MOLD MEDICINE VERSUS MOLD HYPE

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- MEDICINE BEGAN HUNDREDS OF YEARS AGO
 - ERGOTISM IN THE MIDDLE AGES
- HYPE BEGAN WITH 1994 CDC CLEVELAND NEWBORN STUDY
 - MEDIA FEEDING FRENZY
 - RETRACTED IN 2000 BY INTERNAL AND EXTERNAL REVIEWS
 - RETRACTION NEVER DISCUSSED

PARALELL TRACTS

- HEALTH-MOLD SCIENCE: MAINSTREAM MEDICINE
 - TEXTBOOKS OF MYCOLOGY
 - NO STACHYBOTRYS NOTED
- COSTLY POPULAR FRENZY:
 - DRIVEN BY
 - "INDOOR AIR SPECIALISTS"
 - ENGINEERS
 - REMEDIATORS
 - MEDIA
 - ATTORNEYS
 - FEW ACTIVIST PHYSICIANS

THE MOLD MANAGEMENT DILEMMA

DENIAL

SOME ADJUSTERS

SOME PROVIDERS

\$ 32 MIL. BALLARD

PROPER RESPONSE

MEDICINE -BASED SCIENT. ADVISORY SENSITIVITY FOCUSED FEAR REDUCTION-REDUCED \$

MOLD FEAR

WORRIED
PUBLIC
MEDIA HYPE

PROVIDERS—
BUY IN
DON'T KNOW
\$ PROFIT

EXHORBITANT \$

WHY CLEAN UP MOLD?

- AESTHETICS
- STRUCTURAL
- HEALTH—THE PRIMARY DRIVER
 - FEW PHYSICIANS INVOLVED
 - ALMOST NO MEDICAL OVERSIGHT

IS MOLD TODAY WORSE OR MORE DANGEROUS?

- NEW STUDIES BUT LITTLE EVIDENCE OF GROWING HEALTH PROBLEM RE INDOOR EXPOSURES
- MOST DATA IS ANECDOTAL OR IMPRECISE EPIDEMIOLOGY
 - CROFT
 - HODGSON
 - JOHANNING
 - CDC REPORT—NOW RETRACTED

ANECDOTES AND CASE SERIES

- BREAST IMPLANT CONCERNS AND LITIGATION A RECENT EXAMPLE
- 17 WELL-CONTROLLED
 EPIDEMIOLOGICAL STUDIES ENDED
 THE ISSUE

"EPIDEMIOLOGICAL" "MOLD" STUDIES

DEPEND ALMOST ENTIRELY ON SYMPTOM REPORTING—AN UNRELIABLE ENDPOINT

FEW FINDINGS (IE. "IMMUNE" ALTERATIONS)

MINUTE—CLINICALLY IRRELEVANT

LIKELY UNRELIABLE

NO ESTABLISHED CONTROL GROUP

- MOLD TOXINS INDOORS HAVE NEVER BEEN PROVEN TO CAUSE DISEASE
 - NO MEASUREMENTS
 - LIKELY TOO LOW—COMPARE WITH OCCUPATIONAL LEVELS
 - MUCH LOWER THAN EXPERIMENTAL ANIMAL DATA
 - LOWER THAN MANY OUTDOOR LEVELS OUTDOOR MOLD LEVELS WHICH CAN EXCEED 50,000 SPORES/M3

- MOLD TOXINS HAVE NEVER BEEN PROVEN TO CAUSE BRAIN DAMAGE
 - JOHANNING STUDIES DO NOT SHOW THIS
 - HODGSON STUDIES NEGATIVE
 - DR. GORDON ADMITS HIS DATA DOES NOT ESTABLISH THIS
 - EXCLUDED IN HAVNER DECISION IN BALLARD CASE IN TEXAS
 - TOXINS MADE BY <u>STACHYBOTRYS</u> ARE NOT NEUROTOXIC

- THE TERM "TOXIC MOLD" MAKES NO
 - SENSE.
 - ALMOST ALL MOLDS CAN MAKE MYCOTOXINS
 - EVEN "BENIGN "ALTERNARIA MAY MAKE UP TO 80 MYCOTOXINS

- - THERE IS NO SUCH THING AS "TOXIC FUNGAL SYNDROME" OR "FUNGAL SYNDROME" OR BIOAEROSAL RELATED ILLNESS
 - "EXPERTS" MAKE THIS UP TO EXPLAIN SYMPTOMS.
 - NO ICD9 CLASSIFCATION.
 - NOT GENERALLY ACCEPTED
 - NOT SCIENTIFIC KNOWLEDGE

- THERE ARE NO CHRONIC DISEASES CHARACTERTERIZED BY SYMPTOMS ALONE DUE TO MOLD
 - MOLD-RELATED DISEASES ARE SPECIFIC AND DIAGNOSABLE
 - SYMPTOMS CANNOT BE USED TO ESTABLISH CAUSATION
 - MOLD DOES NOT CAUSE ADD, CFS OR FIBROMYALGIA
 - NOT GENERALLY ACCEPTED
 - NOT SCIENTIFIC KNOWLEDGE

 MOLD AT SUMMER CAMP OR IN THE WOODS IS VASTLY MORE EXTENSIVE AND THEORETICALLY MORE DANGEROUS THAN INDOOR LEVELS

- INDOOR LEVELS OF MOLD DO NOT CAUSE CANCER
 - AFLATOXIN AT HIGH EXPOSURE LEVELS IS A KNOWN HUMAN CARCINOGEN
 - FDA REGULATES LEVELS IN FOODS
 - HIGHLY UNLIKELY THAT INDOOR LEVELS COULD EVER POSE CARCINOGENIC RISK

MOLD SCIENCE

- ALLERGIES
- HYPERSENSITIVITY PNEUMONITIS
- ORGANIC DUST SYNDROME
- INFECTION
- POSSIBLE IRRITANT EFFECTS
- TOXICITY (WITH VERY HIGH DOSES)
- DOSE IS CRITICAL

SOLUTIONS TO MOLD CRISIS

- SOLID SCIENTIFIC-MEDICAL FOUNDATION
- ADVISORY BOARD
- INTEGRATION OF HEALTH AND FACILITY MANAGEMENT
- SINCE THE DRIVER IS HEALTH HAVE MEDICAL OVERSIGHT

MOLD ASSESSMENT & MANAGEMENT: SINGLE-SOURCE SOLUTION

Facility Mold Health Assessment Evaluation SINGLE-**SOURCE SOLUTION** Maintenance Remediation & Prevention