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Science Policy Issues

TSCA: Three Years Later

George Washington University
Milken Institute School of Public Health
June 24, 2019

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Panel

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My Goal:
"Teeing Up" A Few Key Issues

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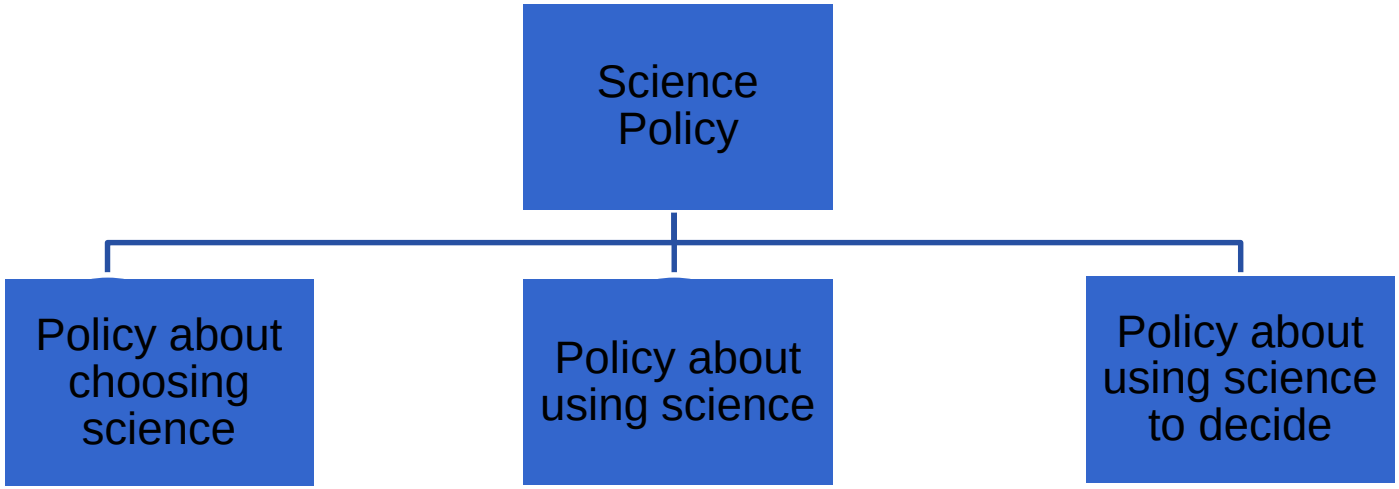
Broad Issues



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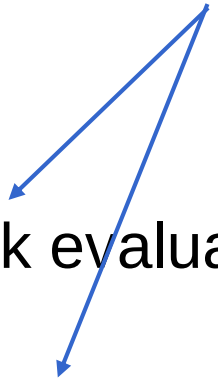
Policy About Choosing Science

- What is the scope of a risk evaluation
  - Which exposures?
  - Which populations?
  - “Conditions of use”
- “Sufficient Information”
- What information is considered in a risk evaluation?
- How are data considered and weighed?

Systematic Review



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Policy About Using Science

- Making hazard calls from systematic review process
- Choosing studies to characterize dose-response
  - Point of Departure
  - Cancer Slope Factors
- Which exposure models or measurements?
- Characterizing uncertainty and variability

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Different Science Policy Choices

Organizations	<	=	>	Ratio Range (% order of mag. or more)
ATSDR *vs.* EPA (IRIS) (N=36 chemicals)	17%	***56%***	28%	0.06-33 (11%)
HC *vs.* EPA (IRIS) (N=29 chemicals)	45%	7%	48%	0.01 – 33 (28%)
RIVM *vs*. EPA (IRIS) (N=53 chemicals)	28%	23%	49%	0.03 – 83 (25%)
ATSDR *vs*. HC (N=11 chemicals)	55%	18%	27%	0.1 – 3 (9%)
RIVM *vs*. HC (N=27 chemicals)	33%	22%	44%	0.03-39 (26%)
ATSDR *vs*. RIVM (N=15 chemicals)	53%	13%	33%	0.3-12.5 (13%)

Source: Holman, E., Francis, R. and Gray, G (2016) Comparing Non-cancer Chronic Human Health Reference Values: An Analysis of Science Policy Choices. *Risk Analysis* **37**:861-878

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Policy About Science-Based Decisions

- Prioritization – role of exposure and hazard
- “Unreasonable Risk”

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Key Challenges

- Time constraints
- Evolving science
- Explicit policies (“codifying”) vs flexibility to adapt