

# Inactive Ingredient Database (IID) Overview

**Excipients and Formulation Assessments of Complex Generic** 

Products: Best Practices and Lessons Learned

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## Why is the IID Important to the Generic Drug Program?



#### **Regulatory Requirement**

§314.94(a)(9)(ii) an applicant must...provide information demonstrating that such inactive ingredients do not affect the safety or efficacy of the proposed drug product

## IID Provides Evidence of Prior Approved Use

- Prior use in approved products is particularly important for ANDAs
- IID is used by FDA in application filing decisions
- IID is referenced during submission technical assessments
- IID is used by industry in excipient selection



#### **Presentation Outline**

- 1. IID and FDA's Generics Program
- 2. Introduction IID Basics
- 3. IID Enhancements
- 4. Excipient Maximum Daily Exposure (MDE)
- 5. Stakeholder Feedback



## What is the Inactive Ingredient Database?

#### **IID Basics**

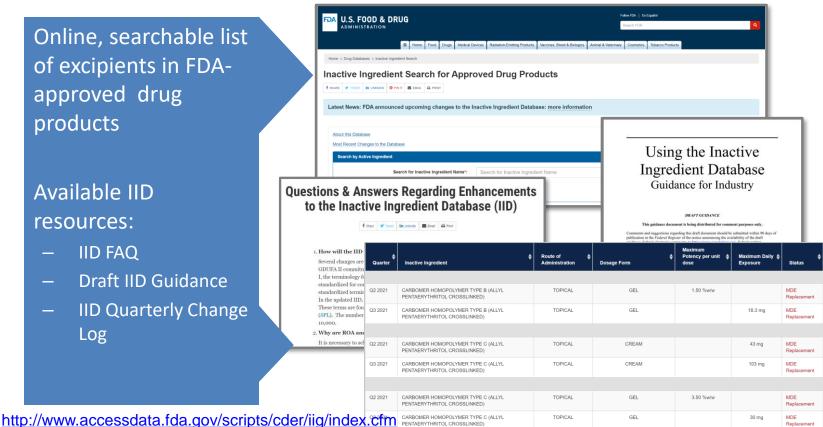
#### Introduction to the IID



Online, searchable list of excipients in FDAapproved drug products

#### Available IID resources:

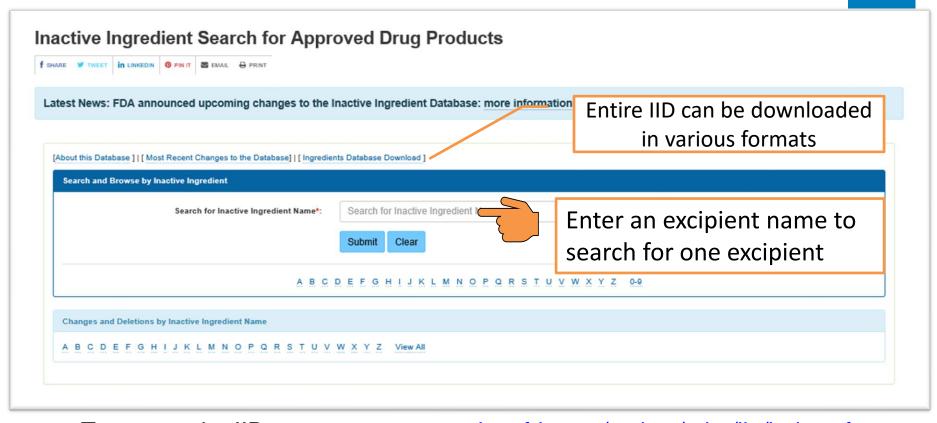
- **IID FAQ**
- **Draft IID Guidance**
- IID Quarterly Change Log



https://www.fda.gov/regulatory-information/search-fda-guidance-documents/using-inactive-ingredient-database-guidance-industry

#### Where to find the IID





#### **IID Basics**



Maximum Potency per unit dose

Maximum Daily Exposure (MDE)

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Inactive Ingredient	Route \$	Dosage Form 💠	CAS Number \$	UNII \$	Maximum Potency per unit dose	Maximum Daily Exposure (MDE)	<b>\$</b>	Record Updated	<b>\$</b>
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	CREAM		4Q93RCW27E		103mg		Υ	
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	CREAM, AUGMENTED		4Q93RCW27E	1%w/w				
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	EMULSION		4Q93RCW27E	0.6%w/w				
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	GEL		4Q93RCW27E		30mg		Υ	
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	LOTION		4093F CW27E	0.5%w/w record				
CARBOMER HOMOPOLYMER TYPE C (ALLYL PENTAERYTHRITOL CROSSLINKED)	TOPICAL	OINTMENT, AUGMENTED		4Q93FCW27E	2.25%w/w		Fla		N
			1				Fla	ig for r	iev

Displays one row per unique Excipient-RoA-DF combination

www.fda.gov

**CAS** is the Chemical Abstracts Service Registry Number **UNII** is a unique code assigned by SRS

records



#### What are the IID's limitations?

- Does not provide the context of use for excipients
- Does not tell ANDA applicants what is in an RLD
- Does not include excipients in BLAs and OTC monograph products
- Does not provide a link between maximum potency and MDE



#### **IID Enhancements**

#### IID Enhancements under GDUFA

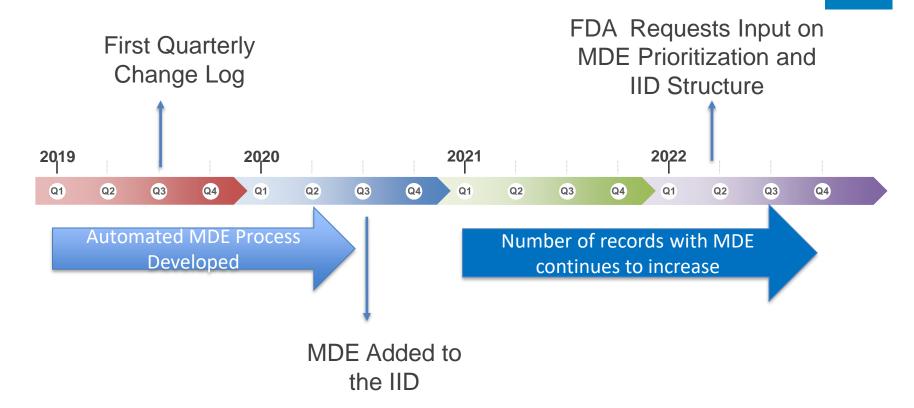


Commitment to enhance the IID brought gradual changes in 2018-2022

- 1. By October 1, 2020, FDA will complete enhancements to the Inactive Ingredient Database so users can perform electronic queries to obtain accurate Maximum Daily Intake and Maximum Daily Exposure information for each route of administration for which data is available.
- FDA will update the Inactive Ingredient Database on an ongoing basis, and post quarterly notice of updates made. Such notices will include each change made and, for each change, the information replaced.

#### IID Enhancements 2019-2022







#### **Excipient Maximum Daily Exposure**

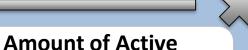
#### **Excipient Maximum Daily Exposure**



Maximum Daily Exposure (MDE) of an Inactive Ingredient is based on the Maximum Daily Dose (MDD) of products in which it is used

Maximum
Daily
Exposure
(MDE)

Maximum Daily
Dose of Active
Ingredient
(MDD)



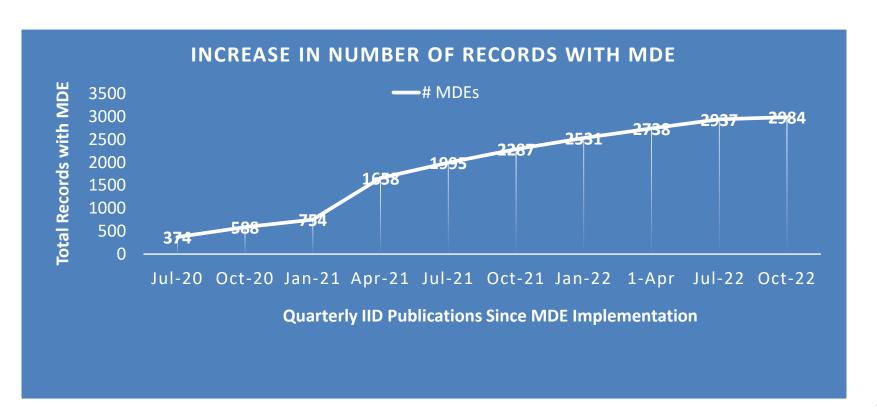
Ingredient per dosage unit
(A)

Amount of Inactive Ingredient per dosage unit (I)

MDE is also the Maximum Daily Intake (MDI) for oral drugs



#### Increase in Records with MDE Since 2020





### Stakeholder Input on Next Steps







Prioritizing the Addition of Maximum Daily Exposure Information and Removing Dosage Form Information From the Inactive Ingredient Database; Establishment of a Public Docket; Request for Comments

A Notice by the Food and Drug Administration on 03/22/2022



Docket Number: FDA-2022-N-0236

#### Stakeholder Feedback



#### Should dosage forms be eliminated?

- Most stakeholders said dosage form should be retained.
- Dosage form is important for development of new formulations.
- Route of administration is sufficient for oral products.

#### Which excipient categories should we prioritize?

- Focus on the most common excipients; those used in most products.
- Excipients unique to certain complex dosage forms.
- Specific excipient types: flavors, emulsifiers, polymers, surfactants.

#### Which excipients are of highest priority for MDE?

- Most stakeholders did not identify specific excipients by name.
- There was no majority opinion on which excipients to prioritize.



#### **Contact Information**



- Questions and concerns about IID entries, send to <u>IIDUpdate@fda.hhs.gov</u>
- Nomenclature corrections and questions about excipient names, send to FDA-SRS@fda.hhs.gov

www.fda.gov



#### Many Thanks to the FDA IID Team

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