additional attendee from same
office: $149. Includes continental breakfast and
lunch on Friday.

Program: This full day seminar with Dr. Thomas
Baldwin, DDS, MAGD, Chair of the Periodontal
Committee, IAOMT and Editor of Non-Surgical
Periodontics Newsletter (NSP) takes a hands-on
approach to learning with specific emphasis on
Step-by-Step case presentations; Microbial
Assessment Techniques; Natural Herbal &
Essential Oil alternatives; Nutrition, Prevention &
Patient Management. Learn how to diagnose and
treat the actual infections that cause periodontal
disease instead of just treating the symptoms while
your patients continue to lose attachment.