



# Peer Review: Improving the Process

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## Issues in the Peer Review Process

- How do we select peer reviewers?
- How can we assure a balance of perspectives?
- Does the conflict process exclude those with real experience with chemicals?
- How should the public and stakeholders be considered in the peer review process?
- How do we assure that Agencies adequately respond to peer reviews?
- How do we encourage a more robust review and evaluation process?



## Goals for Selection of Peer Review Panel

- **Covers all of the technical areas of relevance**
  - Can be broad with chemical assessments.
- **Achieves a balanced perspective of views**
  - Resulting review should reflect views that a majority of scientists would share.
- **Includes reviewers that are free to conclude that the assessment is good or bad**
- **Viewed as credible**
  - Though, those unhappy with result may always take shots



## Who Has a Peer Review Conflict?

- **Easy:**
  - Direct financial interest.
  - Consulting with stakeholder on chemical.
- **Harder:**
  - Other indirect industry connections.
  - Previous work in industry.
  - Expert witness work. Does it matter if it is for a plaintiff or defendant?
  - Can someone at a government Agency have a conflict?
  - Can someone at an NGO have a conflict?

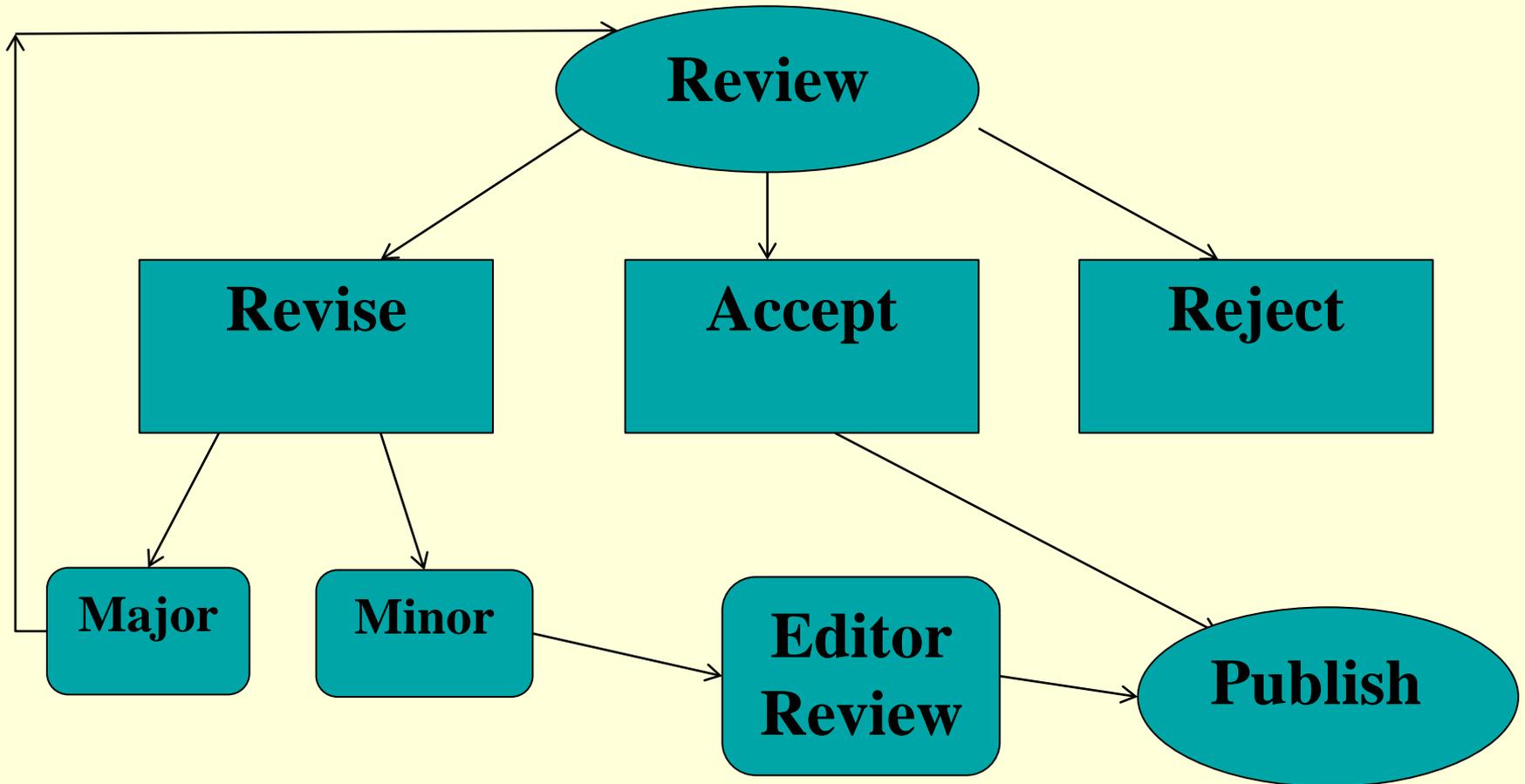


## Some Ideas for Improvement

- Better transparency
- Earlier stakeholder involvement
- Have a reasonable conflict waiver process
- Non-voting members
  - Have conflicts, but have valuable expertise
  - Available for panel discussions, but don't vote



## How Do Journals Review Papers





## Different Processes for Agencies to Address Comments

- Allow Agency discretion for addressing comments
  - Agency publishes a detailed response
- Allow panel to decide whether they need to see the revised assessment.
  - Full reconvening of panel
  - Ask panelists to separately respond to revision
- Have Agencies establish an independent ombudsman to ascertain if Agency has adequately responded to comments



## Should Panels Make Recommendations on Future Review?

- Agree up front that this will be done.
- Options could include:
  - Acceptable, but should consider the following comments ... (i.e., minor revisions)
    - No re-review necessary
  - Upgradable, but need to respond to detailed comments and re-review
    - Subset of panel reviews changes, possibly without meeting
  - Rejected, scientific flaws are substantial
    - Panel needs to reconvene to review changes



## Government Wide Peer Review System

- Can we establish a government-wide system to assure good reviews for important assessments
  - Could allocate a set number (5 or so) of assessments for NAS peer review each year
  - Who decides which assessments are reviewed? A new or existing agency?
  - Who decides whether Agency has adequately responded to comments?



## Potential for “Paralysis by Analysis”

- Many assessments just take too long
  - There is cost to a bad assessment, but there is also a cost to having no assessment
- Do we need stopping rules or defined timelines?
- Is there a point in the assessment where new data can no longer be considered?