NTP
National Toxicology Program

Report on Carcinogens Concepts

Ruth M. Lunn, DrPH
National Institute of Environmental Health Sciences

NTP Board of Scientific Counselors Meeting
June 21 – 22, 2012

Process for Preparation of the Report on Carcinogens

Nomination and Selection of Candidate Substances

Invite nominations to the RoC

↓ **Interagency review**

↓ **Public comment**

Develop draft concept documents for substances proposed for evaluation

↓ **Public comment**

Review of draft concept documents by NTP Board of Scientific Counselors*

(**public meeting, public comment**)

↓ NTP Director

Select candidate substances

Scientific Evaluation of Candidate Substances

Prepare draft RoC Monograph for a candidate substance

(initiate cancer evaluation component)

↓ **External scientific input, as needed**

(e.g., consultants, *ad hoc* presentations, expert panels*)

Public input

(e.g., listening session, comment)

Interagency input

(complete cancer evaluation component and prepare draft substance profile)

↓ **Interagency review**

Complete draft RoC Monograph

Public Release and Peer Review of Draft RoC Monographs

Release draft RoC Monograph

↓ **Public comment**

Peer review of draft RoC Monograph by NTP Peer-Review Panel*

(**public meeting, public comment**, peer-review report)

↓

Present information regarding the peer review and revised draft RoC Monograph to NTP **Board of Scientific Counselors**

(**public meeting, public comment**)

↓ NTP Director

Finalize RoC Monograph

(cancer evaluation component and substance profile)

HHS Approval and Release of Latest Edition of the RoC

Submit recommended listing status for newly reviewed candidate substances

↓ NTP Executive Committee

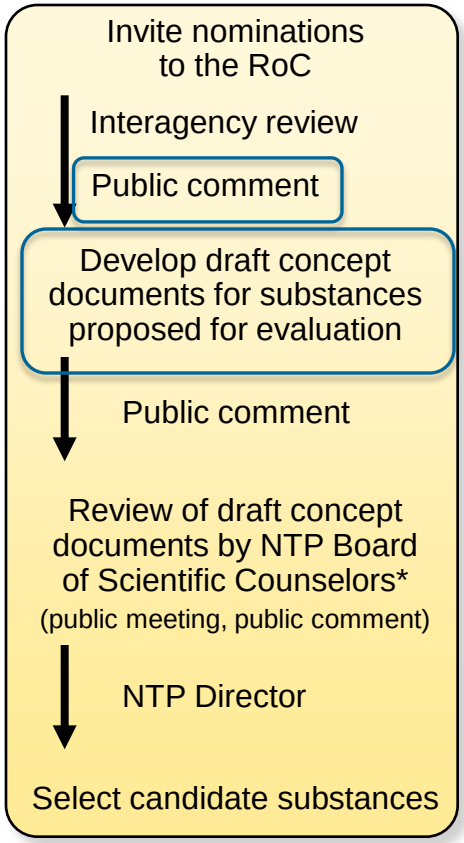
Approval of listing status by Secretary, HHS

(transmit latest edition of RoC to Congress and release to the public)

Key

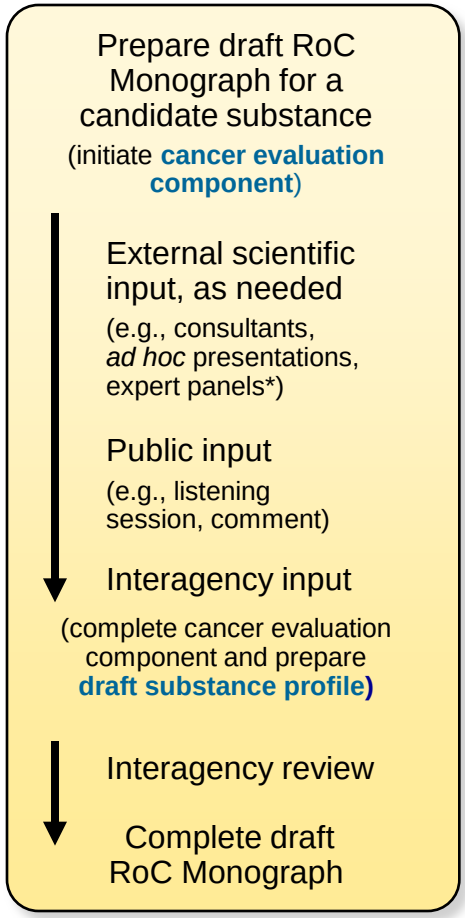
HHS = Health and Human Services
NTP = National Toxicology Program
RoC = Report on Carcinogens
* Federally chartered advisory groups

The NTP is proposing 5 candidate substances for review from the list of 15 nominated substances



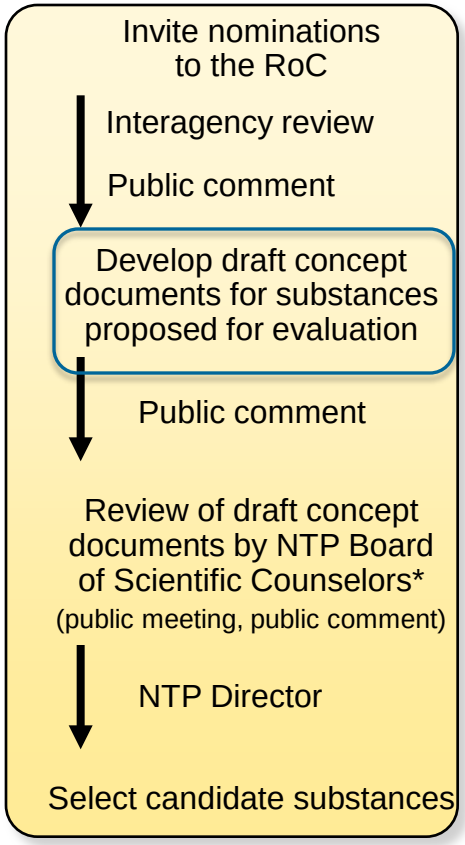
- Anyone can nominate a substance at any time to the RoC
- NTP solicited public comments on 15 nominated substances (Jan 2012) including
  - Data on current production, use patterns, and human exposure
  - Published, ongoing, or planned cancer studies
  - Scientific issues important for assessing carcinogenicity
  - Names of scientists with expertise or knowledge specific for the substance or relevant disciplines
- Draft concepts developed for 5 substances proposed for review
- “Living list” of nominations and candidate substances

Cancer evaluation is captured in the RoC monograph



- Cancer evaluation component
  - Identifies and reviews information relevant to listing recommendation
  - Assesses the quality of the information
  - Assesses the level of evidence for carcinogenicity from studies in experimental animals and humans
  - Integrates the overall body of evidence and reaches a preliminary listing recommendation
- Substance profile [final becomes part of the RoC]
  - Preliminary listing recommendation and scientific evidence considered key to reaching the recommendation
- Draft monograph is peer reviewed in a public forum

Draft concept document outlines:

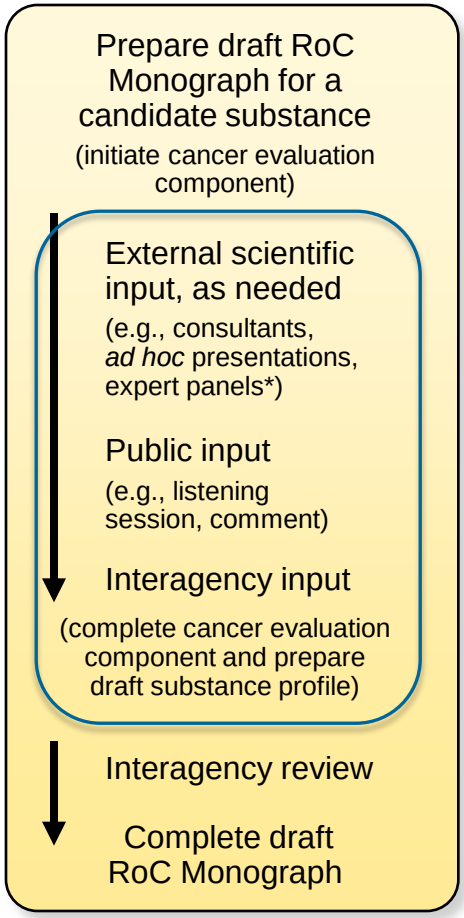


- Rationale for reviewing the proposed candidate substance
- Overview of human exposure data
- Overview of the extent and nature of the carcinogenicity information
  - Not an assessment of the data
- Key scientific questions and issues based on current knowledge
- Proposed approach for conducting the cancer evaluation
  - Preliminary literature search strategy
  - Scope and focus of the draft monograph
  - Proposed approach for obtaining external scientific and public inputs

ORoC will establish a webpage for each candidate substance

- The webpage will typically include the following:
  - RoC documents related to the review of the substance (e.g., concept document, draft RoC monograph)
  - Citations for references identified from literature searches
  - Public comments
  - Input box for the public to provide information (such as new literature) or comments such as the identification of additional scientific issues
  - Information on public meetings or listening sessions
- NTP listserv will be used to communicate when new information (or changes) is added to the website
  - Subscribe to the NTP listserv at http://ntp.niehs.nih.gov/go/getnews

NTP will use a variety of mechanisms to obtain scientific and public inputs



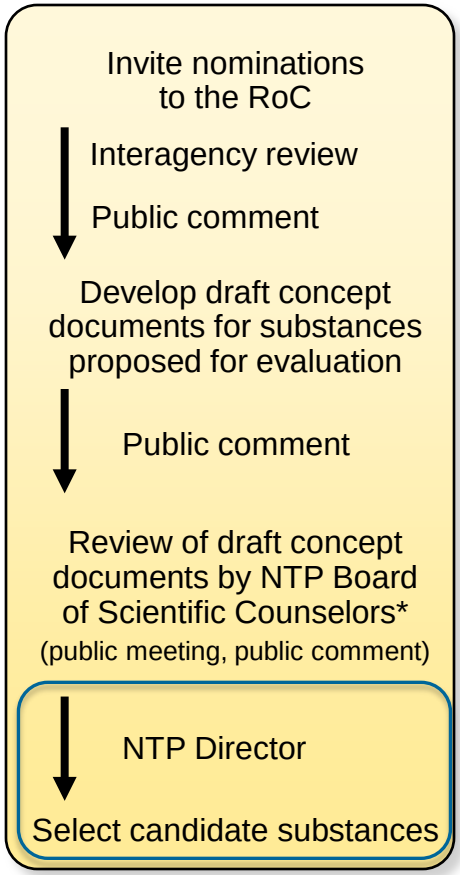
- Technical advisors (individual level)
  - External or internal to the government
  - Expertise on substance and/or relevant disciplines
  - Provide early input in identifying literature and issues and comment on draft monograph
- Information group (non-FACA)
  - Individuals assembled to exchange information, usually about a specific issue
  - Provide comment as individuals
- *Ad-hoc* presentations (e.g., public web-based symposiums)
  - Invited presentations on specific issue(s)
  - Focused discussions led by technical advisors
- Listening session
  - Forum to receive public comments on specific issue(s), usually allot 20-30 min per presentation

First five proposed candidate substances

Substance	Database	Public comments	Approach
1-Bromopropane	NTP bioassay, no human studies	1	Technical advisors
Cumene	NTP bioassay, no human studies, mechanistic issues	none	NTP advisors
ortho-Toluidine	Currently listed as RAHC Human and animal data	1	Technical advisors
Pentachlorophenol	Human and animal data	1	Technical advisors Information group Public web-based symposium
Trichloroethylene	Currently listed as RAHC Human and animal data	1	Technical advisors Public listening session Public web-based symposiums

RAHC = *Reasonably anticipated to be a human carcinogen*

Next steps



- NTP considers comments on draft concepts from the Board of Scientific Counselors and public
  - NTP Director finalizes the list of candidate substances
  - Office of the RoC (ORoC) finalizes the concept documents
- ORoC establishes a webpage for each candidate substance and posts relevant materials
- ORoC initiates scientific evaluation of the candidate substances including development of the draft RoC monographs

Specific charge questions

1. Comment on whether the cited information suggests that exposures to the substance in the United States are “significant” and whether the extent and nature of the scientific information on the carcinogenicity of the nominated substance are clearly described and adequate (studies in humans, animals, and/or mechanistic information) to support a RoC evaluation.
2. Advise as to whether the relevant scientific issues are identified. Are you aware of any other scientific issues that need to be considered during the evaluation?
3. Comment on the proposed scope and focus for the cancer evaluation component of the draft RoC monograph.
4. Comment on the proposed approach for obtaining scientific and public input in development of the evaluation.
5. Rate the overall significance and public health impact of this evaluation as low, moderate, or high. The NTP will use this rating in assessing the relative priority of evaluations of RoC candidate substances.
6. Provide any other comments you feel staff should consider in developing this evaluation.