



FDA Perspective: EUAs, LDTs and Zika Response

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1976 – Medical Device Amendments

- Provided definition of 'medical device'
- Defined the standard to be used
- Provided Regulatory Paradigm
- Risk-Based regulation of medical devices



Risk-Based Classification

- **Class I: common, low risk devices**
 - Most exempt from premarket submission
 - General controls
- **Class II: more complex, higher risk**
 - Premarket Notification [510(k)]
 - Substantial equivalence, special controls
- **Class III: most complex, highest risk**
 - Premarket Application [PMA]
 - Safety, effectiveness



MCM-Related Counterterrorism Legislation

- Bioterrorism Act 2002
- Project Bioshield Act 2004
- PREP Act 2005
- PAHPA Act 2006
- PAHPRA Act 2013

Emergency Use Authorization (EUA)

During certain circumstances:

Under section 564 of the Federal Food, Drug, and Cosmetic Act (FD&C Act), the FDA Commissioner may allow

- **use of unapproved medical products or**
- **unapproved uses of approved medical products**

to **diagnose**, treat, or prevent serious or life-threatening diseases or conditions caused by Chemical, Biological, Radiological, or Nuclear (**CBRN**) threat agents when there are **no** adequate, approved/cleared, and available **alternatives**.

21 U.S. Code § 360bbb–3 - Authorization for medical products for use in emergencies

(c)(2)(A) the product may be effective in diagnosing, treating, or preventing—

(c)(2)(B) the known and potential benefits of the product, when used to diagnose, prevent, or treat such disease or condition, outweigh the known and potential risks of the product

(c)(3) that there is no adequate, approved, and available alternative to the product for diagnosing, preventing, or treating such disease or condition

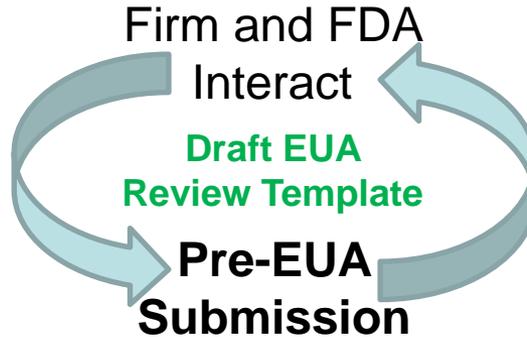


EUA Diagnostics in Past and Current Emergencies

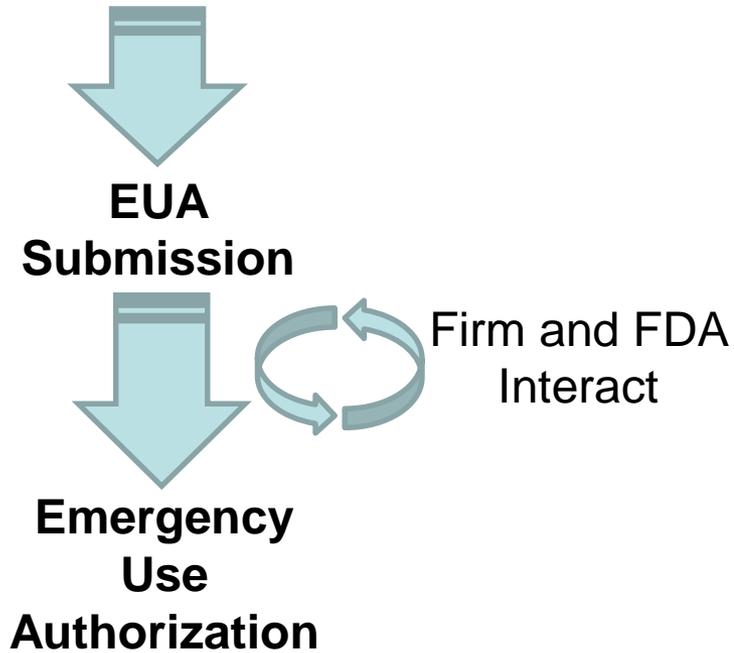
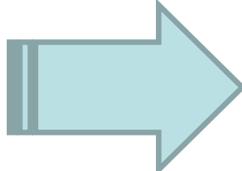
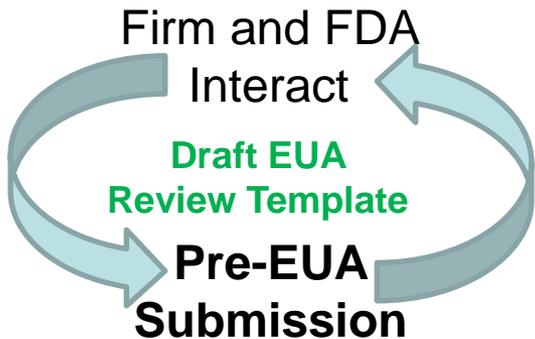
	H1N1	H7N9	MERS-CoV	Ebola	Enterovirus D68	Zika
EUA Declaration	April 26, 2009	April 19, 2013	May 29, 2013	August 5, 2014	February 6, 2015	May 31, 2016
EUA Diagnostics:						
Molecular	17	2	2	9	1	3
Antigen	1	1	0	2*	0	
Serology	0	0	0	0	0	1
* Includes one product that was authorized for two different intended uses						

Note: Around 70 submitted, so far 41 authorized

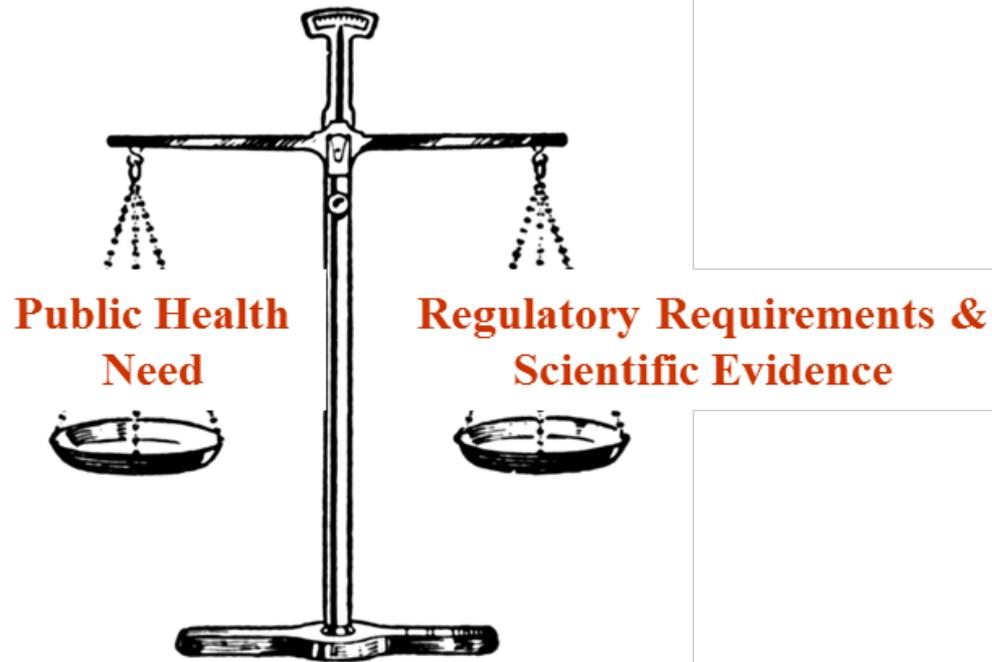
Emergency Use Authorization (EUA)



Declaration of Emergency



Emergency Use Authorization (EUA)



Analytical Sensitivity
(LoD)

Analytical Specificity

- Reactivity
- Cross reactivity
- Interference

Clinical Evaluation

- Clinical Sensitivity
- Clinical Specificity



Conditions of Authorization

FDA may establish conditions on an EUA necessary or appropriate to protect the public health. Some conditions are required to the extent practicable given the applicable circumstances of the emergency or threat, whereas others may be imposed entirely at the discretion of FDA.



Conditions of Authorization (cont. I)

- Information relating to the EUA Product – provided in the form of fact sheets for healthcare providers and patients (recipients of the test)
- Monitoring and reporting of adverse events – required to the extent practicable given the circumstances of the emergency
- Records – firm to maintain records and to grant FDA access to records – examples include number of devices shipped or sold during EUA

Conditions of Authorization (cont. II)

- Distribution and use— conditions may be placed on which entities may distribute and who may use the product, and how distribution and administration are to be performed. In addition, conditions may be placed on the categories of individuals to whom, and the circumstances under which, the product may be administered.
- Advertising – conditions may be placed on advertisements and other promotional printed materials relating to the EUA device



Conditions of Authorization (cont. III)

- Waiver or Limitations of Compliance with Current Good Manufacturing Practice regulations (CGMP) - FDA generally expects that EUA products will be produced, stored, and distributed in compliance with CGMPs; however, limits or waivers may be granted in an EUA on a case-by-case basis, after consideration of the circumstances and of any alternative proposed approach (section 564(e)(3)).

Categorization of Tests Under an EUA

- Section 564(m) allows FDA, if issuing an EUA for a diagnostic device, to indicate whether the test can be performed at a point-of-care setting or only in a laboratory able to handle more complex tests.
- FDA may also establish appropriate conditions on the performance of the test. The complexity categorization made under this authority is effective for the same period as a declaration of emergency or threat justifying an EUA under subsection 564(b) and is independent of that made under Clinical Laboratory Improvement Amendments (CLIA) regulations.

Duration an EUA

- FDA will specify the effective date of an EUA issued under section 564. In general, an EUA will remain in effect for the duration of the declaration under which it was issued (see section III.A of this guidance), unless the EUA is revoked because the criteria of issuance (see section III.B of this guidance) are no longer met or revocation is appropriate to protect public health or safety (section 564(f),(g)).

Draft EUA Review Templates

- Draft EUA Review Templates developed to stream line data submission as well as data review and review documentation
- Outlines FDA's current recommendations for the analytical and clinical validation studies needed in support of an EUA submission for an infectious disease IVD
- Dynamic Template: Draft document, adapted depending on specific circumstances of the outbreak, Analyte & Technology (e.g., molecular, serology), starting point
- Assist Sponsors and FDA Reviewers:
 - Manufacturer fills out the template
 - Template serves as basis for interactive review
 - Template will later serve as sponsor's EUA Submission AND
 - Review memorandum



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