Beyond Scare Pollution: 

*What Happened to Coal and How to Stop It From Happening Again*

By Steve Milloy
October 26, 2017
The Coal Institute
Fall Education and Engineering Seminar
Goals

1. To understand the Obama EPA science fraud that devastated the coal industry.
2. To understand how to prevent #1 from happening again.
MONTY PYTHON
and the Holy Grail
Arthur’s Holy Grail

Happiness
Eternal Life
Infinite Sustenance
Obama EPA’s Holy Grail

Destruction of the Coal Industry
2008 Obama Campaign Promise

"If somebody wants to build a coal plant... it will bankrupt them."

BARACK OBAMA
Obama EPA’s Holy Grail: Killer PM$_{2.5}$
Sources of PM$_{2.5}$ – Natural
Sources of PM$_{2.5}$ - Manmade
Key to Arthurian Holy Grail: Faith
Faith Required for PM$_{2.5}$ Holy Grail

1. Any inhalation can kill.
2. Death can occur within hours... or decades... which ever comes first.
3. Kills 570,000 Americans every year.
Food Fraud for Thought:
Claimed Death Tolls: Blue Sky Air vs. Smoking

570,000 Deaths Annually

440,000 Deaths Annually
Real-World **Products** of EPA’s Magical PM$_{2.5}$

- Ever more stringent PM$_{2.5}$ National Ambient Air Quality Standards (NAAQS)
- War-on-coal rules
  - Cross-State Air Pollution Rule
  - Mercury Air Transport Standard
    - Estimated CSAPR/MATS benefits from pretending to save 34,000 lives/year ($9 million per life) ~ $380 billion/year
    - Coal industry only worth $60+ billion to GDP
  - Clean Power Plan
    - PM$_{2.5}$, not CO$_2$/methane key emission controlled
- Ozone NAAQS
  - 90% of alleged benefits from PM$_{2.5}$
- ‘Social Cost of Carbon’
Real World Consequences of EPA’s PM$_{2.5}$ Regulations

• Near total destruction of U.S. coal industry
  – Largest companies in bankruptcy
  – Industry market value cut 94% from 2011-2016
  – Thousands of coal mining jobs lost
  – Many thousands more support jobs lost
  – Communities devastated
  – Investments, pensions, benefits, health care lost/cut
  – Utilities run away from coal
Myth!
Fracking More a Factor than Obama EPA

• Study: 83% of loss in coal production due to regulation
• Gas glut only made gas competitive with coal
• Regulation made coal expensive/politically incorrect for utilities
• Environment/public health not improved by reduced coal production
• Public health hurt by lost coal production
  — Unemployment/Poverty ≠ Health/Clean Environment
Milloy PM$_{2.5}$ Quest Begins in 1997

The EPA’s Clean Air-ogance

By Steven J. Milloy and Michael Gough
Updated Jan. 7, 1997 12:01 a.m. ET
Quest Amps Up in 2011

Show us the **bodies**, EPA

*Green agency uses phony death statistics to justify job-killing rules*

By Steve Milloy

The House will soon vote to (slightly) rein in the Obama Environmental Protection Agency. But this much-needed baby step by Congress will only happen if Republicans have the knowledge
tory distress, by implication from air pollution.

But like the EPA's 17,000-lives-saved statistical fabrication, the ad is a fake.

If you look closely at the girl, as opposed to what is being done to her, she is, in fact, calmly sitting up in bed and not in any respiratory distress whatsoever. The ad is a total put-on. Moreover, asthma attacks aren't treated with chest-compression devices, which are in-

sands of jobs and cost our crippled economy countless billions of dollars, Republicans must demand some sort of proof that the alleged harms are indeed happening.

The EPA says air pollution kills tens of thousands of people annually. This is on a par with traffic accident fatalities. While we can identify traffic accident victims, air pollution victims are unknown, unidentified and as far as anyone can tell, figments of EPA's statisti-
Show Us the Bodies, EPA
By Steve Milloy
Washington Times, July 21, 2011

‘Green agency uses phony death statistics to justify job-killing rules.’
‘Bring out yer dead...’
Show us the bodies, EPA!
July 26, 2011
Kucinich to EPA Witness:
“\textit{I'd like to give you a chance to respond to [Milloy's] op-ed.}”

[Person speaking in a courtroom setting]
Obama EPA Witness to Kucinich:

PM$_{2.5}$-Kills Claim “... based on peer-reviewed science”
Translation of Obama EPA Response

“I FART IN YOUR GENERAL DIRECTION!”

- Monty Python and the Holy Grail
‘Peer’... or ‘Pal’... Review at EPA?

• Clean Air Science Advisory Committee (CASAC) Particulate Matter Committee
  – External science advisors
  – Committee works on consensus (i.e., non-scientific) basis

• 1996 – First PM2.5 NAAQS Proposal
  – 14 of 20 members NOT EPA grantees
  – Disagreed w/EPA, concluding PM$_{2.5}$ not associated with death

• 2017
  – 24 of 26 members (92%) ARE EPA grantees
  – Grants worth $200+ million
  – Reviewing their own work
    • E.g., Harvard’s Doug Dockery & Harvard Six City Study
  – No review: Panel simply assumes PM$_{2.5}$ kills

• QED: EPA ‘Peer Review’ = ‘Farting in Your General Direction’
115th Congress
1st Session

H. R. 1431

IN THE SENATE OF THE UNITED STATES

March 30, 2017
Received; read twice and referred to the Committee on Environment and Public Works

AN ACT
To amend the Environmental Research, Development, and Demonstration Authorization Act of 1978 to provide for Scientific Advisory Board member qualifications, public participation, and for other purposes.
Obama EPA Avoided Real Peer Review

• EPA PM$_{2.5}$ conclusions depend on two lines of study (Harvard Six City & Pope-ACS II)

• EPA refused independent review of data
  – 1994, CASAC
  – 1996, House Commerce Committee
  – 2011
    • House Science Committee
    • House subpoena
    • Secret Science/HONEST Act bills
HONEST Act

115th Congress
1st Session

H. R. 1430

IN THE SENATE OF THE UNITED STATES

March 30, 2017
Received; read twice and referred to the Committee on Environment and Public Works

AN ACT

To prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible.
EPA Total Denial = The Black Knight
‘None Shall Pass’
Four Limbs of EPA’s PM$_{2.5}$ Claims

1. Epidemiology
2. Animal Toxicology
3. Human Clinical Research
4. Real World Experience
large-scale epidemiological studies. Epidemiological studies, the primary tool in the discovery of risks to public health presented by ambient PM2.5, typically use data from large populations of people with varying susceptibility to PM2.5. They evaluate the relationship between changes in ambient levels of PM2.5 and changes in health effects. However, epidemiological studies do not generally provide direct evidence of causation; instead, they indicate the existence or absence of a statistical relationship. Large population studies cannot assess the biological mechanisms that could explain how inhaling ambient air pollution particles can cause illness or death in susceptible individuals. Devlin Decl. ¶¶ 6, 7, 8.
NEVER FORGET!

Epidemiology ≠ Science
Epidemiology = Statistics

There are three kinds of lies — lies, damned lies and statistics.
(Mark Twain)
EPA PM$_{2.5}$ Epidemiology Is Junk, Anyway

- All hazard ratios on the order of 1.01 to 1.2.
- Hazard ratio = 1 = NO EVIDENCE OF HAZARD!
- But hazard ratios less than 2.0 are unreliable
  - Sir Austin Bradford Hill, Dean of Epidemiology
  - Sir Richard Doll, knighted epidemiologist
  - National Academy of Sciences
  - National Cancer Institute
  - U.S. Food & Drug Administration
“In epidemiologic research, relative risks of less than 2 are considered small and are usually difficult to interpret. Such increases may be due to chance, statistical bias, or effects of confounding factors that are sometimes not evident.”
EPA PM$_{2.5}$ Regulations Based on Noise, Not Signal
‘Tis but a scratch...’
EPA’s Animal Toxicology
How many animals have died after being exposed to massive doses of PM$_{2.5}$?
‘Just a flesh wound...’
Human Clinical Research

Diesel Gas Piped into Chamber
How many people have been killed or injured in EPA’s PM$_{2.5}$ human experiments?
1. Any inhalation can kill.
2. Death can occur within hours... or decades... which ever comes first.
3. Kills 570,000 Americans every year.

But Recall What EPA Tells the Public and Congress
EPA to PM$_{2.5}$ Study Subjects:

No Worries

**What are the possible risks or discomforts involved with being in this study?**

This study might involve the following risks and/or discomforts to you:

If you have any tendency to become uncomfortable in small closed spaces, it is possible that you may become uncomfortable during this study. You will be taken to the exposure chamber when you are first evaluated for suitability for the study to allow you an opportunity to see where you will sit and what the chamber looks like.

**PM exposure:** During the exposure to the concentrated air pollution particles, you may experience some minor degree of airway irritation, cough, and shortness of breath or wheezing. These symptoms typically disappear 2 to 4 hours after exposure, but may last longer for particularly sensitive people. You will be monitored continuously during the exposure session.
“I’m invincible”
Last Leg: Does Any Reality Help EPA on PM$_{2.5}$?
Meuse Valley Fog, December 1930
Donora, Pennsylvania, October 1948
Donora at Noon on the 3rd Day
London Fog, December 1952
Common Elements In All 3 Fatal 20th Century Air Pollution Episodes

• Meuse Valley
  – Temperature inversion
  – Deaths blamed on ‘irritant gases’
    • Sulfur dioxide levels hundreds of time greater than EPA standards
  – Particulate matter termed “innocuous”

• Donora
  – Temperature inversion
  – “Analogy might me made here with certain war gases.”
  – “No evidence isolated particles had a local effect.”

• London
  – Temperature inversion
  – “…sulfur dioxide believe to constitute the main danger…”
  – Particulate matter not singled out
Chinese Air Tests the Sulfur Dioxide Hypothesis
No Deaths in China. Why?
Low Sulfur Dioxide
Inconvenient Reality: Smoking

• Massive acute dose of PM$_{2.5}$
  – Up to 40,000 times greater from ONE cigarette
  – Up to 160,000 times greater from ONE marijuana joint
  – 4 million times (like smoking 100 cigarettes) greater from ONE hookah bar session

• No deaths from these PM$_{2.5}$ inhalations

• Marijuana prescribed for medical reasons to ‘vulnerable’ patients
  • No deaths
Inconvenient Reality: Smoking (cont’d)
Inconvenient Reality: Smoking (cont’d)
Inconvenient Reality: Smoking (cont’d)
EPA-Funded Researcher, C. Arden Pope III

C. Arden Pope III’s PM2.5 research is so ridiculous he has been forced to claim outdoor air is more dangerous than smoking.
Underground Coal Miners

- Massive doses of PM$_{2.5}$ on a daily/career basis
- Allowed to inhale 150 times greater than outdoor air
- Non-smoking coal miners live longer than average worker
Show us the bodies, EPA!
I win.
Recall EPA’s Secret Science

• EPA keeps key study data secret
  – Harvard Six City data
  – Pope American Cancer Society II data

• EPA defied requests for data
  – CASAC in 1994
  – Congress in 1996
  – Congressional subpoena, 2013
  – HONEST Act (aka ‘Secret Science Reform Act)
Newly Published California Study: No Association Between PM2.5 and Death
California PM$_{2.5}$ Study

- All deaths in California between 2000-2012 (2+ million)
  - Versus mystery/cherry-picking of EPA studies
- Compares daily deaths with daily PM$_{2.5}$ measurements
  - Only study to do this, others use monthly/annual guesstimates
- Cause of death from death certificates
  - Not ‘all cause’ mortality (unrelated deaths removed)
  - No medical privacy issues
- Result: No association between PM$_{2.5}$ and death
  - Even when limited to seniors dying from heart/lung causes
- EPA cronies tried to prevent publication
- *No secret science – data available to public!*
Defiant Black Knight EPA

I’LL BITE YOUR LEGS OFF!
Obama EPA Cronies Try Biting Back

Air Pollution and Mortality in the Medicare Population

Qian Di, M.S., Yan Wang, M.S., Antonella Zanobetti, Ph.D., Yun Wang, Ph.D., Petros Koutrakis, Ph.D., Christine Choirat, Ph.D., Francesca Dominici, Ph.D., and Joel D. Schwartz, Ph.D.
Air Pollution Still Kills

Rebecca E. Berger, M.D., Ramya Ramaswami, M.B., B.S., M.P.H.,
Caren G. Solomon, M.D., M.P.H., and Jeffrey M. Drazen, M.D.
NEJM Editorial Attacks President Trump

In explaining his withdrawal from the Paris climate agreement, Trump stated, “I was elected to represent the citizens of Pittsburgh, not Paris.” Ironically, Pittsburgh is less than 30 miles from the Donora Smog Museum, where a sign reads, “Clean Air Started Here.” With the report by Di et al. adding to the large body of evidence indicating the risks of air pollution, even at current standards, we must redouble our commitment to clean air. If such protections lapse, Americans will suffer and we are doomed to repeat history. Do we really want to breathe air that kills us?
NEJM Study = Same Old Junk Science

• **Poor quality data (GIGO)**
  – No cause of death for any study subject
  – Modeled (guesstimated) exposures
  – No consideration of confounding factors

• **Poor statistical analysis**
  – Most charitable interpretation of weak correlations are statistical noise

• **No mention of contradictory studies/evidence**
  – Despite knowledge by study funders, authors and editors
Summary of NEJM PM$_{2.5}$ Study

I DON'T KNOW HOW TO DO STATISTICS BUT IT DOESN'T MATTER BECAUSE I DIDN'T HAVE DATA.
A JUNK SCIENCE

Air Pollution and Mortality in the Medicare Population

Qian Di, M.S., Yan Wang, M.S., Antonella Zanobetti, Ph.D., Yun Wang, Ph.D., Petros Koutrakis, Ph.D., Christine Choirat, Ph.D., Francesca Dominici, Ph.D., and Joel D. Schwartz, Ph.D.
Air Pollution Still Kills No One

Rebecca E. Berger, M.D., Ramya Ramaswami, M.B., B.S., M.P.H.,
Caren G. Solomon, M.D., M.P.H., and Jeffrey M. Drazen, M.D.
Request for NEJM to Retract Study

• Federally-funded study

• Federal scientific integrity rules
  – ‘Falsification’ = Omitting data or results such that the research is not accurately represented in the research record.

• Touting bad statistical analysis based on poor quality data w/o mention of known contradictory results = Falsification
Response from EPA’s PM$_{2.5}$ Cronies at NEJM

“I FART IN YOUR GENERAL DIRECTION!”

- Monty Python and the Holy Grail
New NEJM Study: Lower Quality Diet Causes Premature Death

Association of Changes in Diet Quality with Total and Cause-Specific Mortality

Mercedes Sotos-Prieto, Ph.D., Shilpa N. Bhupathiraju, Ph.D., Josiamed Mattei, Ph.D., M.P.H., Teresa T. Fung, Sc.D., Yanping Li, Ph.D., An Pan, Ph.D., Walter C. Willett, M.D., Dr.P.H., Eric B. Rimm, Sc.D., and Frank B. Hu, M.D., Ph.D.

Even More Misconduct by NEJM

- PM$_{2.5}$ and Diet study have same health endpoint: PREMATURE DEATH
- All researchers in both studies from Harvard School of Public Health
- Both studies published in the NEJM
- Published within 2 weeks of each other
- Although each study affects the other (confounding risk factors for death), neither study considers the other.
How to Stop It from Happening Again

• Campaign to reform EPA science
  – Regulatory pauses lasts only as long as GOP in control
  – Honest Act
  – EPA Science Advisory Board Reform Act
  – Stop funding EPA/university junk science
  – Other EPA science reforms
• Fire back at the #FakeNews media
• Sue the EPA-funded universities
  – Universities have accepted ~$600 million to publish fraudulent science
• Be more aggressive, break some china
How to Stop It from Happening Again

• Don’t bring Jello to a gun fight
  – Don’t assume Congress will protect you
  – Don’t assume the WashDC swamp will protect you
• Economics by itself is an insufficient message
  – Fraudulent science should be the lead message
  – Mindset of judges, public
    • Weighing procedural errors vs. EPA claims of saving lives
EPA

Many staffers plan to weather Trump tempest

Nilina Heikkinen and Robin Bravender, E&E News reporters

Published: Thursday, July 20, 2017

U.S. EPA Administrator Scott Pruitt signs papers with President Trump. Agency employees aren't rushing to leave EPA under Pruitt's leadership. EPA
Policy Cannot Be Changed Willy-Nilly!
Even if GOP runs EPA forever, threats abound!

- Activist groups
- Activist ‘scientists’
- Universities
  - Politically correct
  - Grant hungry
- Blue states
- Vague, out-of-date laws
- Uninformed, politicized judiciary
- Public opinion
But There Is Good News!

1. Proposed repeal of Clean Power Plan based on PM$_{2.5}$ *NOT* causing death.

2. EPA plan to impose conflict of interest standards on science advisors.
Steve Milloy

milloy@me.com
@JunkScience
JunkScience.com
240-205-1243