

Specialists

Dr Gerald Ross

Gerald H. Ross, M.D., P.L.L.C
P.O. Box 115, Bountiful, Utah 84011-0115
801-296-1181 (phone) 801-296-1202 (fax)

14 Aug 2007

Doug Copp
563 Charlotte Street
Sydney, Nova Scotia
CANADA B1P 1E6

Hello Doug:

Enclosed are several originals of the cover letter that I sent today to Mr. David Glendinning of the Dept. of Justice in Virginia.

I am sending these so that you can decide if you want to send one to Andrew Miller, to keep him up to speed.


With that letter I sent the materials on you that were sent to me from Kip Purcell, along with the *relevant records* that I have made personally, having to do with your health.

I did not send stuff to Mr. Glendinning that had primarily to do with the lawsuit that Andrew Miller is advising you about, as that is not directly relevant to the allegations made against you, that there was really nothing significant wrong with your health, and that therefore you 'defrauded' the 9/11 Commission.

Also enclosed is a hard copy of the slides that I prepared for the Washington meeting where we presented to the Special Master.

I hope that this will be of some help, and I continue to wish you well

Sincerely,

A handwritten signature in cursive script that reads "Gerry Ross". A horizontal line is drawn underneath the signature.

Gerald H. Ross, MD

Gerald H. Ross, M.D., P.L.L.C
P.O. Box 115, Bountiful, Utah 84011-0115
801-296-1181 (phone) 801-296-1202 (fax)

14 August 2007

Mr. David Glendinning
United States Department of Justice
Office of the Inspector General
Fraud Detection Office
2300 N. 17th St., Suite 3200
Rosslyn, Virginia 22209

Dear Mr. Glendinning:

RE: THE MATTER OF DOUGLAS F. COPP
SSN: 046-46-1692

As per our phone call, enclosed is a complete copy of the medical records that were sent to me by the patient's former attorney, Mr. Kip Purcell of Albuquerque. (See a copy of their cover letter dated October 22, 2003, immediately after the Tab Index, at the front of the enclosed large black binder.) Enclosed at the end of the binder are copies of my personal notes from our conversations, and some emails that went to and from me and Mr. Copp, that clarified certain things that I felt are relevant to your investigation, particularly the findings of Kaiser Permanente and other short term health problems he had in the past.

I have found the records that I had created back when I was first contacted by Mr. Purcell and Dr. Tim Smith, and the record of the interview and exam that I did on Mr. Copp on November 11, 2003, the evening before the presentation before Mr. Feinberg. This material is enclosed, under added 'TAB 17 - Records of Gerald H. Ross, MD'.

I would draw your attention particularly under this Tab to the hard copy set of the slides that I presented to the Special Master. These address each of the major diagnoses of Mr. Copp, and how his symptoms are described in the medical and scientific literature. I believe these illustrate the historical relationship between Mr. Copp's WTC site exposures and his subsequent health problems.

I would be grateful to receive a small re-imbusement for the copying costs, the binder, tabs, etc. that have been required. The receipts are enclosed. Because I will have to make further copies of my personal notes and of the 'slide set' presented to the Special Master, I am uncertain of how much these final costs will be. (Currently $38.25 + 3.41 + 16.06 = \$57.72$, and the copying costs and packaging today will hopefully be less than \$20 beyond that).

In conclusion, I can only say that Mr. Copp has many significant and debilitating health problems, of which the evidence is overwhelming. He was a very highly-functioning individual with a lot of stamina and executive ability before the 9/11 exposures. I believe the subsequent serious deterioration in his health was a direct result of those exposures.

If allegations have been made that he is '*not really all that ill*', those allegations are very distinctly incorrect and are indeed proven false by the objective evidence of the legitimacy of his many serious health problems. In my experience and opinion, this evidence is overwhelming. I wish you well.

Sincerely,



Gerald H. Ross, MD. CCFP
DABEM, DIBEM, FAAEM, FRSM.
Former President,
American Academy of Environmental Medicine

Gerald H. Ross, M.D., P.L.L.C.
P.O. Box 115, Bountiful, Utah 84011
801-296-1181 Phone 801-296-1202 Fax

Confidential Facsimile Transmission

The information in this facsimile transmission and any attached documents are confidential and legally privileged material, for the sole use of the intended receiver of the transmission. If you have received this message by mistake, you are hereby notified that any dissemination or copy of this information is strictly prohibited. Please inform the sender about the misdirection of this message, (at the telephone number above), and return the original to the sender by U.S. mail.

Date: 12 March 2004
Fax to: DOUG COPP
At Fax Number: 505-281-7877
Concerning: DETOX PROGRAM IN NEW YORK FOR WTC RESCURERS
Number of Pages: 85

Message:

DEAR DOUG: I HAVE NOT FORGOTTEN YOU.

THERE WAS A BROCHURE THAT I HAVE BEEN LOOKING FOR IN THE 'MESS' THAT I CALL AN OFFICE AT HOME, THAT I CANNOT FIND.

BUT I FINALLY CAME ACROSS THE ENCLOSED MATERIAL, THAT TELLS A LITTLE ABOUT THE SAUNA DETOX PROGRAM THAT WAS SET UP IN NEW YORK BY DR. DAVID ROOT.

I APOLOGIZE THAT IT HAS TAKEN ME SO LONG TO GET THIS TO YOU.

I EXPECT THAT WITH YOUR CONTACTS, YOU PROBABLY ALREADY HAVE THIS BASIC INFORMATION.

TAKE CARE,



JERRY ROSS

ERALD H ROSS

From: "Marsha Rapuano" <mmrap@airmail.net>
Sent: Sunday, October 05, 2003 9:26 PM
Subject: NYC Firefighters Seek 'New' Treatment

Friends,

This enclosed article appeared in yesterday's NY Times. EHC Alums and patients who have utilized this kind of (ahead of its time) treatment are very familiar with the benefits of 'detoxification saunas', exercise and those 'weird pills' mentioned in this article. Vitamins like Niacin actually assist the body's compromised detox process-----imagine that!!! We can only hoep that those very ill NYC firefighters will get improvement and 'authenticate' the validity of sauna and enviromental medicine's approach to restoring health. Hopefully most readers of this article won't get hung up on the 'Scientology' connection, throwing the baby away with the bathwater. Its founder, Hubbard figured out sauna's benefits quite some time ago in his efforts to rid recreational drug users of the physical toxins and damages left behind.

Environmental docs recognized the validity of this tool and incorporated it into their own medical regimen. Of course, the Swedish knew sauna's benefits long ago. They just didn't call it 'detox'.

--Marsha

October 4, 2003

Scientologist's Treatments Lure Firefighters

By **MICHELLE O'DONNELL**

For the past year, more than 140 New York City firefighters, some ailing from their work in the ruins of the World Trade Center, have walked into a seventh-floor medical clinic just two blocks from the former disaster site. Once inside, some have abandoned the medical care and emotional counseling provided to them by their own department's doctors, and all have taken up a treatment regimen devised by L. Ron Hubbard, the late science fiction writer and founder of the Church of Scientology.

The firefighters take saunas, engage in physical workouts and swallow pills — all of which together constitute what for years has been known, amid considerable dispute, as Mr. Hubbard's detoxification program, one meant to wash the body of poisons or toxins. The firefighters are not charged for their trips to the clinic, called Downtown Medical.

Of the more than 140 firefighters and 15 emergency medical workers who have undergone the program, some have told colleagues of its virtues. Others have said they were simply following the regimen in order to enjoy free saunas.

But one retired firefighter is a paid member of the clinic's advisory board, and the city's main fire union has pledged its "full support" to the clinic as it seeks government grants and other forms of financing.

10/11/03

"The statements I have heard from firefighters who have completed the program are truly remarkable," Stephen J. Cassidy, the president of the Uniformed Firefighters Association, wrote in a letter that is posted on the clinic's Web site. The letter adds, "The work you are doing in this regard is unique in the city, and is very welcome."

But the existence of the clinic has upset city Fire Department officials, who, among other concerns, are alarmed that the medical treatment prescribed by its doctors is being discarded by some firefighters who enroll at Downtown Medical. They say the clinic's detoxification program requires firefighters to stop using inhalers meant to help with their breathing and any medications they may be taking, like antidepressants or blood pressure pills.

The department officials, including its physicians, said they had no way of vouching for the program's practices. The exact makeup of the pills taken as part of the program, for instance, is not widely known, although they are believed to contain niacin. One clinic board member wrote a report published in a firefighting magazine that firefighters produced blue beads of sweat during the program. One city firefighter said that the man next to him in the sauna once appeared to sweat a quarter-size black substance — evidence, he said, that toxins were being drained out of his body.

"While we are aware some members of the department have availed themselves of the program, we in no way endorse it," said Deputy Commissioner Francis X. Gribbon. Dr. David Prezant, deputy chief medical officer for the department, added, "It's risky for anybody to stop any type of medication without guidance and a plan from their own treating physician."

Officials with the clinic, while acknowledging some of them are Scientologists, said the clinic is not formally affiliated with the Church of Scientology. An official at the church's office in Los Angeles said they were aware of the clinic, but described it as a secular enterprise employing Mr. Hubbard's methods.

The official in Los Angeles, Linda Simmons Hight, said many Scientologists had donated to the clinic, but "as far as it being part of the church, it isn't." Joseph Higgins, a retired firefighter who is now a paid member of the clinic's advisory board, said Tom Cruise, the actor, had paid for "quite a bit" of the treatments for rescue workers, estimated by Mr. Higgins to cost \$5,000 to \$6,000 apiece.

People inside and outside the department said they regarded the use of the clinic to be yet more evidence of the degree of the distress experienced by members of the force, which lost 343 men on Sept. 11.

"People are desperate to feel better," said one fire lieutenant. "As far as I can tell, they'll try anything, even off the beaten track." Another officer, who said he planned to sign up for the regimen in hope of clearing up lung congestion, said: "Right now, I'm at the point I would try a voodoo doctor."

Clinic officials, after briefly addressing issues involving the clinic, said they would not comment further about the program. But Mr. Higgins, the former firefighter, said, "It's actually a pretty awesome program."

10/11/03

The use of the New York clinic is not the first instance of firefighters' being persuaded to use Hubbard's methods.

In 1987, after a fire in a transformer room at the Louisiana State University School of Medicine, in Shreveport, dozens of firefighters became alarmed that they had been exposed to high levels of polychlorinated biphenyls, or PCB's.

After repeated complaints of headaches, dizziness and rashes, the city of Shreveport contracted with a private outfit that advocated Mr. Hubbard's detoxification methods. But after the city's insurance carriers questioned the legitimacy of the treatments and their escalating cost, the city hired an independent medical doctor to investigate the regimen.

In a blistering 1988 report, Dr. Ronald E. Gots, a toxicology expert from Bethesda, Md., called the regimen "quackery," and noted that "no recognized body of toxicologists, no department of occupational medicine, nor any governmental agencies endorse or recommend such treatment." The report ended Shreveport's dealings with the program.

In an interview yesterday, Dr. Gots said of the program, "It's an unproven, scientifically bereft notion."

Keith Miller, a Downtown Medical board member, said yesterday in regard to Dr. Gots's 1988 Shreveport report that Dr. Gots was not a reputable source.

In the days after the Sept. 11 attack, Scientologists were among the representatives of many religions and religious groups moving among the rescue workers and the traumatized residents. They were even allowed to remain along with the American Red Cross after many other groups had been ordered to leave.

The Church of Scientology was founded in the 1950's by Mr. Hubbard, a science fiction writer who died in 1986. Its adherents, who number in the millions and include many Hollywood celebrities, believe that Scientology's self-help techniques and counseling sessions, known as auditing, can help people live more productive and satisfying lives. But the cost of the auditing sessions, which can run into thousands of dollars an hour, has drawn criticism, as have the church's aggressive tactics toward its critics.

The Internal Revenue Service granted the church tax-exempt status in 1993.

Officials at the Manhattan clinic said that shortly after the terrorist attack, an official with the firefighters' union contacted the Foundation for Advancements in Science and Education, a group that promotes the detoxification program developed by Mr. Hubbard, to request the regimen for New York firefighters.

In September 2002, the Downtown Medical clinic opened on the seventh floor of 139 Fulton Street, in a building full of homeopathic clinics. The building's lobby directory, however, does not list a clinic in that name.

In addition to Mr. Higgins, a well-known fire academy drill instructor who estimates he has

10/11/03

trained over half the city's firefighters, another department figure, Israel Miranda, the president of the union that represents emergency medical workers, is also on the clinic's board. Mr. Miranda is also an instructor at the emergency medical workers' academy.

Stacks of of pamphlets about the program have appeared at Fort Totten, the department's training center. Department officials have tried to distance themselves from any impression that they endorse the regimen, but they say that it has been difficult.

"This is a very hard battle to win," said Dr. Prezant, who noted that firefighters do the regimen on their own time and do not have to report to the department that they are undergoing it. "It's not our job to say you can't go. All we can do is say there's no proven evidence it works."

Mr. Cassidy, of the main fire union, did not return a phone call yesterday.

A lieutenant named Rob, who refused to give his last name, stopped outside the clinic's building Thursday evening to talk about the regimen. He said that a visit included a weigh-in, a checkup with a clinic doctor and a four- or five-hour stretch in the sauna interspersed with intervals on a treadmill or stationary bike. In addition, he said, patients are given a packet of vitamins with gradually increasing doses of niacin.

The lieutenant said he had no serious medical trouble, but looked at the regimen as a way to give up drinking, and possibly sweat out any toxins he thought he might have. "The only reason I'm doing it is because I have a sinking feeling about what I took in on Sept. 11," he said.

[Copyright 2003 The New York Times Company](#) | [Home](#) | [Privacy Policy](#) | [Search](#) | [Corrections](#) | [Help](#) |

Slide Presentation

**The chemical and other exposures
of patient Douglas Copp
at the WTC Ground Zero Site
and how they relate to his
subsequent medical history**

*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*

*12 November 2003
Washington, D.C.*

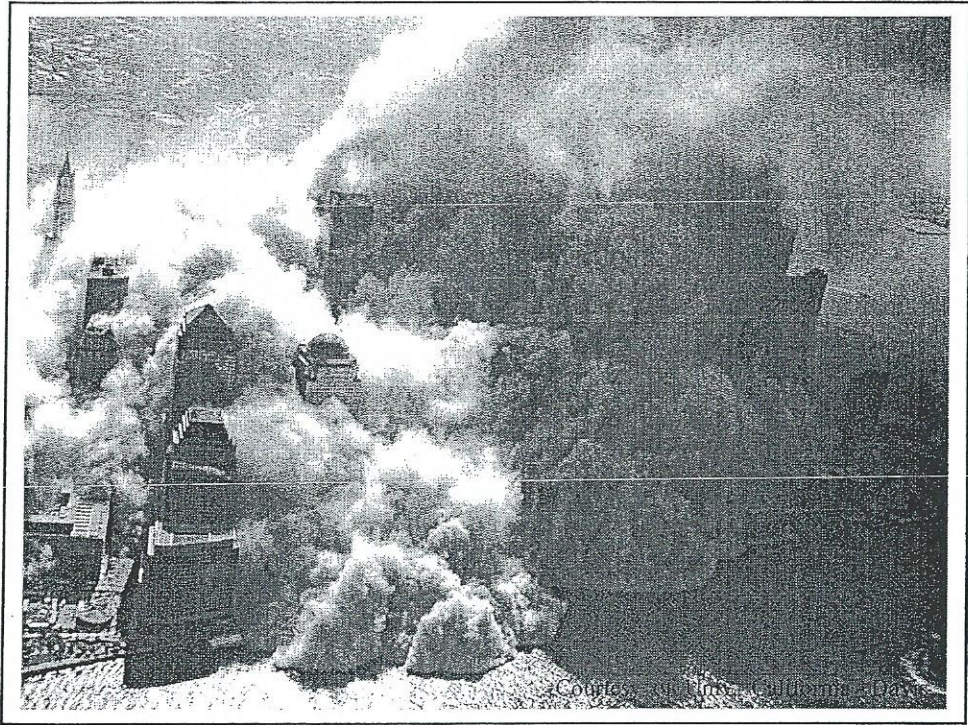
Background

(Univ. California – Davis)

The collapse of the World Trade Center structures (South Tower, North Tower, and WTC 7) presented two very different types of air pollution events:

1. Initial fires and collapse - derived “dust storm”
2. Continuing emissions from the debris piles

Both cases shared the unusual aspect of a massive ground level source of particulate matter in a highly populated area with potential health impacts.



Proposed explanation of WTC very fine aerosols size and composition

- Problems:
 - We see very fine aerosols typical of combustion temperatures far higher than the WTC collapse piles.
 - We see some elements abundantly and others hardly at all, despite similar abundances in the collapse dust.
 - We see organic species in the very fine mode that would not survive high temperatures.
- Explanation
 - The hot collapse piles are converting some species to gasses that can escape to the surface of the piles and then form aerosols, a process that yields very fine particles

Courtesy of Univ. California - Davis

Why do we care about very fine ($0.26 > D_p > 0.09 \mu\text{m}$) aerosols?

- EPA (AAAR, 10/2002) summarized 5 causal factors most likely to explain the statistically solid data connecting fine $\text{PM}_{2.5}$ aerosols and human health:
 - biological aerosols (bacteria, molds, viruses...)
 - acidic aerosols
 - very fine/ultra fine ($< 0.1 \mu\text{m}$) insoluble aerosols
 - fine transition metals
 - high temperature organics

4 of the 5 reached unprecedented ambient levels in the very fine aerosol plumes from the WTC collapse piles

On most days, the plumes lofted above NYC so that only those on or near the WTC site breathed these aerosols.

Courtesy of Univ. California - Davis

Why was the WTC debris pile so hot, so long?

(Univ. California – Davis)

Energy (est.)	(in units of 10^{11} joules)
-Kinetic energy of falling building	5 (+2.5°C)
-Chemical energy of cars in garage	10
-Chemical energy of diesel/Con Ed oil	150
• Especially under WTC#7	
-Chemical energy of building combustibles	430
• Perhaps 15% burned before the buildings collapsed	

The surface and near sub-surface debris pile was hot enough to melt aluminum, make steel red hot, and burned to 12/19.

This was still much cooler than typical sources of very fine particle metals such as power plants, smelters, and diesels.

Courtesy of Univ. California - Davis

Conclusions – WTC Aerosols - Univ. California Davis

- There were heavy and continuing emissions of aerosols in narrow plumes of unusual size and composition from the WTC collapse site that on 9 to 15 occasions impacted 201 Varick St, 1.8 km NNE.
- Coarse particles were similar to the initial collapse aerosols (cement, dry wall, glass, ...) but had chemicals and soot from the ongoing combustion. Little asbestos was expected or observed.
- The presence of unprecedented levels of very fine ($0.26 > D_p > 0.09 \mu\text{m}$) particles by mass and number in narrow plumes was more typical of an industrial source, specifically a chlorine rich municipal incinerator, than any normal ambient air situation. Upwind sources were a very minor contribution.
- The very fine silicon and sulfur and many of the coarse metals like vanadium decreased steadily during October. Very fine particles near the WTC site in May, 2002, were generally < 10% of the October, 2001 plume impact days at Varick Street. (except S, Ni)

Courtesy of Univ. California - Davis

**ANNALS OF ALLERGY, ASTHMA,
& IMMUNOLOGY**

**Outdoor Air Pollutants Derived From
Industrial Processes May Be Causally Related
to the Development of Asthma in Children**

Background: There is no consistent evidence that outdoor air pollutants are involved in the development of asthma.

Objective: The aim of this study was to determine whether outdoor air pollutants derived from industrial processes were related to the prevalence of asthma, bronchial hyperresponsiveness, and atopy in exposed children.

Methods: A total of 7,511 children from 7 to 12 years of age were recruited in the study. Eight hundred eighty-eight of 1,009 (88%) of the subjects living around industrial factories and 5,998 of 6,502 (92%) living in a less polluted neighboring area responded to the ISAAC questionnaire. A total of 1,492 subjects 8 to 9 years old underwent skin prick tests for 11 common aeroallergens. A total of 732 of the subjects from 8 to 9 years of age underwent bronchial provocation tests with hypertonic saline (BPT-HS).

Results: The prevalence of ever experiencing wheezing and wheeze during the last 12 months was 25.6%, and 18.8% among the children living in the more polluted area. This was significantly higher than for those living in the less polluted area (14.2% and 9.0%, respectively). The positive rate of BPT-HS (the provocative dose of hypertonic saline causing 20% fall of FEV₁, ≤ 23 mL) was higher among those in the more polluted area than in children living in the less polluted area (12.2% vs 7.5%). However, the rate of atopy based on the skin tests was the same in the two groups (28.3% vs 30.6%).

Conclusions: The prevalence of asthma and bronchial hyperresponsiveness was higher among children living around the heavily industrial area compared with those living in the less polluted area, despite similar atopic sensitization.

(2001;86:456-460) Yoon-Keun Kim et al, Department of Internal Medicine, Seoul National University College of Medicine, 28 Yongon-dong Chongno-gu, Seoul 110-744, Korea (e-mail: yooyoung@plaza.snu.ac.kr).

JAMA, June 20, 2001—Vol 285, No. 23 2955

**Outdoor Air Pollutants
Derived From Industrial
Processes May be Causally
Related to the Development
of Asthma in Children**

Ann Allergy Asthma Immunology
2001; 86: 456 - 460

“ The prevalence of asthma and bronchial hyper-responsiveness was higher among children living around the heavily industrial area compared with those living in the less polluted area, despite similar atopic sensitization. ”

Triggers of Asthma

‘Allergic’

- House dust mites
- Mold or yeast spores
- Pollens
- Cat hair, saliva, or urine
- Dog hair and saliva
- Cockroach particles
- Aspirin or NSAIDs
- Metabisulfites in foods

‘Non-allergic’

- Tobacco smoke
- Smog
- Natural gas, propane,
- Coal or wood smoke
- Paint vapors
- Viral infections
- Exercise
- Weather changes

(AMA, 1997)

Reactive Airways Dysfunction Syndrome (RADS)

RADS was originally defined as clinical asthma and bronchial hyperresponsiveness that results from a one-time, high dose exposure to airway irritants. Pre-existing atopic conditions are not usually cited as relevant predisposing factors. *Brooks S et al. (1985) Reactive airways dysfunction syndrome (RADS). Persistent asthma syndrome after high level irritant exposures. Chest 88:376-384*

Bronchial hyperresponsiveness as demonstrated by nonspecific challenge (e.g., to methacholine) is a hallmark of RADS. *Tarlo S, Broder I. (1988) Irritant - induced occupational asthma. Chest 96: 297-300*

Other reports are now describing the development of this clinical syndrome after repeated low-dose chemical exposures. *Kipen H et al. (1994) Asthma experience in an occupational and environmental medicine clinic. Low-dose reactive airways dysfunction syndrome. J. Occupational Med 36: 1133-1137*

Reactive Airways Dysfunction Syndrome or Irritant - Induced Asthma

In the case of patient
Douglas Copp

*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*

Reactive Airways Dysfunction Syndrome

(Irritant – Induced Asthma)

Within a few days of starting work searching for survivors in the collapsed underground 6 floors of the WTC, the patient began to experience hoarseness of his voice, and started to cough.

This progressed over time to wheezing, with reactive, irritant – induced asthma, which became life - threatening and required hospital assessment.

He began to react with wheezing to a wide array of commonly – encountered chemical substances, which is one of the hallmarks of irritant – induced asthma.

Reactive Airways Dysfunction Syndrome Or Irritant – Induced Asthma

in the case of patient Douglas Copp

Mr. Copp's medical records are replete with instances of symptoms of breathlessness or shortness of breath.

Evaluation of 9. 19. 2002 by pulmonologist Bruce A. Miller, MD shows that on pulmonary function studies, the patient had abnormal lung function tests, with the physician stating:

"This shows a moderate restrictive and obstructive ventilatory defect."

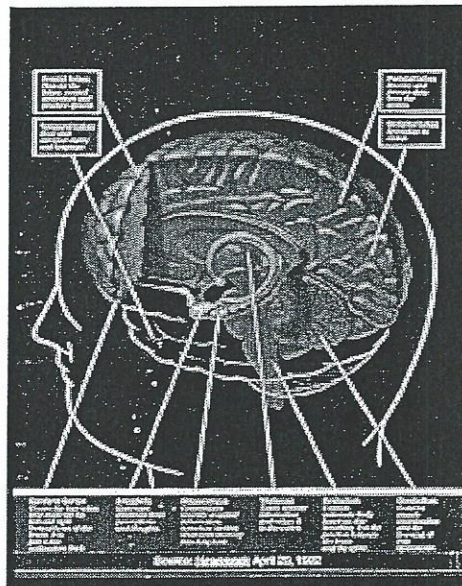
The DIAGNOSIS made on that occasion was :

"Irritable airway secondary to toxic exposure from the World Trade Center."

Neurotoxicity - Central and Peripheral

In the case of patient
Douglas Copp

Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM



Brain Limbic System

NEUROTOXOCITY PATTERNS

- PERIPHERAL - SENSORY
MOTOR
- CENTRAL - MOTOR
- SENSORY
- COGNITIVE
- EMOTIVE
- AUTONOMIC - DYSAUTONOMIA
(e.g. T⁰, sweating)
- MIXED FEATURES

Neurotoxicity: Toxic Brain Syndrome, or Toxic Encephalopathy, (DSM-III code 349.82)

1. Personality changes - a) irritability, b) social withdrawal,
c) amotivation (disturbance of executive function)
2. Mental changes - a) problems with memory for recent events,
b) concentration difficulties, c) mental slowness
3. Sleep disturbance
4. Chronic fatigue
5. Headache
6. Sexual dysfunction
7. Numbness in the hands or feet (variable)
8. Recognition that there are been a loss of mental function.

Singer R. (Neurotoxicity Guidebook. Van Nostrand Reinhold, New York. p. 3, 1990)

Commonly used neurotoxic industrial chemicals

Aluminum	Hexachlorophene
Barium	tetraethyl lead
Benzene	Manganese
Boron	Mercury
Cadmium	Methanol
Carbon Disulfide	Methyl Bromide
Carbon Monoxide	Methyl n-butyl ketone
Carbon tetrachloride	Organochlorine insecticides
Chlordane	Phenol
DDT	Phthalate esters
2,4-D	PBBs
n-hexane	Styrene
Toluene	

CDC, 1986

Examples of chemical groups in which 10 or more compounds cause neurotoxicity

Metals **
Ethers
Ketones **
Alcohols
Glycol derivatives
Organic phosphates **
Cyanides and nitriles
Alicyclic hydrocarbons
Aliphatic carboxyl acids
Organic phosphate esters
Aliphatic nitro compounds
Aliphatic and alicyclic amines
Phenols and phenolic compounds **
Halogenated aliphatic hydrocarbons with Cl, Br, I **

Anger 1986. *Parry's Industrial Hygiene and Toxicology* Vol 2, New York, John Wiley, 1981-82

NEUROTOXICOLOGY - EVOLUTION IN LITERATURE

- Morrow LA et al. *Alterations in Cognitive and Psychological Functioning after Organic Solvent Exposure.* J. Occup. Med. (1990) 32 (5): 444 - 450
- Lorig TS et al. *The Effects of Low Concentration Odors on EEG Activity and Behavior.* J. Psychophysiology (1991) 5: 67 - 77
- Le BT. *Genetic Susceptibility to Neurotoxicants.* Clinics in Occup. and Environ. Medicine (2001) Vol 1(3): 489 - 509
- Costa LG. *Pesticide Exposure: Differential Risk for Neurotoxic Outcomes Due to Genetic Polymorphisms.* Clinics in Occup. and Environ. Medicine (2001) Vol 1(3): 511 - 23

EVALUATION OF NEUROTOXICITY

- **Biological Monitoring :**
 - Blood tests for certain suspected chemicals.
 - Fat or other tissue analyses for chemicals.
 - Hair analysis for heavy metals.
 - Chelation challenge to assess heavy metal load.
- **Imaging Techniques :**
 - CT, MRI, PET, SPECT, MRI Spectroscopy
- **Electrophysiological :**
 - EEG, Evoked Potentials, Nerve Conduction

EVALUATION OF NEUROTOXICITY

- **Symptom Screening :**

Neurotoxicity Screening Survey (Singer)

- **Psychometric Testing :**

Halstead - Reitan, Wechsler (WAIS-R)

Benton Visual Retention Test (*short term visual memory and motor skills*)

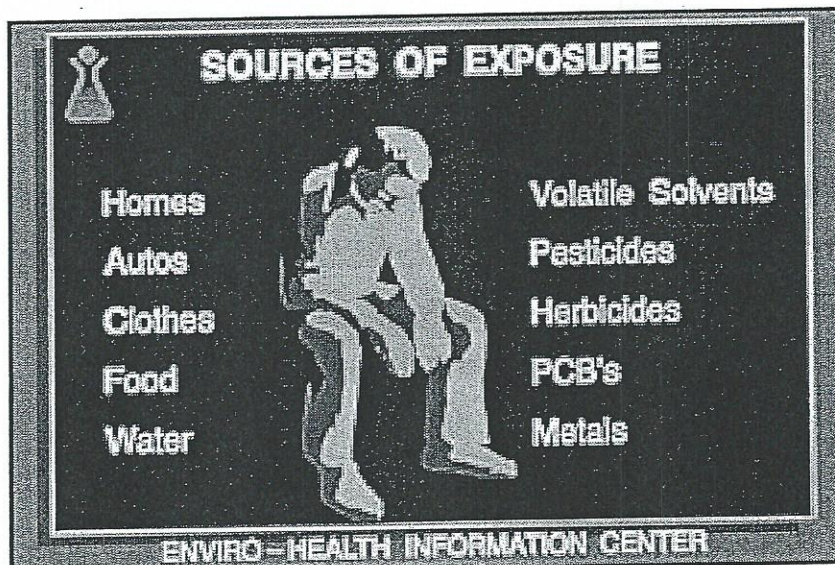
Wechsler Memory Scale (*recent memory*)

Army Trailmaking Test (*concentration; mental flexibility*)


Digit Symbol / Symbol Digit Tests (*reaction time, short term memory, psychomotor speed*)

Block Design Test (*3-D constructional functioning*)

Singer, Neurotoxicity Guidebook



From Dr. John Laseter



ROUTES OF EXPOSURE

- Inhalation
Vapors, dust
- Ingestion
Food, water
- Dermal contact
Clothing, overspray

ENVIRONMENTAL HEALTH INFORMATION CENTER

From Dr. John Laseter

TABLE 2 Mini-Mental State Examination*

Test areas	Maximum score	Score
Orientation	5	_____
What is the (year) (season) (date) (day) (month)?	5	_____
Where are we: (state) (county) (town) (hospital) (floor)?		_____
Registration	3	_____
Name three objects: 1 second to say each. Then ask the patient all three after you have said them. Give 1 point for each correct answer. Then repeat them until he or she learns all three.		_____
Attention and Calculation	5	_____
Serial 7s. 1 point for each correct. Stop after five answers. Alternatively spell "world" backward.		_____
Recall	5	_____
Ask for the three objects repeated above. Give 1 point for each correct response.		_____
Language	2	_____
Name a pencil and watch.	1	_____
Repeat the following "No ifs, ands, or buts."	1	_____
Follow a three-stage command: "Take a paper in your right hand, fold it in half, and put it on the floor."	3	_____
Read and obey the following: Close your eyes. Score 1 point only if he or she actually closes his or her eyes.	1	_____
Write a sentence. Do not dictate a sentence; it is to be written spontaneously. It must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary.	1	_____
Copy design. On a clean piece of paper, draw intersecting pentagons, each side about 1 inch, and ask the patient to copy it exactly as it is. All 10 angles must be present and 2 must intersect to score 1 point. Tremor and rotation are ignored.	1	_____

*Modified from Folstein MF, Folstein SE, McHugh PR. "Mini-Mental State." A practical method for grading the cognitive state of patients for the clinician. J Psychiatr Res 1975; 12:129-138. Copyright 1975, with kind permission from Pergamon Press Ltd, Headington Hill Hall, Oxford OX3 0BW, UK; and Bleecker ML, Bolla-Wilson K, Kawas G, Agnew J. Age-specific norms for the Mini-Mental State Exam. Neurology 1988; 38:1565-1568.

From: Longstreth WT. Central Nervous System Disorders, Chapter 19.1 in Rosenstock and Cullen, Eds, Textbook of Clinical Occupational and Environmental Medicine, Saunders, Philadelphia, 1994, p. 471

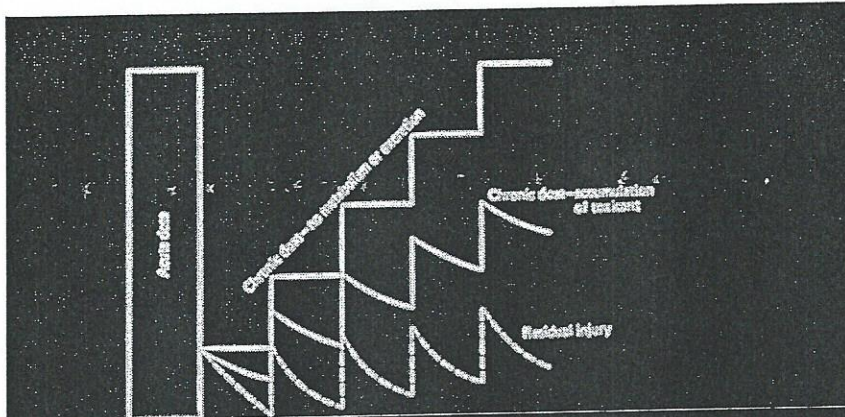
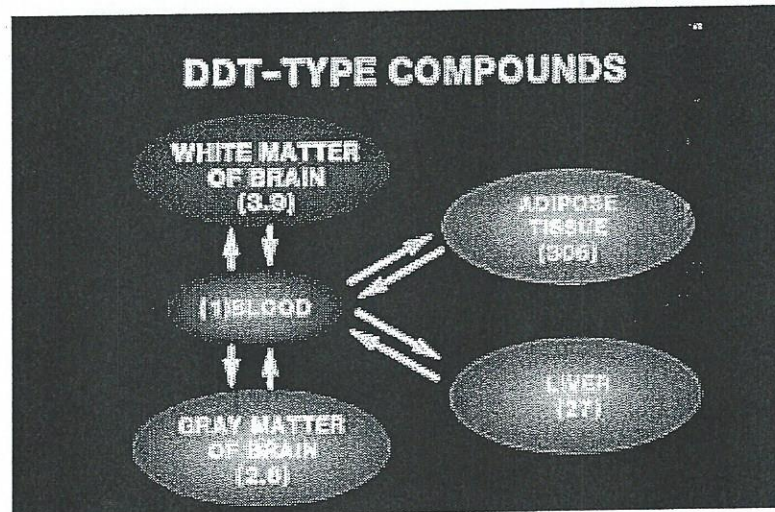


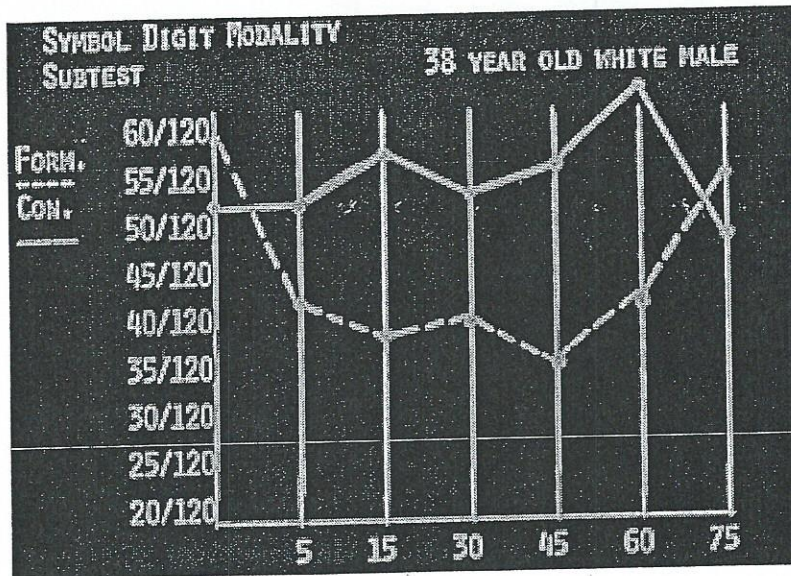
Figure 2-1. Diagrammatic view of dose and corresponding measure of effect. Acute dose is compared to the cumulative dose after multiple administration of a chemical that has limited elimination and thus accumulates, and one that produces injury, which accumulates with multiple dosing. Casarett and Doull's Toxicology, 3rd ed.

Illustration of Chronic Accumulation of Toxin



Tissue Distribution of Xenobiotic Chemicals

From Dr. John Laseter



Neurotoxic Effect After Blinded Exposure

From Dr. W.J. Rea

Evidence of neurotoxic effects in the case of patient Douglas Copp

A comprehensive neurocognitive evaluation performed by Clinical Neuropsychologist Tony J. Kreuch on 5.7.2003 stated: *"His obtained Halstead Average Impairment Rating ... places Mr. Copp within the range of significant impairment..."*

"In summary, the current results support, to a reasonable degree of neuropsychological probability, the presence of moderate neuropsychological dysfunction, most likely related to toxic exposure within a previously high functioning individual."

**Evidence of neurotoxic effects
in the case of patient Douglas Copp**

A comprehensive neurocognitive evaluation performed
by Clinical Neuropsychologist Tony J. Kreuch on 5.7.2003,
continued:

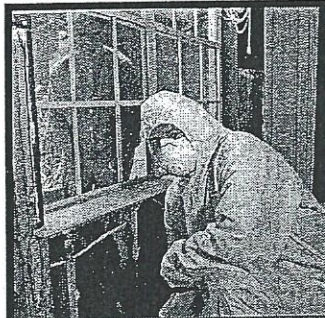
*“Mr. Copp obtained a Verbal IQ of 96 (38th percentile),
a Performance IQ of 78 (7th percentile), and a Full Scale IQ
of 88 (21st percentile)...”*

*“Areas affected include attention, concentration, processing
speed working memory, and acquisition, storage, and retrieval,
in addition to executive conceptualization and flexibility of
cognition. ...it is unlikely that psychological variables fully
account for the neurocognitive deficits seen...”*

Evidence of Significant Mold Exposures

**In the case of patient
Douglas Copp**

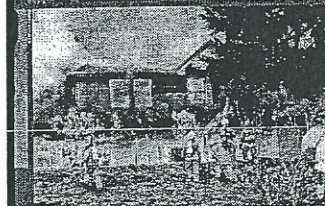
*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*



of Georgia Health & Science University, argues that most people will experience little more than "transient irritation," such as a runny nose or tear, eyes, that clear up once the mold is removed.

Others are not so sure. In a study published in 1996, Myra Chleboun and colleagues concluded that mold causes more than just allergies. Some have asthma, bronchitis, sinusitis, and even more serious types of brain damage. Wayne Garner, a pneumonologist, and Dr. Richard Johnson, dean of the Mount Sinai School of Medicine in New York City, have been treating patients whose problems with memory, learning, and concentration occurred only after exposure to mold spores in houses they were in a relationship.

But they concede, more research is needed. "I haven't done any research myself," says Garner. "For science to prove anything, it has to be done in a controlled setting. It has to be done in a lab." says Gay Venn, a New York City attorney who has been sued twice. The Department of Housing and Urban Development has studied and issued \$2 million in clean-up mold problems in low-income homes.



dition: "We're not the guarantors of public health." The California building industry sued and failed in part through a "home warranty" bill, under which home owners could be required to pay building contractors in case of any fire defects.

Now, much of the risk is based on how well a house is built and how much mold is in the air. Some houses have mold growing on the walls, floors, and even in the crawl space. It's a hidden problem, says Dr. Eric Johnson, who says it's a hidden problem, says Dr. Eric Johnson.

Requester chose to wear a full protective suit and mask and other gear to be sure to avoid the mold. Doctors know the certain mold can trigger asthma, sinusitis, and other respiratory ailments. They have discovered that some mold can be as dangerous as the more common, but proving that a mold in this house caused the person's conditions or causal conditions is a notoriously difficult task.

Along the way, Dr. Eric Johnson.

Time Magazine
July 2, 2001



Watching their house burn in February was a big event, says Steve.

The Fire Cure

To rid themselves of the toxic mold that savaged their lives, Steve and Karen Porath burned down their home

On Valentine's Day, Steve and Karen Porath both got something they really wanted: the chance to see their dream home burn on the ground. They stood anxiously on the front lawn of their rolling five-acre spread in Forest Hill, Calif., and watched as flames devoured their three-bedroom ranch-style home, destroying family photos, stuffed animals, even their son's baby book. "It was a relief," says Karen, 34, of the controlled fire the couple arranged in February. "That house almost killed our child."

The scourge that invaded their home and prevented the herring was something straight out of *The X-Files*: *Stachybotrys chartarum*, better known as black mold. A toxic fungus that feeds on moisture and thrives in damp areas, black mold can cause rashes, sore throats, and severe respiratory ailments. Claims of mold infestation are on the rise, particularly in areas hit by heavy rains, such as Texas. And while no national warning exists, mold outbreaks in food-grade areas are "a major public health problem," believes Fredrick Herwig, a California immunologist who has treated hundreds of patients, including the Poraths, suffering from mold-related illness. "When people find out a major contaminant has been living in their house, they feel violated."



People Magazine
9 July 2001

Evidence of Significant Immune Suppression

In the case of patient Douglas Copp

*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*

Significant abnormalities of immune system function

Mr. Copp had substantial evidence on blood analysis of immune suppression and dysregulation, with low numbers of immunocompetant cells, low natural killer cell activity, and abnormal ratios between white blood cell subsets.

He also has antibodies against body tissues, including anti-smooth muscle antibodies, elevated rheumatoid factor and anti-nuclear antibodies (elevated to 1:320), findings which are associated with lupus and other auto-immune diseases.

Chemical and mold exposures are known to induce these kinds of abnormalities of immune dysregulation.

Multiple Chemical Sensitivity

Credible Diagnosis ?

Pseudodisease ?

Belief System ?

Neural Sensitization ?

Toxic Encephalopathy ?

Psychological or Physiological ?

Multiple Chemical Sensitivity: A 1999 Consensus
Archives of Environmental Health 1999 54(3): 147-149

MCS definition -- 34 clinicians and researchers:

- 1. A chronic condition**
- 2. With symptoms that recur reproducibly**
- 3. To low levels of chemical exposure**
- 4. To multiple unrelated chemicals**
- 5. Sx improve / resolve if incitants removed**
- 6. Symptoms occur in multiple organ systems**

MCS Causation: The Weight of Medical Opinion

Through 1998, scientific articles that critique a psychogenic basis to MCS disorders or that support a finding of a physical /organic basis :

311

Through 1998, scientific articles that critique physical / organic basis to MCS disorders or that support a finding of a psychogenic basis :

137

Articles with both: 96

Research design : 37

Reference: MCS Referral and Resources : mcsrr.org

A Review of Multiple Chemical Sensitivity Graveling RA et al., *Occup Environ Med* 1999; 56: 73 - 85

The authors were commissioned by the United Kingdom Health and Safety Directorate to review the world literature on MCS and to answer two basic questions:

Is MCS a real illness, and if so,
what is the best evidence to date on its causation.

The abstract states:

"...The collated evidence suggests that MCS does exist although its prevalence seems to be exaggerated."

The available evidence seems most strongly to support a physical mechanism involving sensitization of part of the midbrain known as the limbic system."

Evidence of Chemical Sensitivity or Intolerance

In the case of patient
Douglas Copp

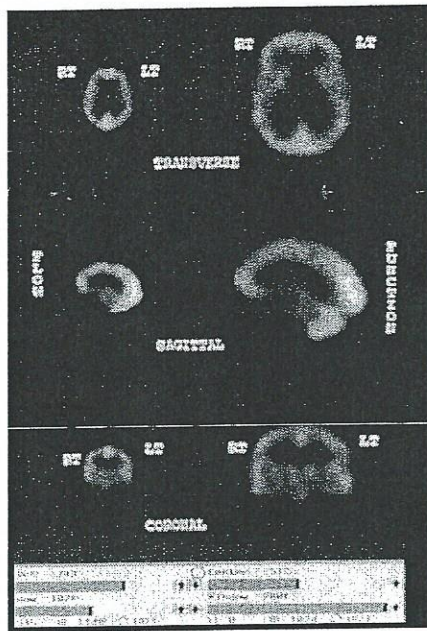
*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*

Evidence of Chemical Sensitivity or Intolerance

Chemical sensitivity or chemical intolerance usually results after a one-time, large dose exposure to a chemical or mixture of chemicals, or after repeated lower-dose exposures over an extended period of time.

Mr. Copp describes the classic onset of chemical sensitivity or chemical intolerance, with 'spreading' or extension of more and more chemicals that will trigger his symptoms.

See: Ashford N and Miller C.
Chemical Exposures: Low Levels and High Stakes



Normal SPECT
brain scan

Left side -
Blood flow

Right side -
metabolism

From Dr. T Simon

MCS / Neurotoxicity Linked

Brain SPECT scans using the technique of Simon and Hickey indicate that over 90% of 'MCS' patients have evidence of CNS neurotoxicity. These brain metabolic abnormalities are compatible with the neurocognitive and neuroemotive symptoms frequently reported by patients alleging 'MCS'.

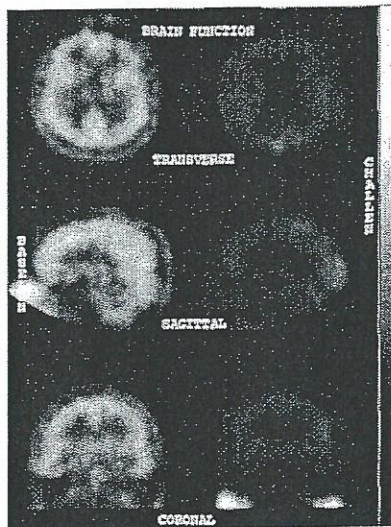
Ross GH, Simon TR et al. *Neurotoxicity in single photon emission computed tomography brain scans of patients reporting chemical sensitivities.* Toxicology and Industrial Health 1999 15, 415-420

MCS / Neurotoxicity Linked

Metabolic [SPECT] brain scans done before and after ambient or blinded challenges with very low concentrations of relevant chemicals, show a high degree of neurotoxicity in 'MCS' patients.

This pattern is *not characteristic* of the SPECT brain scan features of patients with psychiatric disease.

Ross GH, Simon TR et al. *Neurotoxicity in single photon emission computed tomography brain scans of patients reporting chemical sensitivities.* Toxicology and Industrial Health 1999 15, 415-420



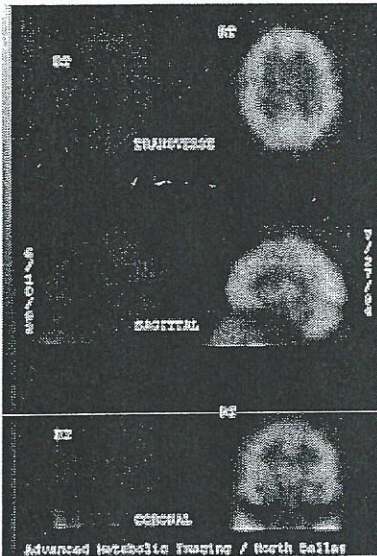
Left --

Baseline scan of an 'MCS' patient

Right --

The same patient after exposure to a low dose concentration of a chemical to which he was sensitized.

From Dr. T Simon

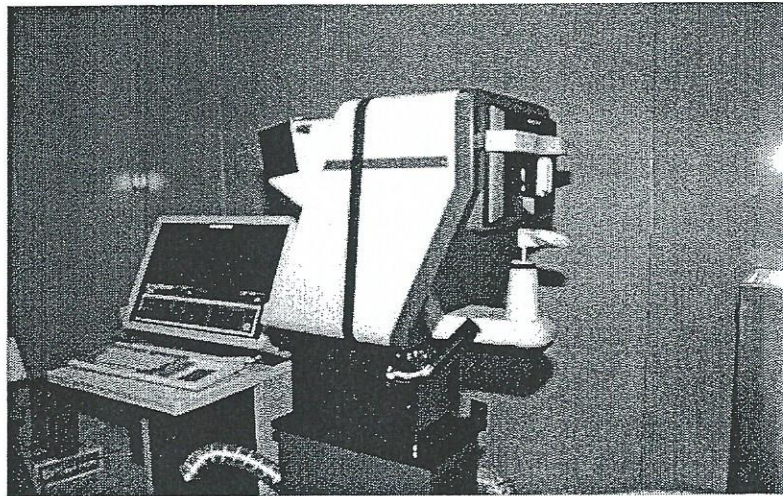


BEFORE DETOX AFTER DETOX

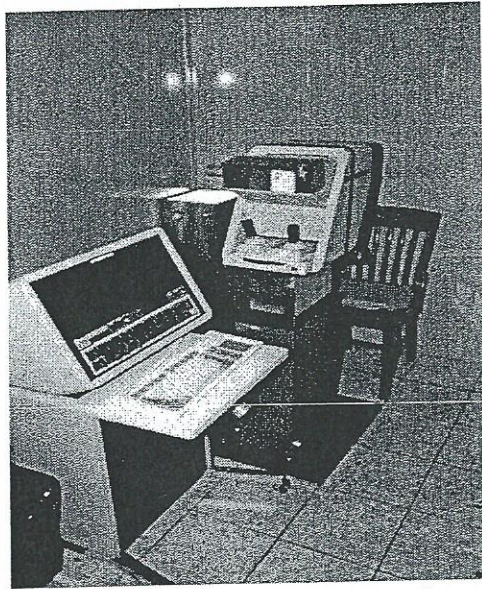
Left -
 SPECT scan of
 a chemically sensitive
 patient

Right -
 The same patient
 after a sauna
 detoxification program

From Dr. T Simon

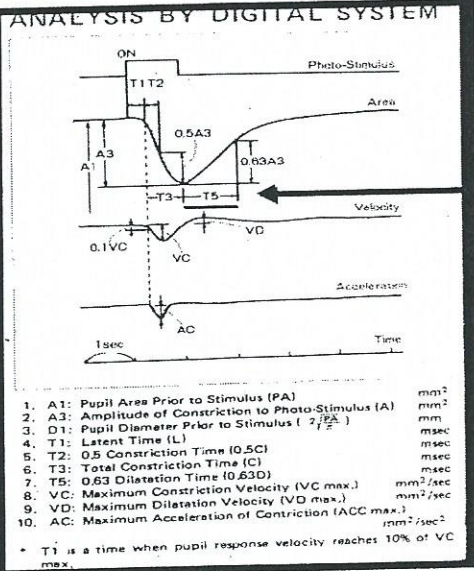


**Binocular Iriscope performs Pupillography --
 - A Direct Assessment of the Autonomic Nervous System -**



**Binocular Iriscorder
performs Pupillography.**

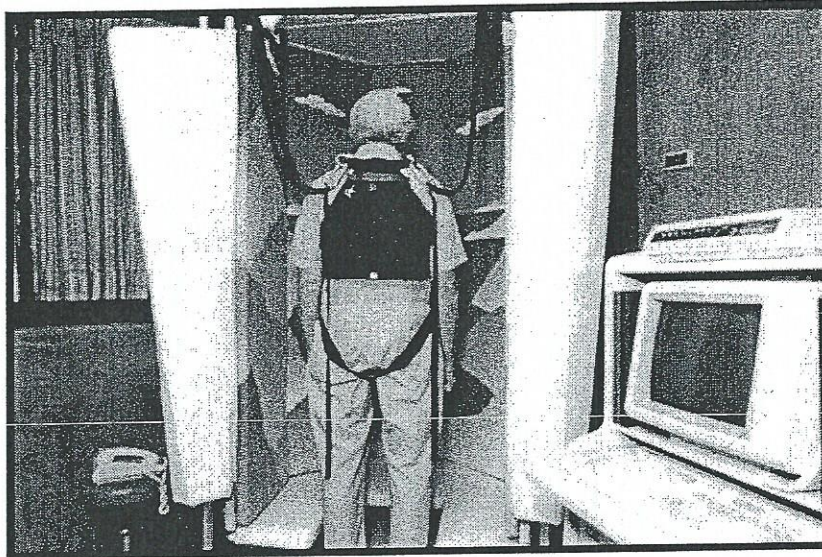
**- A Direct Assessment
of the Autonomic
Nervous System -**



**Binocular Iriscorder
Printout**

**'T5' measurement
is usually
1200 - 1800
milliseconds:
often abnormal
in chemically
contaminated
patients,
indicating
neurological
dysfunction**

*Ishikawa S. A New Binocular Infrared Videopupillography - Iriscorder
C2514. Neuro-ophthalmol Japan 1986; 3: 225-40*



**Posturography Equipment - Assessment of Balance:
Integration of proprioception, vestibular and visual information.**

Is there credible evidence that the
medical treatments recommended
for Mr. Copp offer the hope of
stabilization of his complex health problems?

*Gerald H. Ross, MD, CCFP,
FAAEM, DABEM, FRSM*

**Reduction of Chemical Sensitivity
by Means of Heat Depuration, Physical Therapy,
and Nutritional Supplementation in a Controlled Environment.**

A study on 210 chemically sensitive patients,
with assessments of :

- 1) Standardized scores for each patient's three worst symptoms.
- 2) Blood analysis for toxic chemicals, such as PCBs, pesticides, chlorinated and various other petroleum - derived solvents.

Rea WJ, Pan Y, Johnson AR, Ross GH, Suyama H and Fenyves EJ.
Journal of Nutritional and Environmental Medicine (1996) 6: 141-148

**Reduction of Chemical Sensitivity
by Means of Heat Depuration, Physical Therapy,
and Nutritional Supplementation in a Controlled Environment.**

A study on 210 chemically sensitive patients,
with assessments of :

- 3) Autonomic neurological function was assessed with precise measurements by Iriscorder (pupillary response to light.)
- 4) A computerized assessment of the patient's ability to maintain proper balance (posturography).

Rea WJ, Pan Y, Johnson AR, Ross GH, Suyama H and Fenyves EJ.
Journal of Nutritional and Environmental Medicine (1996) 6: 141-148

**Reduction of Chemical Sensitivity
by Means of Heat Depuration, Physical Therapy,
and Nutritional Supplementation in a Controlled Environment**

RESULTS on these 210 chemically sensitive patients :

- The three most troublesome symptoms showed statistically significant reductions in 86% of patients.

- All patients were contaminated with toxic chemicals. 132 patients (63 %) had statistically significant reductions in blood pollutants, 40 (19%) were unchanged, and 38 (18%) went higher.

Rea WJ, Pan Y, Johnson AR, Ross GH, Suyama H and Fenyves EJ.
Journal of Nutritional and Environmental Medicine (1996) 6: 141-148

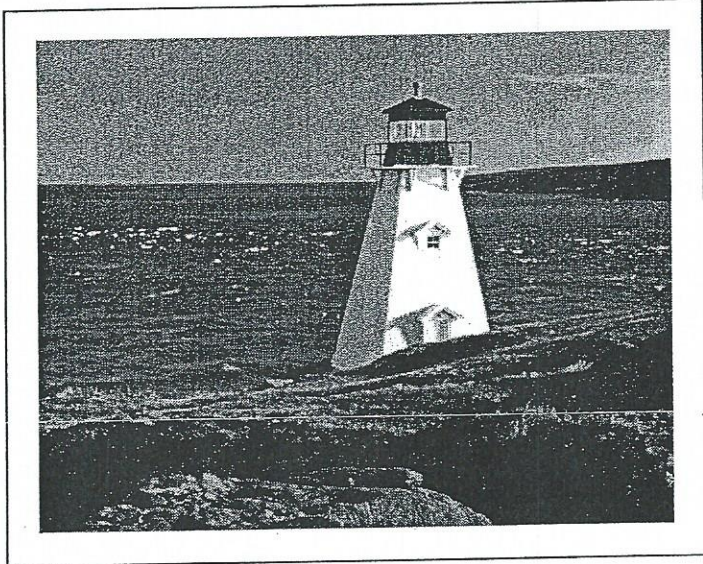
**Reduction of Chemical Sensitivity
by Means of Heat Depuration, Physical Therapy,
and Nutritional Supplementation in a Controlled Environment**

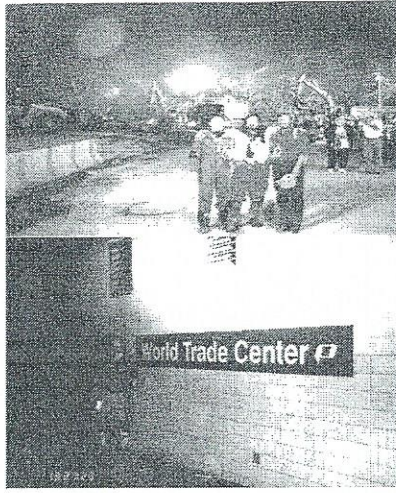
RESULTS on these 210 chemically sensitive patients :

- Of 106 patients tested, autonomic neurological function was abnormal in 88 (83%) of patients. Of these 88, 27 (30.5%) improved, 48 (55%) did not change, and 9 (10%) worsened.

- A computerized assessment of balance was abnormal in 48 of 78 (62%) before therapy, and 12 of 21 (57%) showed improvement after comprehensive Environmental Medicine therapy.

Rea WJ, Pan Y, Johnson AR, Ross GH, Suyama H and Fenyves EJ.
Journal of Nutritional and Environmental Medicine (1996) 6: 141-148





American Rescue Team International (ARTI)

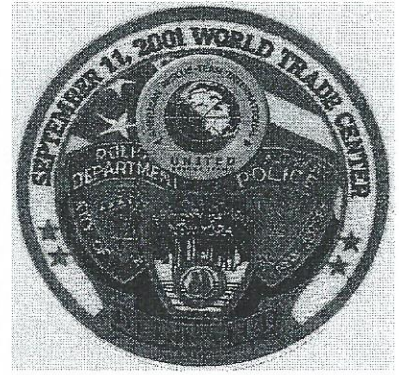
www.amerrescue.org

501 (C) 3, non profit, All Volunteer
Organization

"The world's most experienced rescue, disaster
mitigation and disaster management organization
with members in 59 countries." June 2002.

Head email: amerrescue@aol.com

Office Voice: 1-505-281-7977



Nov 18, 2003.
Attention Dr Gerry Ross MD

Dear Gerry:

As promised I am sending you a videotape: It includes: 1) The BBC Segment of Oct 15, 2003 and Nov 23, 2003. 2) The videotape shown at the hearing (an earlier version; since, the copy of the hearing video was damaged. 3) The Dark Field Microscopy of my blood.
Also, a cd with some ARTI info.

I simply cannot thank you enough.

I will be signing a contract with a Toronto/Montreal/London-England based Production Company. These shows will feature my struggle to survive, the process of knowledge being absorbed into society and how this is abnormally altered by the triumph of the AMA, chemical and pharmaceutical companies. I hope that you, DR Lieberman and DR Rea will be available for interviews. It will definitely be focused on helping the Environmental Medicine cause and will be seen by many millions of viewers both in North America and around the world.

Just for your info I was informed that I was on Costa Rican TV, last week and will be in a Chinese magazine, next week.

It seems that I continue to be of media interest in spite of my illness.

Thanks again.

Doug Copp
Rescue Chief// Disaster Manager
American Rescue Team International
PO Box 534
Sandia Park, NM, 87047
Phone: 1-505-281-7977
fax: 1-505-281-7877
amerrescue@aol.com
<http://www.amerrescue.org>

"The world's most experienced rescue, disaster mitigation
and disaster management organization with members in 55 countries."

Doug Copp: Dipl Praktikant ENG (Germany), BA HON PHIL (Canada), Distinction Honorifica (Universidad Nacional-Peru), Fire Capt. Station #4, CBP, Lima, (Peru), AKUT (Turkey), RCFR (Russia), KERO (Kenya), CIBS (Portugal), RAC (Taiwan), MRC (Mexico), HTN (Bulgaria). QSDRT (BRASIL), Bjelovar Fire Dept.(Croatia), UCP(Italy), BOER (Argentina)

Gerald H. Ross, M.D., P.L.L.C
P.O. Box 115, Bountiful, Utah 84011-0115
801-296-1181 phone 801-296-1202 fax

19 December 2003

Doug Copp
P.O. Box 534
Sandia Park, NM 87047-0534

Dear Doug:

Thank you so much for the Christmas card which we recently received.

I sincerely hope that everyone's efforts when we spoke to the Special Master will bring to you an equitable settlement.

Remember what I said that day, Doug – there are things that can be done in the form of investigation and treatment (that you have not been able to afford right now), that have a good chance of bringing more stability to your health, even to the point that you can be far less reactive than now.

I'm not saying that you would be able to go back to crawling inside collapsed buildings like before – you understand that.

However, you have a wealth of knowledge locked away in your head – and perhaps if your health gets some stability, you could work at your own pace, resting when you needed to, and could write about those experiences that you have had, for the benefit of others.

That information that you have gained, can be transferred through writing, even if you may feel too scattered at times to feel confident enough to speak to groups. (However, depending on circumstances, I have seen significant recovery ever in that, but I think that we must assume that you will be limited in what you can do in the future).

However, my friend, a Nova Scotian by birth, has 'a lot more going for him' than most others who are not so fortunate. Remember that. Remember who you are, and who you can be in the future. Do not lose heart, Doug, when you feel addled in the brain or limited by your asthma.

If we can clean out a lot of the crap that your body contains, and give you the right nutrient fuels that promote detoxification and healing, wonderful progress can be made. God bless and take care.

Your friend,

Jerry Ross



P.S. When I wear that fantastic watch from ARTI, people see it and say: WOW! (Then they practically shit themselves, when I tell them that this thing can give me the average temperature in Hong Kong in July).