REPORT ON THE 50-STATE PETITION
[Courtesy of Charles G. Brown, Esq. And James S. Turner, Esq.]

Consumers for Dental Choice, working closely with DAMS and Citizens for Health and their state affiliates, filed petitions with all 50 dental boards on 24 September 1997. We seek a level playing field for mercury-free dentistry. Each petition was sent to the dental board, the Governor, and the state Attorney General. With the 50-state petition, we have taken the offensive! But filing the petition is only the start. To succeed in 1998, we must:

- Be prepared to go to states having hearings.
- Respond to those states who need information.
- Prod states who are unwilling to answer.
- Combat those states whose positions are adverse to ours.

We must prepare on three levels - legal arguments, fact based scientific research, and grassroots consumer activism. The challenge is great, but so are the stakes. We need financial resources now so that we can begin this undertaking for 1998.

No fewer than 15 states are scheduling meetings to consider our petition in a public hearing. Most of these meetings will be early in 1998, although a few have been held already. They include Alaska, Arizona, Colorado, Georgia, Idaho, Kentucky, Louisiana, Montana, Nevada, New Mexico, Ohio, Oklahoma, Pennsylvania, Virginia, and Wyoming. We expect more states to have hearings - if we push the issue forward.

Several states profess neutrality between mercury-free and amalgam-based dentistry, including California, Delaware, Kansas, Missouri, North Carolina, and Washington. Kansas says nothing prevents a dentist there “from discussing the pros and cons about fillings containing silver amalgams.” California’s board president writes: “The Board fully supports the right of California consumers to select not only the types of fillings to be placed in their teeth, but all aspects of dental treatment performed, including the dentist providing the treatment.” New York rather ambiguously states it “does not regulate what materials a dentist may use in his/her professional judgement.”

Some states are more adverse. Indiana’s health director gives a ringing endorsement to amalgams, but then says dentists are free to advise consumers on the choice of fillings. Florida’s letter endorses amalgams, but concedes consumers may choose their filling. New Jersey states, bluntly, it is sticking to the ADA’s guidelines.

Other states indicate they need to examine the issue before giving a substantive response, including Hawaii, Illinois, Maine, Michigan, New Hampshire, South Carolina, Texas, Vermont, and West Virginia. We should follow through with these.

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The other states have not yet responded. We would like to contact them again.

We suggest not giving up on any state appearing to have a closed mind. Here is an example. Wyoming law incorporates the ADA Code of Ethics position on amalgam, seemingly a major impediment to amalgam-free dentistry. But we contacted that state’s Attorney General, presenting legal arguments against the ADA’s hostile pro-amalgam advisory opinion. To our delight, the AG’s office replied that the amalgam advisory opinion is not enforceable!

**BIO-PROBE COMMENT:** The Consumers for Dental Choice have accomplished a great deal to help mercury-free dentistry and patient freedom of choice. Their victories for mercury-free dentists in dental board actions (California, Florida, etc.), along with their 50 state petition has effectively sent a message to state dental boards that they can no longer arbitrarily punish mercury-free dentists with impunity. The Governor and Attorney General of every state are now aware of the amalgam controversy within the dental profession, as well as the scientific and legal arguments supporting mercury-free dentistry.

To date, this effort has been financially supported by a few dedicated individuals. Now, it is imperative that every one involved in the issue offer their financial support, no matter how large or small! [Consumers for Dental Choice, 1424 16th Street, NW, Suite 105, Washington, DC 20036.]

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**MORE GOOD NEWS FROM AUSTRALIA!**

In our last issue, Bio-Probe reported that Dr. Roman Lohyn and others of the Australasian Society of Oral Medicine and Toxicology (ASOMAT) had succeeded in getting the health agency of the Australian government to withdraw their pamphlet supporting the safety of mercury fillings. This had been accomplished by pointing out the invalidity of the one reference utilized to reach the conclusion of amalgam safety.

Now, the National Health and Medical Research Council (NHMRC) of the Australian government, having been obliged to publicly acknowledge that they have no position or even information on the safety of amalgam mercury, have established a meeting to investigate the issue. ASOMAT, the Australian Chapter of IAOMT, has been invited to participate!

Further, the Australian Dental Association (ADA) has implied action against ASOMAT and some of its leaders, based on their claim of firm instructions from the Australian government (NHMRC). In response, ASOMAT has challenged the ADA to produce the claimed firm instruction, which NHMRC has denied exists. Should be quite interesting!

ASOMAT has prepared a superb package of information for distribution throughout Australia.

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**USEPA MERCURY REPORT!**

On Thursday, 18 December 1997, the Duluth News-Tribune featured a lead article entitled “Bigger Threat Seen in Mercury: EPA Report packs strong message.” The article pointed out that the EPA (Environmental Protection Agency) has determined that mercury is a critical problem for the country’s environmental and human health.

Gary Glass, a mercury expert and EPA researcher, is quoted as saying: “The thing that struck me the most is how (the report) shows the enormity and magnitude of the problem. It’s clear that’s why it was delayed so long politically.” The article noted that mercury poisoning can cause severe neurologic damage, tremors, loss of sight, headaches, behavior changes, nausea and even death. It also emphasized that unborn babies and children up to age 7 are especially vulnerable.

Although the EPA report focused on human intake of mercury from eating fish, the article emphasized that environmentalists and scientists warn that the real problem is eliminating the sources of mercury that cause the environmental contamination leading to accumulation of mercury in the fish. Six recommendations from the scientists and environmental groups for curbing the problem were cited, including: “Require hospitals, dentists and clinics to use mercury-free products whenever possible and encourage separation of mercury products from medical waste that’s burned.”

The EPA draft report to Congress was also cited as stating: “The EPA recommends that a 150 pound adult should consume no more than 7 micrograms of mercury daily, while a 30 pound child should consume only 1.4 micrograms daily, and a 15 pound child only 0.7 micrograms.” [Bio-Probe Comment: This EPA recommendation can be compared to acknowledged daily intake of mercury from amalgam dental fillings. The mercury toxicology experts, including those from the World Health Organization, conclude daily intake of amalgam mercury to be 3-17 micrograms; while the dental profession even admits to a daily intake of 1-3 micrograms. Even the dental authorities must now admit that children are at risk from amalgam mercury, and adults are at borderline risk!]
DMPS/NEUROLOGIC FUNCTION STUDY

Dr. H. Vasken Aposhian and Dr. Deanna Echeverria are conducting an additional study on neurologic function of dentists related to body burden of mercury. This study will be conducted at the IAOMT Mid-Year Meeting in Durham, North Carolina in March of 1998.

The study will consist of a panel of tests of neurologic function, as was conducted on an IAOMT group previously, and measurements of mercury in urine before and after parenteral administration of DMPS. Two groups of 12-15 dentists will be tested. Group A must arrive on Wednesday (11 March), have physical exams and neurologic testing on Thursday (12 March), and DMPS administration on Friday (13 March). Group B must arrive on Thursday (12 March), have physical exams and neurologic testing on Friday (13 March), and DMPS administration on Saturday (14 March). One overnight and two spot urine samples will be collected.

Further study of the effect of detoxification will be conducted on IAOMT members at a future date, probably at the Annual Meeting in Denver on 10-13 September 1998. Volunteers are needed for this important study in Durham. To enroll, please call [407-298-2450] or fax [407-298-3075] IAOMT Executive Director Michael F. Ziff as soon as possible.

SCIENCE

An Epidemiological Study of Mercury Sensitization.
Sato, K; Kusada, Y; Zhang, Q; Yanagihara, M; Ueda, K; Morihoro, H; Ishii, Y; Mori, T; Hirai, T; Yomiyaama, T; Iida, T.

ABSTRACT: Mercury sensitization has been historically in question and may be related to recent increases of type I allergic diseases. To clarify the epidemiological factors of mercury sensitization, we investigated factors relating to mercury sensitization in 215 medical students. Their allergic symptoms, family histories and lifestyles were studied by questionnaire. Patch tests were performed with HgCl2 (0.05% aq.) and NiSO4 (5% aq.). Anti-Dermatophagoides and anti-Cryptomeria pollen IgE antibodies in sera were also measured. Urinary mercury concentrations were measured in 25 mercury sensitized and 44 non-sensitized subjects (controls). Hair mercury concentrations were also measured in 19 sensitized and 22 non-sensitized subjects.

While the positive rate of nickel was 6.0% (13/215), that of mercury was high (13%, 28/215). The subjects' individual histories of allergic rhinitis, eczema, urticaria and allergic conjunctivitis were significantly associated with family histories of these conditions (P, P and P , respectively), as reported in the literature. However, no allergen-specific antibody positivity or past history of allergic disease was associated with mercury sensitization. Mercury sensitized subjects had experienced eczema, caused by cosmetics, shampoos, soaps and hair creams significantly more frequently (P).

The history of mercurochrome usage was not associated with mercury sensitization. The number of teeth treated with metals in mercury sensitized subjects was significantly higher than that in the control group (6.8 +/- 4.3 vs 4.8 +/- 1; P).

There were significant differences in urinary mercury concentrations (specific gravity adjusted levels) between mercury sensitized subjects and non-sensitized subjects (2.0 +/- 0.9 and 1.3 +/- 0.6 mcg/L respectively; P). There were also significant differences in hair mercury concentrations between mercury sensitized and non-sensitized subjects (2.0 +/- 0.9 and 1.2 +/- 0.5 mcg/g respectively; P).

These results suggest that mercury sensitization is associated with exposure to mercury in the living environment and that skin symptoms are possibly associated as preceding factors.

BIO-PROBE COMMENT: The finding of 13.0% allergic to mercury is very important, especially combined with the finding that the subjects with amalgam fillings had significantly higher levels of mercury allergy. The authors even stated (page 205): "If the use of amalgams was to be limited, the prevalence of Hg sensitization would be expected to lessen."

This is yet another controlled study demonstrating a high incidence of allergy to mercury. In sixteen years of investigation, we have yet to find one single controlled study supporting the position of organized dentistry that allergy to mercury is "very rare", "one in a million", "less than 1%", or any other vague, unsupportable level! Continued public promotion of these unsupportable statements by health professionals could constitute negligent misrepresentation.

Long-Term Mercury Excretion in Urine After Removal of Amalgam Fillings.
Bergerow, J; Zander, D; Freier, I; Dunemann, L.

ABSTRACT: The long term urinary mercury excretion was determined in 17 28- to 55- year old persons before and at varying times (up to 14 months) after removal of all (4-24) dental amalgam fillings. Before removal the urinary mercury excretion correlated with the number of amalgam fillings.
In the immediate post-removal phase (up to 6 days after removal) a mean increase of 30% was observed. Within 12 months the geometric mean of the mercury excretion was reduced by a factor of 5, from 1.44 micrograms/g (range: 0.57-4.38 micrograms/g) to 0.36 micrograms/g (range: 0.13-0.88 micrograms/g). After cessation of exposure to dental amalgam the mean half-life was 95 days.

These results show that the release of mercury from dental amalgam contributes predominantly to the mercury exposure of non-occupationally exposed persons. The exposure from amalgam fillings thus exceeds the exposure from food, air and beverages. Within 12 months after removal of all amalgam fillings the participants showed substantially lower urinary mercury levels which were comparable to those found in subjects who have never had dental amalgam fillings. A relationship between the urinary mercury excretion and adverse effects was not found. Differences in the frequency of effects between the pre- and the post-removal phase were not observed.

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Mercury Release From Amalgam Into Saliva: An In-Vitro Study.
Lussi, A.

ABSTRACT [Article in German]: The aim of the study was to investigate mercury release into salivary fluid and to test whether this release is associated with flow rate, buffer capacity or pH of salivary fluid. Salivary fluid was collected from 18 persons (11 with amalgam fillings, 7 without) and the surface area of the fillings was assessed.

Mercury loss in unstimulated saliva was 11.6 ng/min for persons with amalgam and 2.1 ng/min for those without. Multiple regression analysis revealed no association between flow rate, buffer capacity or pH of unstimulated salivary fluid and mercury release.

BIO-PROBE COMMENT: The finding of mercury release of 11.6 ng/min in unstimulated saliva translates to a daily exposure of 16.7 micrograms of mercury [11.6 x 60 x 24/1000]. This level is considerably higher than the daily exposure estimates of amalgam mercury provided by dental authorities (i.e., 1-3 micrograms/day), and much higher than the USPHS Minimal Risk Level (MRL) for mercury exposure for the general population (0.28 micrograms/day). Moreover, the findings of this study, dealing with dissolved mercury, must be added to exposures calculated from mercury vapor measurements, which is directly inhaled mercury, in addition to the consideration of increased mercury release from multiple daily stimulations of amalgams.

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Mercury Concentration in the Mouth Mucosa of Patients With Amalgam Fillings.
Willershausen-Zonnchen, B; Simmermann, M; Defregger, A; Schramel, P; Hann, G.

ABSTRACT [Article in German]: Mercury concentrations were measured in specimens of oral mucosa taken during oral surgery from 90 patients (53 men, 37 women, mean age 42 ±16 years; 30 of the patients had no amalgam fillings. All the mucosal specimens extended for at least 2-3 mm from the epithelium of the gingival margin and were clinically and radiologically normal.

Thirteen patients without metallic fillings of any kind had mercury concentrations of 118.4 ± 83.7 ng/g tissue, and in 17 patients with precious metal fillings but no amalgam the mean mercury concentrations were 144 ± 290 ng/g tissue. Seventeen patients with 1-3 amalgam fillings had an average of 1975 ± 4300 ng/g tissue and in 26 patients with 3-6 amalgam fillings the average concentration was 1158 ± 2500 ng/g tissue. In 17 patients with more than six amalgam fillings the mean mercury concentration was 2302 ± 5600 ng/g tissue. Although these results demonstrate a considerable degree of transfer of mercury from the amalgam fillings to the oral mucosa, it had not resulted in any clinically detectable mucosal lesions.

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Mercury in Saliva and Feces After Removal of Amalgam Fillings.
Bjorkman, L; Sandborgh-Englund, G; Ekstrand, J.

ABSTRACT: The toxicological consequences of exposure to mercury (Hg) from dental amalgam fillings is a matter of debate in several countries. The purpose of this study was to obtain data on Hg concentrations in saliva and feces before and after removal of dental amalgam fillings. In addition Hg concentrations in urine, blood, and plasma were determined.

Ten subjects had all amalgam fillings removed at one dental session. Before removal, the median Hg concentration in feces was more than 10 times higher than in samples from an amalgam free reference group consisting of 10 individuals (2.7 vs 0.23 mumol Hg/kg dry weight; p <0.001). A considerable increase of the Hg concentration in feces 2 days after amalgam removal (median 280 mumol Hg/kg dry weight) was followed by a significant decrease. Sixty days after removal the median Hg concentra-
tion was still slightly higher than in samples from the reference group.

In plasma, the median Hg concentration was 4 nmol/liter at baseline. Two days after removal the median Hg concentration in plasma was increased to 5 nmol/liter and declined subsequently to 1.3 nmol/liter by day 60. In saliva, there was an exponential decline in the Hg concentration during the first 2 weeks after amalgam removal (t ½ = 1.8 days).

It was concluded that amalgam fillings are a significant source of Hg in saliva and feces. Hg levels in all media decrease considerably after amalgam removal. The uptake of amalgam mercury in GI tract in conjunction with removal of amalgam fillings seems to be low.

**BIO-PROBE COMMENT:** The two preceding studies demonstrate, without doubt, that the removal of amalgam dental fillings results in decreased exposure to mercury. Toxicology reference books state that elimination of exposure is the key factor in addressing mercury intoxication. The new USEPA findings and recommendations define a risk from mercury exposure at much lower levels than previously thought (see earlier article this issue).

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Mercury Exposure of the Population: IV - Mercury Exposure of Male Dentists, Female Dentists and Dental Aides.
Zander, D; Ewers, U; Freier, I; Brockhaus, A.

**ABSTRACT** [Article in German]: Urinary mercury levels were determined in 22 dentists and 46 dental nurses and assistants working in 15 private dental offices in West Germany. For comparison, urinary mercury levels of 29 subjects without occupational mercury exposure were studied.

On average, urinary mercury in dental personnel was higher than in the reference group. Individual mercury levels, however, were all significantly below present occupational exposure limits. Urinary mercury was significantly correlated with the number of amalgam fillings in dental personnel as well as in the reference group. Following administration of Dimaval a significant increase of mercury excretion was observed in both groups.

Regarding total exposure to mercury in dental personnel, the contribution of mercury exposure from the occupational environment is of the same order of magnitude as their exposure from their own amalgam fillings. Dental nurses were found to be more exposed than dentists. This finding seems to be related predominantly to the larger number of amalgam fillings in dental nurses.

**BIO-PROBE COMMENT:** Data from the American Dental Association (ADA) comparing the health and mortality of dentists to the general population are frequently cited as proof that amalgam mercury is harmless, as the dentists are claimed to be as healthy as the general public. These ADA studies do not separate dentists who use mercury from those that do not use mercury, nor do they consider the presence of amalgam fillings in either the dentists or the general public. The ADA data, therefore, is totally irrelevant to the question of exposure to amalgam mercury.

This study demonstrates that, even in dental personnel, body burden of mercury from amalgam fillings is at least equal to the occupational exposure. Even more foreboding, the dental assistants had larger exposures than did the dentists. Through the years, the ADA has focused on mercury exposure in dentists (via the invalid technique of non-challenge urine mercury measurements), while totally ignoring exposure in dental assistants and hygienists!

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Mercury. Not Sulphur Dioxide, Poisoning As Cause of Smelter Disease in Industrial Plants Producing Sulphuric Acid.
Koizume, A; Aoki, T; Tsukada, M; Naruse, M; Saitoh, N.

**ABSTRACT:** Several episodes of "smelter disease", previously assumed to be caused by sulphur dioxide (SO2) poisoning, have been reported in workers replacing pipes in sulphuric acid manufacturing plants. One such incident, affecting 20 men, was recorded in Akita, Japan in July 1993, but the protection these workers used suggested that some cause other than SO2 needed to be looked for. Ten workers were affected despite wearing respirators with SO2 cartridges, the symptoms including dyspnoea, diarrhoea, colicky pain, muscle pain and eczema with erythema. Subsequently 10 other workers using face masks with supplied air were affected, though without respiratory symptoms.

Sludge in the piping contained mercuric sulphate, and mercury fumes resulted when pipes were cut with gas burners. Blood and urine measurements confirmed heavy exposure to the metal, and simulation experiments in rats showed that skin absorption was likely too. The masks with supplied air ought to have excluded both SO2 and mercury fumes. The only way to avoid smelter disease reliably is to wear an encapsulated suit that prevents inhalation and skin absorption of industrial toxins.
BIO-PROBE COMMENT: This report emphasizes the importance of not overlooking mercury as a factor in adverse health effects, as well as the extreme difficulty in preventing harm from mercury.

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Abadin, HG; Hibbs, BF; Pohl, HR.

ABSTRACT: The purpose of this report is to provide an overview of the public health implications of exposure via breast milk to cadmium, lead and mercury for nursing infants and to provide health based guidance. Daily intakes were calculated and compared with guidance values used for public health assessments at hazardous waste sites.

Cadmium, lead, and mercury under normal conditions are found in breast milk at concentration ranges of microgram/L, 2-5 micrograms/L, and 1.4-1.7 micrograms/L, respectively. Women exposed environmentally or occupationally can have higher levels in their breast milk. Concentrations of about 5 micrograms/L (cadmium), 20 micrograms/L (lead), and 3.5 micrograms/L (mercury) appear to be adequate screening levels.

Many factors affect both the distribution of cadmium, lead, and mercury in breast milk and the health consequences to an infant. It is not clear what additional impact low level exposure via breast milk may have on an infant born with a body burden to one of these metals. There is sufficient evidence to make the case that contaminated breast milk is a source of potential risk to infants in certain populations.

Prevention strategies that include behavior modification and proper nutrition should be communicated to women at risk. Identification and elimination of exposure pathways and a critical analysis of the benefits of breast feeding versus heavy metal exposure are needed on a site specific or individual basis. Research is required to better understand the impact of low level exposure to heavy metals via breast milk. Breast feeding should be encouraged under most circumstances.

BIO-PROBE COMMENT: We have previously reported a number of published studies demonstrating the contribution of amalgam mercury to breast milk [BPNL, 13(3):4-8, May 1997], along with studies on adverse effects. Clearly, amalgam dental fillings represent a vital risk factor to be "identified and eliminated" for the protection of babies. The following study provides additional evidence of potential adverse effects.

In Vitro Metal Inhibition of N-Methyl-D-Aspartate Specific Glutamate Receptor Binding In Neonatal and Adult Rat Brain.
Rajanna, B; Rajanna, S. Hall, E; Yallapragada, PR.
ABSTRACT: The in vitro effect of methyl mercury (MM) and lead (Pb) on N-methyl-D-aspartate (NMDA)-specific glutamate receptor binding in neonatal and adult rat brain was investigated. The cerebral cortex was isolated from the neonatal and adult male Sprague Dawley rats and the synaptic plasma membranes were prepared to study the NMDA specific glutamate receptor binding by using (3H)-glutamic acid. The metal salts such as methyl mercury chloride and lead acetate were used to study the effect of MM and Pb.

Both MM and Pb significantly inhibited the receptor binding in neonatal and adult rat brain in a concentration dependent manner. MM (IC50: 0.95 ± 0.08 microM) was more potent in inhibiting the receptor binding than Pb (IC50: 60 ± 7 microM) in neonatal rat brain. A similar high potency was observed for MM than Pb in adult rat brain but the IC50 values are very high (70 ± 6 microM and 300 ± 24 microM respectively), indicating less effect compared to neonatal brain.

The data suggest that NMDA-receptor binding was more sensitive to MM and Pb in neonatal brain than in adult. MM was more effective than Pb because of its more lipophilicity.

BIO-PROBE COMMENT: Mercury vapor, the major form of exposure from dental amalgam, is also highly lipophilic (attracted to fats). An interesting facet of this study is the demonstration that mercury is far more toxic than is lead, which has been increasingly regulated because of adverse neurologic effects on children.

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Stern, AH.
ABSTRACT: A critical step in the U.S. EPA's derivation of a Reference Dose (RfD) for methyl mercury is conversion of the maternal hair Hg concentration of 11 ppm to average daily intake using the one compartment pharmacokinetic model. A default uncertainty factor (UF) adjustment of 3 for Interindividual variability was then applied to this conversion. A probabilistic (Monte Carlo) analysis is presented estimating the Interindividual variabil-
ity inherent in this dose conversion for women 18-40 years old based on data in the scientific literature.

The dose of 1.1 micrograms/kg/day, calculated by the U.S. EPA to correspond to 11 ppm Hg in hair, is estimated in this analysis to be larger than 94-99% of corresponding doses. The application of a UF of 3 to this U.S. EPA value gives a dose which is estimated to be larger than 28-73% of corresponding doses.

This analysis suggests that if the dose conversion in the RfD is intended to be inclusive of 95-99% of women 18-40, the daily intake should be set at 0.1-0.3 micrograms/kg/day. The RfD of 0.03-0.1 microgram/kg/day, derived from this dose by the U.S. EPA’s application of an additional UF of 3 for additional toxicologic concerns, is somewhat smaller than the current RfD of 0.1 microgram/kg/day.

**BIO-PROBE COMMENT:** It is evident that the scientific community is now devoting considerable attention to acceptable daily intakes of mercury for the general population. The increasing documentation of adverse effects to mercury at low level exposures has already resulted in a lowering of the United States Public Health Service’s Minimal Risk Level (MRL) general population standard for exposure to mercury vapor [0.28 micrograms Hg/day for chronic exposure and 0.4 micrograms/day for acute exposure]. The uproar in the United States Congress over the delay in release of the long awaited new U.S. EPA report on dietary mercury may be an indication of a movement towards lowering of the EPA standard. Interestingly, the pattern seems to be the same as were encountered by experiences with lead some years back.

Poisoning of Dairy Heifers by Mercurous Chloride.

Simpson, VR; Stuart, NC; Munro, R; Hunt, A; Livesey, CT.


**ABSTRACT:** Mercury poisoning was diagnosed in four dairy heifers, three of which died. The clinical signs were variable and included salivation, excessive thirst, extreme depression and severe diarrhoea. Postmortem examinations revealed inflammation and ulceration of the alimentary tract, pulmonary and cardiac hemorrhages, pallor of the kidney cortices and perirenal oedema. The kidney mercury concentrations were in the range 58 to 91 micrograms/g wet tissue. It is believed that the animals were poisoned by the ingestion of soil contaminated with mercurous chloride.

**BIO-PROBE COMMENT:** Mercurous chloride ("calomel") is the inorganic form of mercury for-
$105.00/night; cut off date 9 Feb 1997. [This is an outstanding 4 star hotel, with golf course.]
HOST/MEETING REGISTRATION: Michael D. Fleming, D.D.S. 1901 Hillandale Rd., Suite A, Durham, NC 27705. T: (919) 383-0343. IAOMT members= $395.00; non-members= $495.00. Registration includes one additional (spouse or staff member).

FRIDAY PROGRAM:
- Murray J. Vinmy, DMD: "Scientific Review of Dental Amalgam Biocompatibility."
- Woodhall Stopford, MD, MSPH: "Peripheral Neurologic Effects From Acute Mercury Exposure."

IAOMT WORKSHOPS: Friday afternoon, 13 March, 1:15-5:00pm. [designates required Core Curriculum Course for IAOMT Accreditation; others apply to elective requirements.]
  - Michael F. Ziff, DDS: "Mercury 101/102."
  - Marcia A. Basciano, DDS/Paul G. Rubin, DDS: Environmental Aspects of Dental Mercury.
  - David W. Regiani, DDS: "Dental Corrosion."
  - Phillip P. Sukel, DDS/Richard D. Fischer, DDS: IAOMT Standards of Care."
  - Daniel H. Rosen, DDS: "Nutrition in Dentistry."
  - Walter J. Clifford, MS: "Dental Materials Testing."
  - J. C. Pendergrass, PhD: "Biodental Toxicology."
  - Ronald M. Dressler, DDS: "The Use of Biocales in Endodontic Therapy."

SATURDAY PROGRAM:
- Agnes Koubi, DDS: "Oral Toxicology: The Clinical Approach."
- Michael Aschner, PhD: "In Utero Mercury Vapor Exposure and Metallothionein Expression in Rat Brain and Astrocytes."
- Alfred A. Nickel, DDS, MS: "Local Anesthetic Toxicology."

SPECIAL EVENTS:
Welcome No-Host Reception; Thursday, 12 March, 7:30pm.

DMPS Study: Dr. H. Vasken Aposhian; Group A participants arrive by, Wednesday 11 March; Group B participants on Thursday, 12 March 1998. Neurologic function compared to body burden of mercury being investigated. Volunteers needed for this important research study!

IAOMT Board Meeting: Friday, 13 March, 6:30pm (all members invited).

American Academy of Head, Neck & Facial Pain
AAHNFP Mid-Winter Symposium
SITE: Scottsdale, Arizona.

HOTEL: Radisson Resort Hotel, 7171 North Scottsdale Road, Scottsdale, AZ 85252-3696; (602) 991-3800. Special room rate= $130.00 (s/d); 6 December 1997 deadline.

MEETING REGISTRATION: AAHNFP, 520 West Pipeline Road, Hurst, TX 76053; (817) 282-1501, (800) 322-8651. Members= $495.00; non-members= $595.00.

PROGRAM: Myofascial Disease: Diagnosis and Treatment: James R. Frichon, DDS; Bernadette Jaeger, DDS; Gerald J. Murphy, DDS; Gary E. Myerson, MD; Larry L. Tilley, DMD.

The American Academy of Biological Dentistry Diagnosis and Therapy in Dentistry and Medicine
SITE: Carmel, California.

HOTEL: Carmel Mission Inn, Carmel, CA.

MEETING REGISTRATION: The American Academy of Biological Dentistry, P.O. Box 856, Carmel Valley, CA 93924; T: (408) 659-5385; F: (408) 659-2417.

PROGRAM: Featuring Dr. Med. Dent. Jochen Gleditsch of Munich, Germany: Mouth Acupuncture, Somatopies and Reflex Zones; Dento-alveolar Foci; Neural Therapy; Myofascial Therapy; Homotoxicology; Odonton Related Circuitry; Thermography; EEG Biofeedback; University Without Walls Concept.

If you are a mercury-free dentist or are contemplating going mercury-free, you need to join the IAOMT. The IAOMT has helped fund or has been the catalyst for much of the current scientific research demonstrating that dental amalgam is not the benign dental material that 150 years of use and the ADA would like you to believe. Furthermore, the IAOMT is doing something about Standards of Care and Protocols that protect you, your staff and the patient. For membership information contact Dr. Michael F. Ziff, D.D.S., P.O. Box 608531. Orlando, FL 32860-8351. Phone: (407) 298-2450 or Fax: (407) 298-3075.