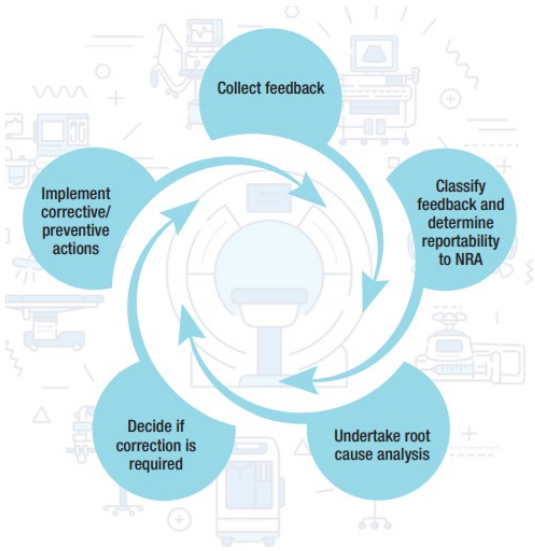
Reviewing field safety corrective actions

15-18 November 2021, Post-market surveillance and market surveillance for regulators of medical devices

Anita SANDS, Incidents and Substandard/Falsified Medical Products Team, WHO, Geneva

Role of manufacturers



- **Collects** feedback
- **Classifies** feedback and determines **reportability to NRA**
  - Uses IMDRF N43 terminology
- **Undertakes** root cause analysis
- **Decides** if correction is required (informs users by field safety notices)
- **Implements** corrective/preventive actions

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Manufacturer's role: post-market surveillance

Basics of post-market surveillance plan

- Scope
- Objectives
- Responsibilities
- Data collection
- Data analysis
- Using data in risk management, clinical evidence, etc.
- Any required actions, risk management, CAPA

TECHNICAL REPORT

ISO/TR 20416

First edition
2020-07

Medical devices — Post-market surveillance for manufacturers

Dispositifs médicaux — Surveillance après mise sur le marché incombant aux fabricants

ISO

Reference number
ISO/TR 20416:2020(E)

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Manufacturer's role: post-market surveillance

- As a minimum, the plan must include these objectives:
  - **New hazard or hazardous situation**
  - **Misuse**
  - **Unforeseen side-effects**
  - **Malfunction** impacting benefit-risk analysis
- Other objectives:
  - **Usability**
  - **Recurring malfunctions**
  - **User/patient training** reduce the likelihood of malfunction?
  - Any **improvements** that can be made to the device?
  - Has **state-of-the-art** changed since launch of the device?

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Manufacturer's role: collecting information

- Proactive
  - written or electronic surveys or questionnaires
  - interviews of users
  - literature search
  - use of medical device registries
  - post-market clinical follow-up studies (or post-market performance follow-up studies, IVDs)
  - recall information and other information released from regulatory agencies.
- Reactive
  - review of **feedback/complaints (including incident reports)**
  - review of non-solicited observations by HCPs or observations by the organization's sales and marketing team members
  - review of service reports or maintenance reports
  - review of regulatory compliance notification

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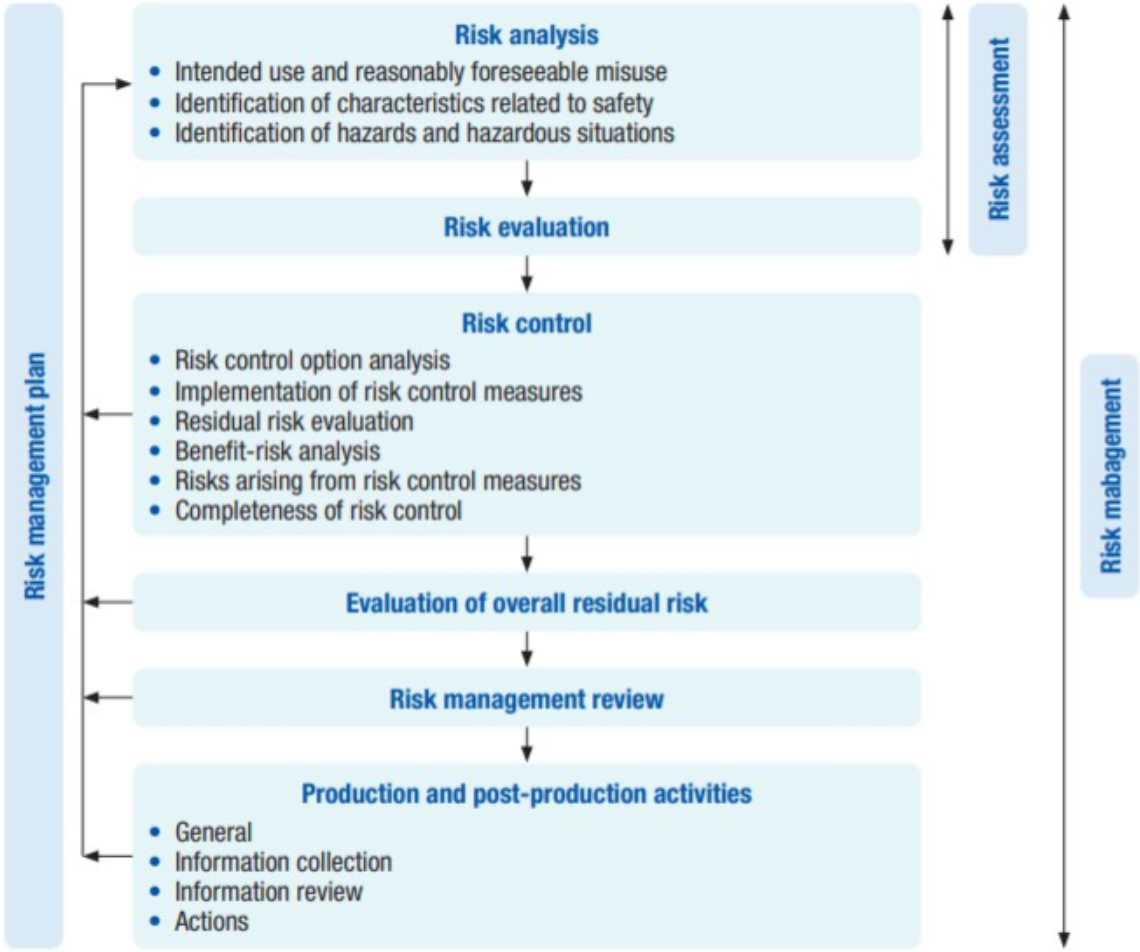
Manufacturer's role: risk management

An FSCA is triggered by information about the occurrence of one or more incidents with already distributed medical devices that poses an unacceptable increase in risk when that device is used.

Has risk/benefit profile changed?

Risk = frequency x severity



Source: ISO 14971 Medical devices — Application of risk management to medical devices

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Manufacturer's role: protecting public safety

- Correction
  - Action to eliminate a detected nonconformity.
    - *Note 1: A correction can be made in advance of, in conjunction with, or after a corrective action.*
    - *Note 2: A correction can be, for example, rework or regrade.*
  - Examples:
    - Repair, modification, adjustment, relabelling, destruction or inspection (including patient monitoring) of a product, additional surveillance of the device in use, retraining, explanation, additional clinical review of patients, retesting, **without its physical removal to some other location**

- Corrective action
  - Action to eliminate the cause of a detected nonconformity or other undesirable situation.
  - *Note 1: There can be more than one cause of nonconformity.*
  - *Note 2 to entry: Corrective action is taken to prevent recurrence, whereas preventive action is taken to prevent occurrence.*
  - *Note 3 to entry: There is a distinction between correction and corrective action.*

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Manufacturer's role: decides on FSCA

- FSCA may include:
  - return of a type of device to the manufacturer or its representative (i.e. recall)
  - device modification*
  - device exchange
  - device destruction (i.e. recall)
  - advice given by the manufacturer regarding the use of the device

*Device modifications can include:

- retrofitting in accordance with the manufacturer's modification or design change
- permanent or temporary changes to the labelling or IFU
- software upgrades including those carried out by remote access
- modification to the clinical management of patients to address the risk of death or serious injury or death specifically to the characteristics of the device

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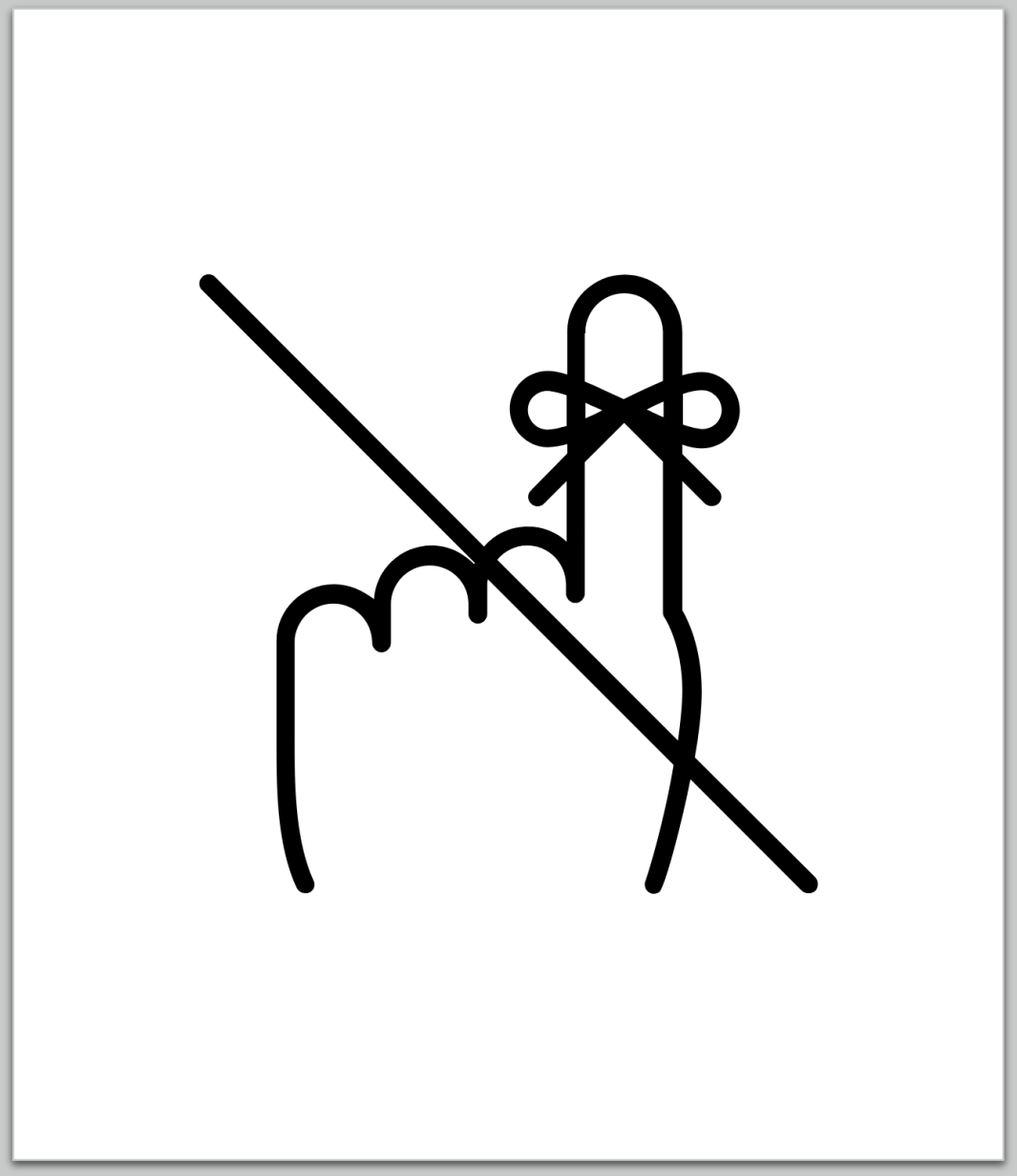
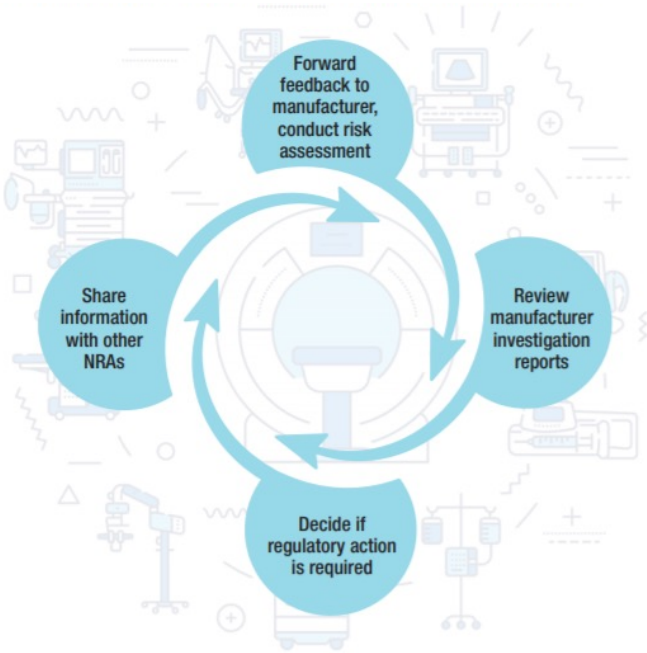
Manufacturer's role: reporting FSCAs

- Manufacturers must report to relevant NRAs when FSCA is implemented
- Incident may have occurred in another jurisdiction
    - Device destruction of affected lot
- FSCA might not be associated with an incident but other post-market surveillance intelligence



Role of regulators



- **Forwards** user feedback to manufacturer
- **Reviews** manufacturer investigation reports
- **Reviews** manufacturer field safety corrective actions
- **Oversees** testing
- **Decides** if regulatory action is needed
- **Shares** information with other NRAs
  - Public repository of field safety notices

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Regulators role: reviewing final manufacturer investigation report

Manufacturer investigation reporting form

Manufacturer's final comments	Updated investigation narrative ▪ IMDRF Type of Investigation (Annex B) ▪ IMDRF Investigation Findings (Annex C) ▪ IMDRF Investigation Conclusion (Annex D) ▪ Any additional corrections ▪ Corrective/preventive action to be implemented ▪ FSCA by manufacturer ▪ Date FSN issued ▪ FSN identifier ▪ Time schedule for identified actions ▪ Any previous similar events for this device with similar root cause ▪ Signature

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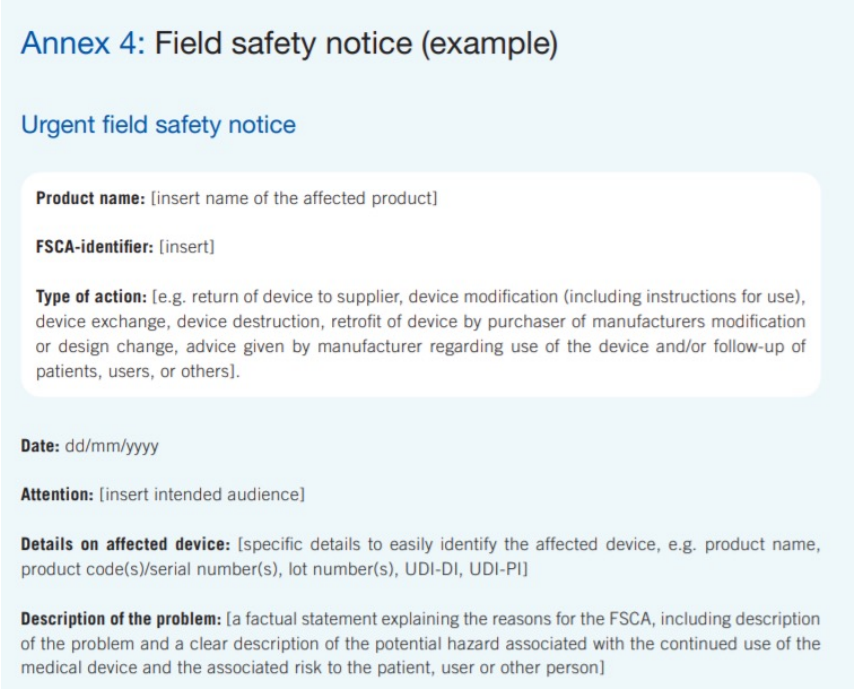
Role of regulator

Reviews FSNs

- Field safety notice should include:
  - Clear title on the notice (and e-mail subject line)
  - Intended audience of the FSN
  - Concise description of product, product code, lot number(s)
  - Factual statement explaining the reasons for FSCA
  - Description of the hazards and likelihood of occurrence
  - Recommended action(s) to be taken by the FSN recipient
  - Designated contact point for the FSN recipient to obtain further information



Annex 4: Field safety notice (example)

Urgent field safety notice

Product name: [insert name of the affected product]

FSCA-identifier: [insert]

Type of action: [e.g. return of device to supplier, device modification (including instructions for use), device exchange, device destruction, retrofit of device by purchaser of manufacturers modification or design change, advice given by manufacturer regarding use of the device and/or follow-up of patients, users, or others].

Date: dd/mm/yyyy

Attention: [insert intended audience]

Details on affected device: [specific details to easily identify the affected device, e.g. product name, product code(s)/serial number(s), lot number(s), UDI-DI, UDI-PI]

Description of the problem: [a factual statement explaining the reasons for the FSCA, including description of the problem and a clear description of the potential hazard associated with the continued use of the medical device and the associated risk to the patient, user or other person]

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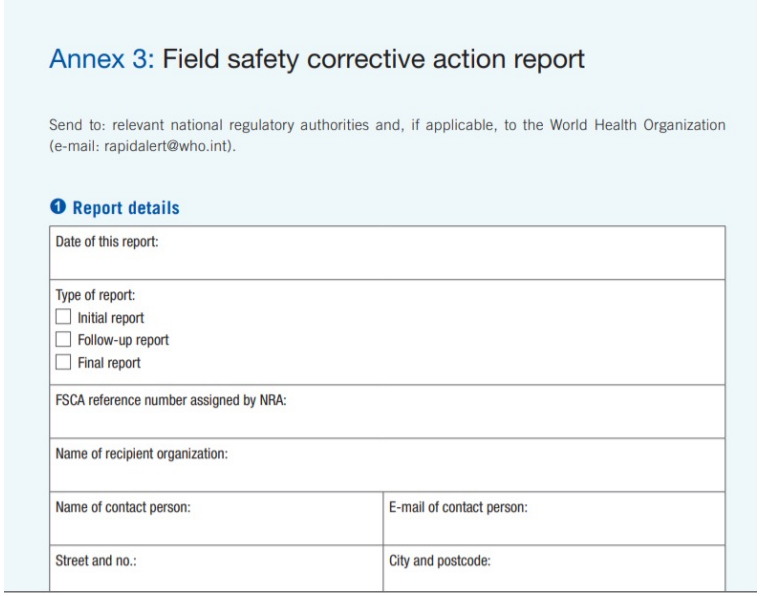
Role of regulator

Reviews FSCA reports

- FSCA report submitted by Manufacturer to NRA includes:
  - Information on the effectiveness of the action per country involved (e.g. percentage of IVDs that underwent the FSCA)
  - When return of affected stock to the manufacturer, completed actions should be fully reconciled against distribution records.
- The final report should contain the following information:
  - The final outcome of the reconciliation of the FSCA
  - Root cause of the problem, if known
  - Proposed action to reduce the chance of recurrence e.g. redesign, update in the field, improved instructions for use, etc.



Annex 3: Field safety corrective action report

Send to: relevant national regulatory authorities and, if applicable, to the World Health Organization (e-mail: rapidalert@who.int).

1 Report details

Date of this report:	
Type of report: ☐ Initial report ☐ Follow-up report ☐ Final report	
FSCA reference number assigned by NRA:	
Name of recipient organization:	
Name of contact person:	E-mail of contact person:
Street and no.:	City and postcode:

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Regulators role: tracking FSCAs

- Record all FSCA for devices registered in your jurisdiction
- Assessing FSCA effectiveness (100%)

B	C	D	E	F	G	H	I	J	K	L	M	N
Identifier	Location	Product name	Manufacturer	Authorized Representati...	Nomenclature code	Lot number	Expiry date	Type of incident (IMDRF Ann... A code)	Date NRA notified	Type of reporter (manufacturer, authorized representative	Reporter contact details	Date Mx notified

O	P	Q	R	S	T	U	V
Date Mx sends initial investigation report	Date Mx sends follow-up investigation report	Date Mx sends final investigation repo...	Root cause identified (Y/N)	Root cause	Correction (action taken to eliminate a detected nonconformity	Corrective action (action is taken to eliminate the cause of a detected nonconformity)	SPOC for manufacter (E-mail)

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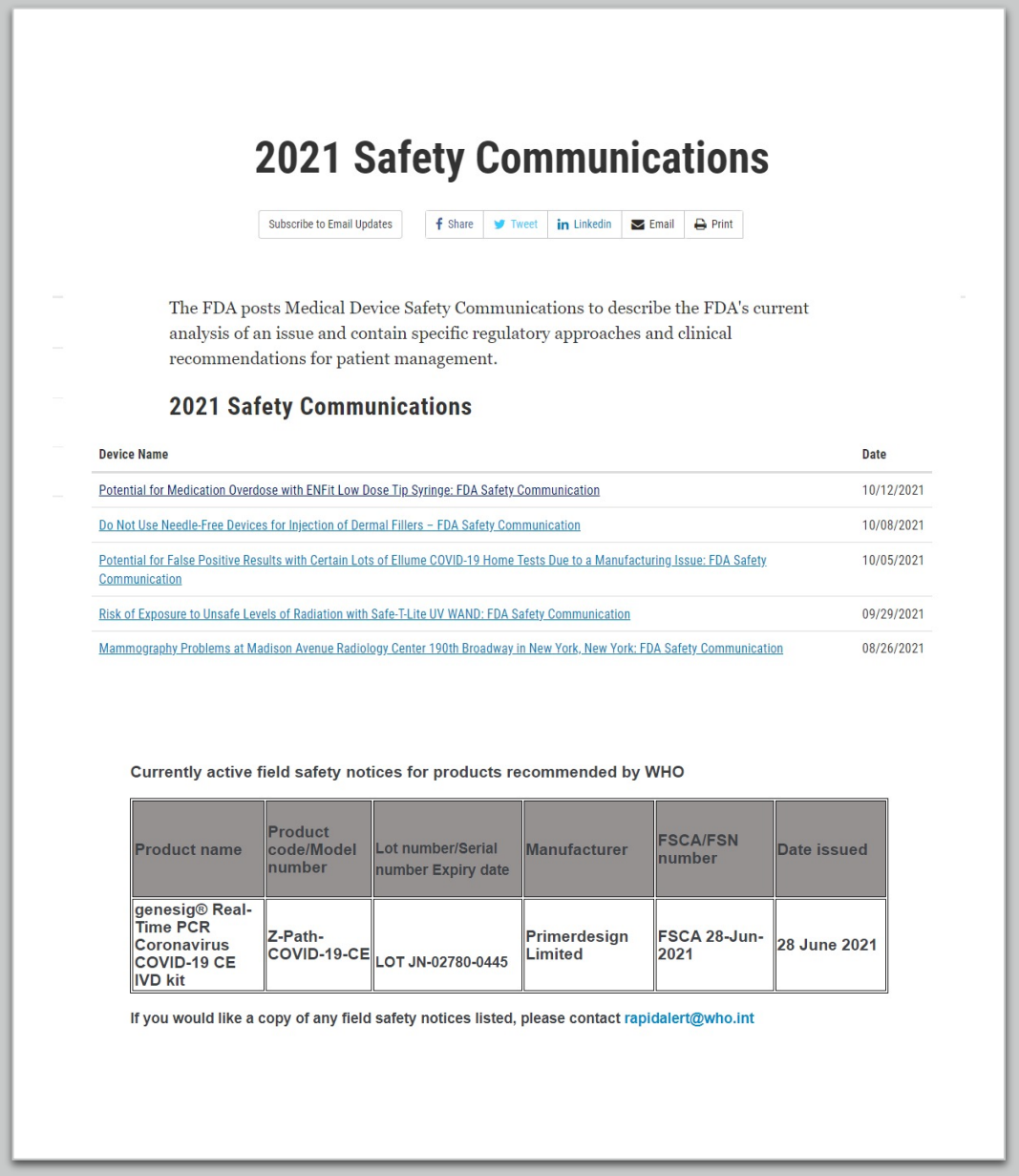

2021 Safety Communications

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The FDA posts Medical Device Safety Communications to describe the FDA's current analysis of an issue and contain specific regulatory approaches and clinical recommendations for patient management.

2021 Safety Communications

Device Name	Date
Potential for Medication Overdose with ENFit Low Dose Tip Syringe: FDA Safety Communication	10/12/2021
Do Not Use Needle-Free Devices for Injection of Dermal Fillers – FDA Safety Communication	10/08/2021
Potential for False Positive Results with Certain Lots of Ellume COVID-19 Home Tests Due to a Manufacturing Issue: FDA Safety Communication	10/05/2021
Risk of Exposure to Unsafe Levels of Radiation with Safe-T-Lite UV WAND: FDA Safety Communication	09/29/2021
Mammography Problems at Madison Avenue Radiology Center 190th Broadway in New York, New York: FDA Safety Communication	08/26/2021

Currently active field safety notices for products recommended by WHO

Product name	Product code/Model number	Lot number/Serial number Expiry date	Manufacturer	FSCA/FSN number	Date issued
genesig® Real-Time PCR Coronavirus COVID-19 CE IVD kit	Z-Path-COVID-19-CE	LOT JN-02780-0445	Primerdesign Limited	FSCA 28-Jun-2021	28 June 2021

If you would like a copy of any field safety notices listed, please contact rapidalert@who.int

Regulator's role: sharing information

- Information that can be in the public domain
  - Manufacturer FSNs
  - NRA safety notices
- Searchable list/database

IMDRF collated weblinks

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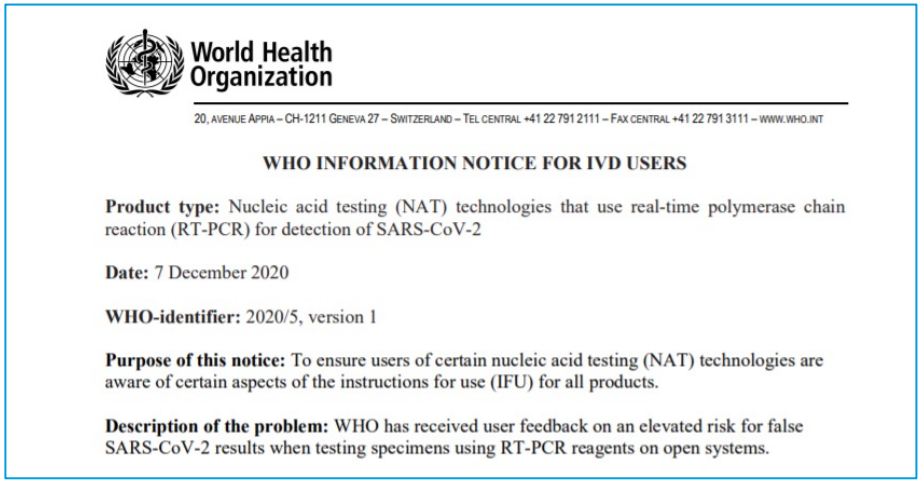
Regulator's role: decides if regulatory action is required

- Regulators may wish to issuing safety or advisory notices to users, other healthcare professionals, patients
  - If the manufacturer does not take timely or appropriate action
  - If an issue is product-agnostic and affects more than one manufacturer's products
  - If falsified medical devices are detected in the supply chain



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WHO INFORMATION NOTICE FOR IVD USERS

Product type: Nucleic acid testing (NAT) technologies that use real-time polymerase chain reaction (RT-PCR) for detection of SARS-CoV-2

Date: 7 December 2020

WHO-identifier: 2020/5, version 1

Purpose of this notice: To ensure users of certain nucleic acid testing (NAT) technologies are aware of certain aspects of the instructions for use (IFU) for all products.

Description of the problem: WHO has received user feedback on an elevated risk for false SARS-CoV-2 results when testing specimens using RT-PCR reagents on open systems.

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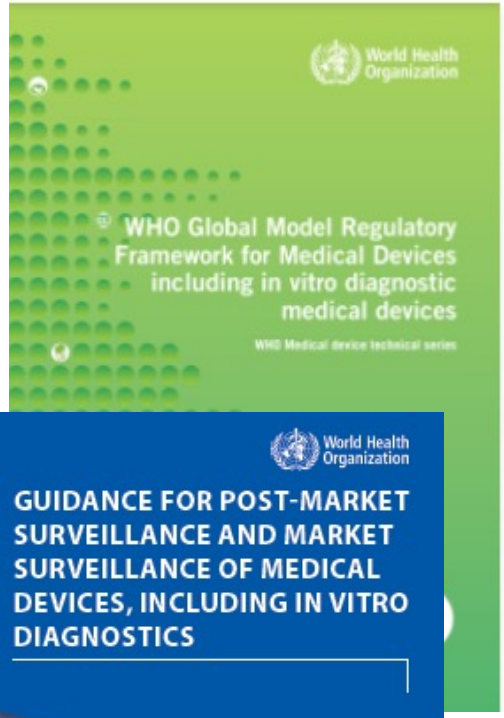
Normative guidance and expanded bibliography

- WHO guidance for medical devices including IVDs
  - Guidance on post-market and market surveillance here
  - Global Model Regulatory Framework, under review
  - Global benchmarking tool for regulators of medical devices, under development
- Other international organizations
  - ISO Medical devices – post-market surveillance for manufacturers, ISO/TR20416:2020
  - IMDRF/GHTF
    - IMDRF terminologies for categorized adverse event reporting (AER);terms, terminology structure and codes, IMDR/AE WG/N43
    - GHTF WG2 on Post-market surveillance/vigilance here
  - GHWP/AHWP
  - AMDF



https://www.who.int/health-topics/substandard-and-falsified-medical-products#tab=tab_1

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Any questions?

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