

MeSH Changes and PubMed Searching: Class Handout

Check your learning by filling in the blanks, below.

Introduction:

MeSH changes for the next year are generally posted in the month of _____ on the NLM MeSH web site.

Documentation and guidance on MeSH changes in MEDLINE can be found in the NLM _ _____ in November and December.

Review Basics:

Check your saved PubMed searches for MeSH term _____ and automatic _____.

Two Dates in MeSH:

When two dates are listed for “Year Introduced,” you can use the term to search the concept back to the oldest/newest [circle one] date listed.

QUIZ:

How far back can you search with the MeSH term **Opioid-Related Disorders**?
1966 1980 1998 2020

Types of Changes to MeSH:

1. New Term; Same Meaning

When MeSH renames a concept (e.g., Bonding, Human-Pet):

- The existing indexed records are changed so that the old term is replaced with the new one.
- The old term is added as an Entry Term.

To adjust your searches:

- Usually you need to do _____.

2. New Term Clarifies Meaning

When MeSH adds a term (e.g., Undiagnosed Diseases) to clarify the meaning of an existing term:

- Existing indexed records are usually not changed.
- The “old” term may have a scope change.

To adjust your searches:

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- Decide which terms are best for your concepts.
- Check _____ for searching older literature.

3. New Term is More Specific

When MeSH adds a term to gain specificity (e.g., COVID-19 Serological Testing):

- Existing indexed records are generally NOT changed.
- The “old” term continues to be used.

To adjust your searches:

- Consider using the new, more specific term to retrieve newly indexed records.
- Use Previous Indexing information and/or the broader term with the [_____] search tag to search previously-indexed records.

Exercise 1:

- How far back can I search with Spike Glycoprotein, Coronavirus (current MeSH term)? _____
- Where do I look in the MeSH record for terms used prior?

- What field tag do I use to limit to records indexed between 1991 and 2013?
[_____]

4. Hierarchy Changes

MeSH hierarchy changes (e.g., Infection terms) can:

- Result in _____ retrieval changes.
- Generally, offer an improvement to your _____.

To adjust your searches:

- Take a fresh look at the new hierarchy and reconsider your search

5. Other Changes

Other changes, including subheading changes, will be explained in the NLM Technical Bulletin’s [MEDLINE Data Changes](#) article.

Exercise 2:

According to the 2021 [MEDLINE Data Changes](#) article,

- **Respiratory Distress Syndrome, Adult** was replaced by: _____.
- **Viral Proteases/antagonists & inhibitors** is now: _____.

Exercise 3:

You want to search PubMed comprehensively as possible, back to 2010, for literature related to water insecurity. How would you do this?

What is the current MeSH term for this concept? _____

What were the previous MeSH terms for this concept?

_____ (2012-2020)

_____ (1963-2011)

How would you restrict your search for a range of indexing dates?

Copy your full strategy, here:

Exercise 4: [IF TIME]

You want to search PubMed comprehensively as possible, back to 2015, for literature related to ischemic strokes. How would you do this?

What is the current MeSH term for this concept? _____

What were the previous MeSH terms for this concept?

_____ (1963-2020)

_____ (1963-2020)

How would you restrict your search for a range of indexing dates?

Copy your full strategy, here:

Summary of Tips:

To adjust to changes in MeSH:

- Check MeSH mappings in your PubMed Search Details
- Check automatic explosions in MeSH
- Use the “Year Introduced,” Previous Indexing guidance and broader terms with [mhda] to craft searches for older records.
- Read about the MeSH changes in October and the year-end changes to MEDLINE in December in the NLM Technical Bulletin.

Pre/Post Test:

1. When a new, more specific MeSH heading is added to the vocabulary, it is applied to records that were indexed in previous years.
 - a. True
 - b. False
2. When a preferred term is replaced, the term that was replaced is retained in MeSH as a(n):
 - a. Preferred Term
 - b. Entry Term
 - c. Supplementary Concept
3. The PubMed search results for a new, more specific term (e.g., Viral Genome Packaging) will be included in the results for the broader term above it (e.g., Virus Assembly).
 - a. True
 - b. False
4. If my saved search suddenly retrieves many more or many fewer citations on a regular basis starting at the end of a calendar year, what is the most likely explanation? (Check the best answer)
 - a. A changed MeSH term with the same meaning
 - b. A new MeSH concept
 - c. Hierarchy changes to MeSH

Useful Links:

NLM MeSH Homepage: <https://www.nlm.nih.gov/mesh/>

Dates in MeSH: <https://youtu.be/CBU7FYJ5Hnk>

2021 MEDLINE Data Changes:

https://www.nlm.nih.gov/pubs/techbull/nd20/nd20_medline_data_changes_2021.html