

CONFLICT-OF-INTEREST: PROBLEMS AND SOLUTIONS: PART I

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AMERICAN PUBLIC HEALTH ASSOCIATION: SPECIAL SESSION, OCTOBER 26, 2021

**EPIDEMIOLOGY SECTION CHAIRS: INTERNATIONAL NETWORK FOR EPIDEMIOLOGY IN POLICY:
ROLE OF EPIDEMIOLOGY IN EVIDENCE-BASED POLICY**

VIRTUAL ORAL SESSION THROUGH ZOOM

THE INEP MISSION



INTERNATIONAL NETWORK FOR
EPIDEMIOLOGY IN POLICY
INTEGRITY, EQUITY, AND EVIDENCE IN POLICIES IMPACTING HEALTH

INEP, comprising 24 national and international volunteer member associations and societies of epidemiologists, works at the interface of research and policy to maintain and protect the public's health, serving as a counter-balance to powerful interests by:

- creating and disseminating evidence-based knowledge about epidemiology,
- supporting capacity-building of experts to translate research and science into policy, and
- recognizing and highlighting the misuse of data and potential corruption of the science practiced by epidemiologists.

RESEARCH INTEGRITY, HEALTH POLICY, AND THE ADVANCEMENT OF SCIENCE

ASSUMPTIONS:

- Science is used to inform policy
- Scientists are expected to operate with integrity in the application of the scientific method

BUT:

- If the scientist lacks integrity, what then is produced to inform rational policy?
Distorted science undermines health policy and derails the advancement of science

HOW AND WHY CONFLICT-OF-INTEREST?

- **What is conflict-of-interest (COI)?**

If a scientist has a vested interest in how TRUTH is presented, she/he can distort the truth

A scientist with a COI may have her/his objectivity compromised

- **What drives COI?**

A scientist's vested interests, which could include benefiting financially, promotions, prestige, etc

BIAS AND UNCERTAINTY CAN BE PROPERLY MANAGED SCIENTIFICALLY, BUT WHAT HAPPENS WHEN COI (A.K.A INVESTIGATOR BIAS) IS AT PLAY?

- **COI introduces a human element into how science is applied. COI can impact all aspects of scientific inquiry, from the framing of a scientific question to the design, analysis, interpretation, and the dissemination of a study**
- **INEP's Position Statement provides a practical approach to managing COI. Its guidance is needed for the science of epidemiology to remain credible**

ON THE SHOULDERS OF OTHERS

INEP's *Position Statement* (<https://epidemiologyinpolicy.org/coi-d-position-statement>)

Started in 2014 and written by 9 co-authors, 8+ contributors, and 6 external reviewers

- Adapted from the work of several professional organizations
- **Unanimously approved** by the INEP Board on September 16, 2020
- Exceeded its required member organization **endorsement threshold** on December 24, 2020; **released** on January 5, 2021

HOW DO COI PRACTICES AFFECT EPIDEMIOLOGY?

RATHER THAN AN IMPARTIAL ANALYSIS,

- Scientists can produce and disseminate misinformation or suppress data
- The association between cause-and-effect can be obscured and denied
- Scientific integrity can be undermined
- Public trust in the science of epidemiology can be eroded
- Workers, the public, and the environment can be harmed
- Distorted science undermines health policy and derails the advancement of science

A TOOLKIT OF EPIDEMIOLOGY 'DIRTY TRICKS'



RECOGNIZE THE METHODS

COMMENTARY (OPEN ACCESS) PUBLISHED AUGUST 19, 2021 ENVIRONMENTAL HEALTH
([HTTPS://DOI.ORG/10.1186/S12940-021-00771-6](https://doi.org/10.1186/s12940-021-00771-6))

A compendium of misapplied methods, often demonstrated in tort actions, the toolkit can be used:

- **By peer-reviewers as a checklist of what to look out for**
- **To train epidemiologists and others on how epidemiology can be distorted**
- **To review the literature for inappropriately conducted science or for uninformative studies (e.g., as in underpowered studies)**
- **To identify who is misusing / abusing epidemiology**
- ***NINE CO-AUTHORS***

REVIEW

- Never has TRUTH been under such assault and needed more to protect the public's health
 - Science can be misused either intentionally, through error, or from bias
 - For centuries, intentional distortion of scientific methods, evidence, and miscommunication have been associated with COI
 - COI-associated misuse of science can result from self-interest (financial stakes, liability protection, political interests, self-advancement, etc.)
 - Increasing levels of sophistication are being employed that include coopting regulatory bodies, scientific panels, and communication forums
- INEP recognizes this and recommends ways to better manage it in the public interest

GOING FORWARD: INEP-SPECIFIC RECOMMENDATIONS FOR COI

- a. Identification
- b. Avoidance
- c. Disclosure
- d. Recusal