

Do we need rapid alert and early warning  
to increase safety  
in blood transfusion and donation?

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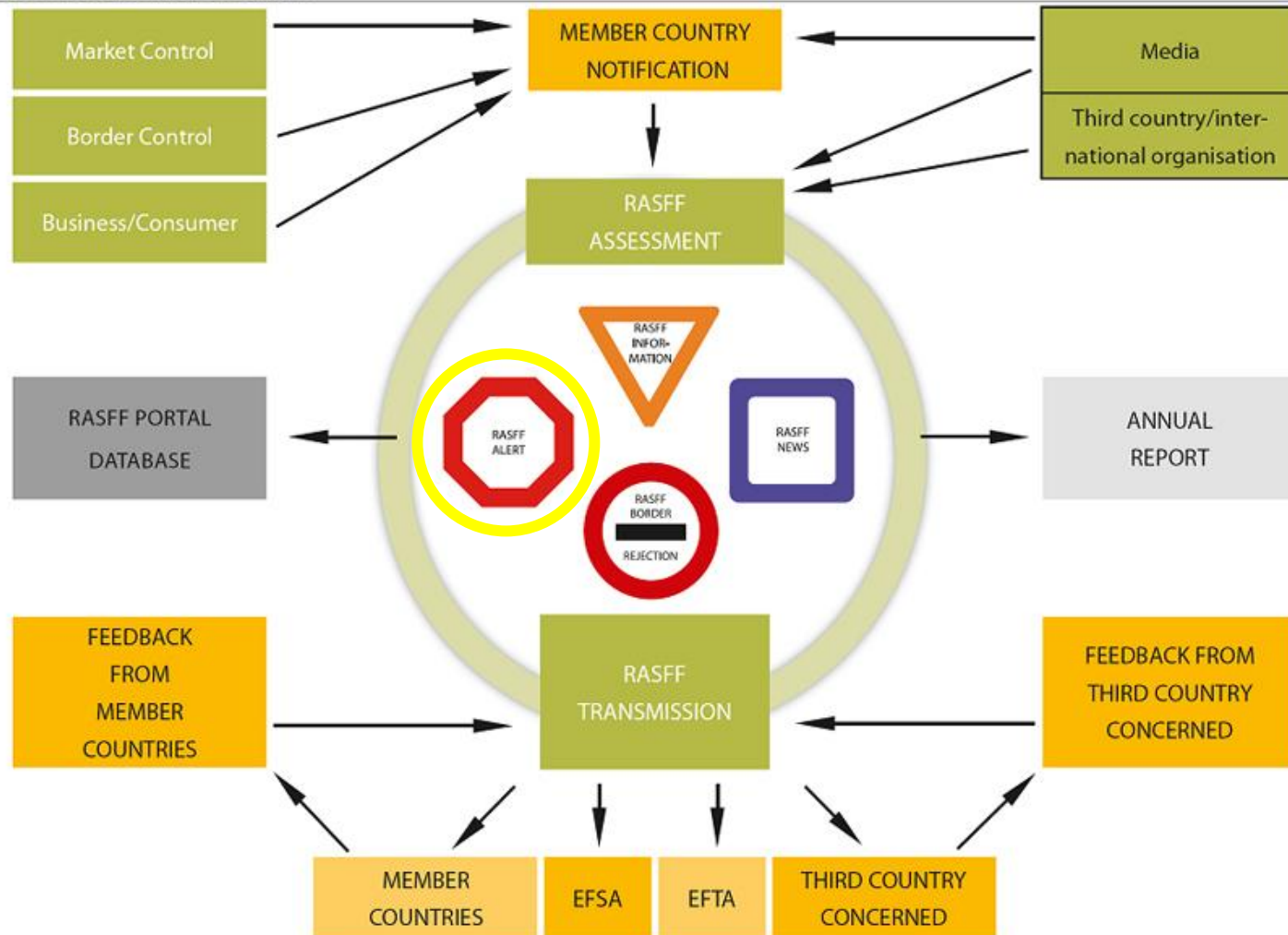
Irrational debate on a “real” problem  
political interference, slow response



➤ **Rapid Alert System for Food and Feed (RASFF)** is a system for reporting food issues within the European Union.

The Rapid Alert System for Food and Feed (RASFF) was put in place to provide food and feed control authorities with an effective tool to exchange information about measures taken responding to serious risks detected in relation to food or feed. This exchange of information helps Member States to act more *rapidly* and in a coordinated manner in response to a health threat caused by food or feed.

# RASFF: complex and fastidious





# **Directive** of the European Parliament and of the Council **2002/98/EC** (08.02.2003, OJEC)

setting **standards of quality and safety** for the collection, testing, processing, storage, and distribution of human blood and blood components and amending Council Directive 2001/83/EC

Chapters I. to X., 34 Articles, 4 Annexes

(33 Whereas, 9 Technical Requirements according art. 29. a.-i.)

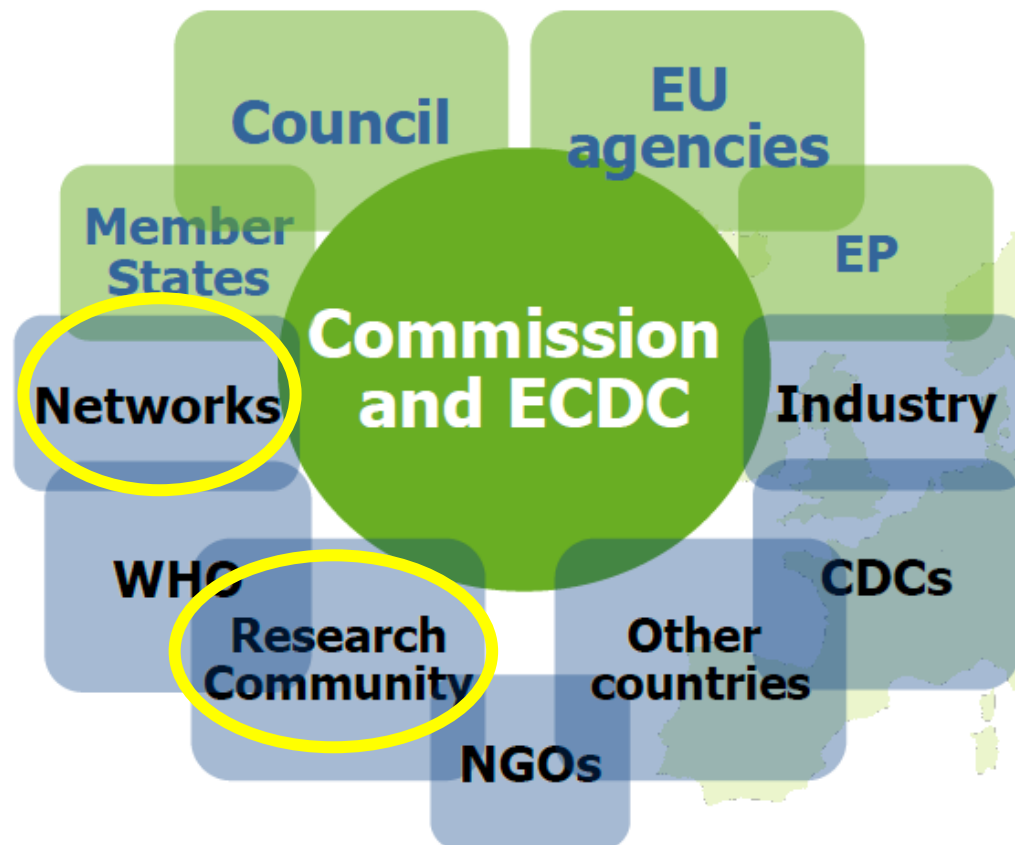
Chapter V. HAEMOVIGILANCE

- article 14. on traceability
- article 15. on notification of serious adverse events and reactions

***N.B. NOT a single word about rapid alert or early warning***

# ECDC: ...timely detection of communicable disease threats

## All partners contribute to health security







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### The European Surveillance System (TESSy)

The European Surveillance System (TESSy) is a highly flexible metadata-driven system for collection, validation, cleaning, analysis and dissemination of data. Its key aim is to provide the basis for high quality data analysis and interpretation to provide evidence for public health action. All EU Member States (27) and EEA countries (3) report data on communicable diseases as described in [Decision No 2119/98/EC](#) to the system. TESSy was launched in 2008 and, apart from routine surveillance, it has incorporated all the data collection systems that were in place for the Dedicated Surveillance Network (DSN) projects and now provides experts with a one-stop-shop for EU surveillance data. Prior to May 2005 when ECDC was established, there were 17 DSNs that collected data on a variety of diseases but also using different file specifications.

#### National Contact Points for Surveillance (epidemiologists and IT/data managers)

In order to ensure solid working relationship with the Member States in surveillance matters, each Member State has identified individuals who are the main Contact Points for bilateral communication with the ECDC. These epidemiologists and IT/data managers are also the main counterparts responsible for data submission to ECDC.

#### Data collection

- A common set of variables is defined for all diseases. This common set is applicable to all diseases.
- For selected priority diseases or disease groups 'enhanced surveillance' is needed. This consists of an additional set of variables that enables a more detailed level of analysis to be carried out.
- The technical transport protocol (file format and data submission) supports both the [CSV](#) and [XML](#) file format.

#### INTERACTIVE TESSY DATABASE



#### Online databases with public access

[Influenza database](#)

[Antimicrobial resistance database](#)  
[Access TESSy](#)

[The European Surveillance System](#)

#### Access to TESSy data

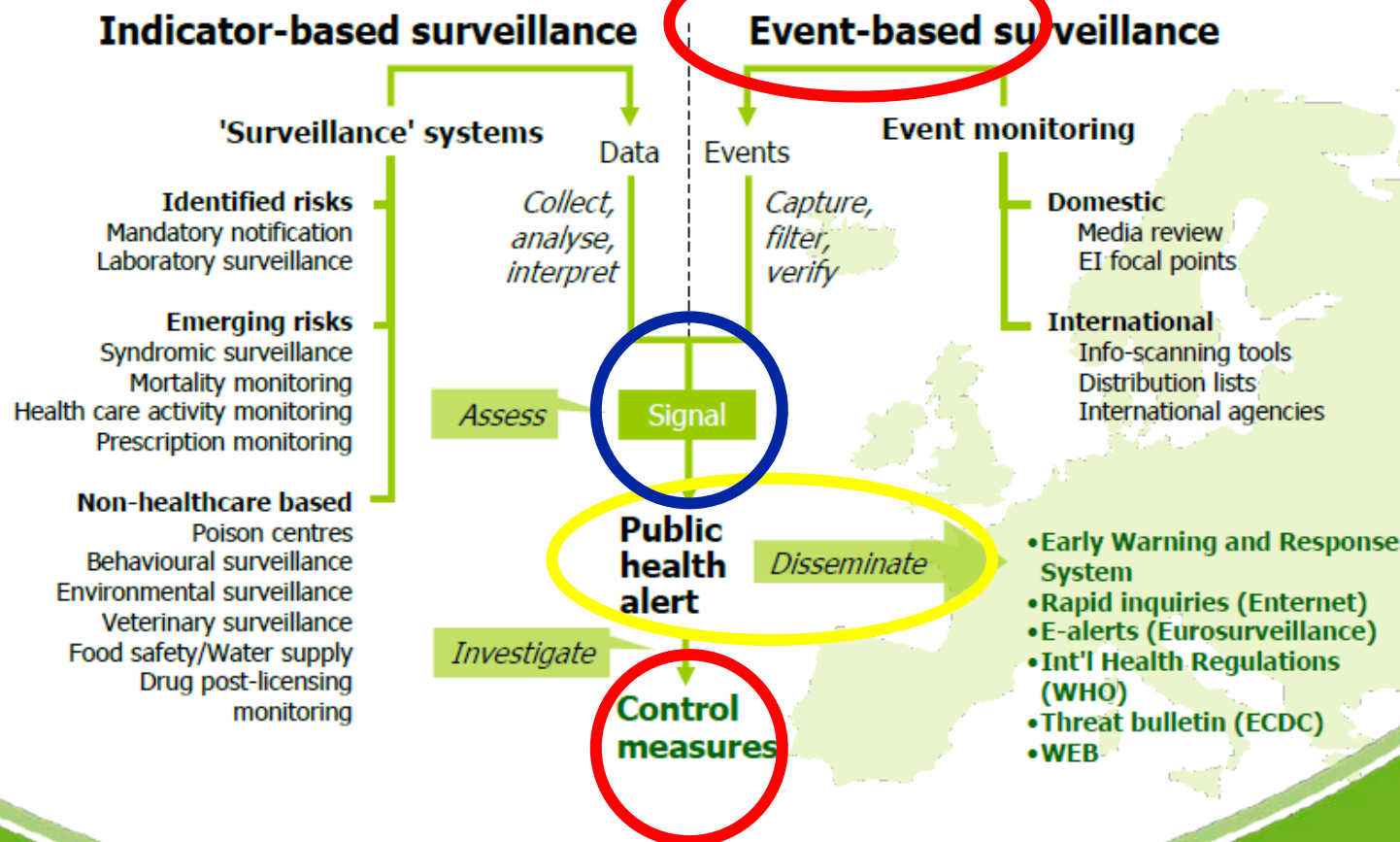
[How to request access to TESSy data](#)

#### DOCUMENTS

- Commission decision of 22 December 1999 on the communicable diseases to be progressively covered by the Community network under Decision No 2119/98/EC of the European Parliament and of the Council
- Commission decision of 18 December 2007 amending Decision No 2119/98/EC of the

*The Commission's Health Security Initiative includes a requirement for them to **notify all types of threats** at EU level, not only communicable diseases.*

# ECDC's threat detection framework





# Rapid Alert for human substances (SOHO)

➤ EC/SANCO

➤ Alert system for MD

➤ ECDC (infectious-TESSy)

➤ RATC:

Rapid alert for tissues  
and cells

➤ RAB:

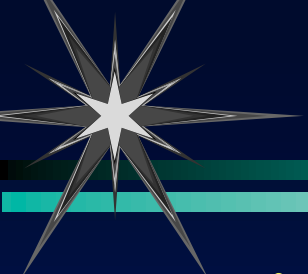
Rapid alert for blood



The screenshot shows the European Commission's Health and Consumers website. The header includes the European Commission logo and the text 'HEALTH AND CONSUMERS'. Below the header, there is a navigation menu with links: HOME, ABOUT US, CONSULTATIONS, FUNDING, INFORMATION SOURCES, and EVENTS. The 'INFORMATION SOURCES' link is highlighted with a yellow arrow. The main content area is titled 'Public Health (01-02-2013)' and features a section titled 'Launch of EU Rapid Alert platform for human Tissues and Cells'. This section describes the platform's purpose: to improve patient safety by ensuring timely exchange of urgent information between Member States regarding human tissues and cells. It also mentions that the platform will be used in parallel with existing national vigilance systems. The text further states that a high volume of tissues and cells are donated and transplanted every year in the EU, and that the RATC can be used to raise the alarm on illegal and fraudulent activities in this field, as well as on developing epidemiological situations (e.g. disease outbreaks) which may have cross-border implications.

...the EU has established a number of mechanisms for a **coordinated, Europe-wide response** in the following areas:

- Preparedness
- Risk assessment
- Risk management
- Risk communication
- International cooperation



## EHN: Rapid Alert (RAS), starting in 2002

### Rapid Alert / Early Warning:

- quick and safe **transmission**
- of precise and correct **data**
- to competent (official) contact **persons**
- deciding on possible **action** in order to maintain or improve **safety** (corrective or preventive action -CAPA).

**Rapid Alert System (RAS)** is the **validated construction** to pass this information from one actor to another.



# European Haemovigilance Network



Alert reports

## ALERT REPORT

(This report is for your information only and does not suggest any action)

Reference : LU/2003-06-12/11:40:56 AM

Protection against liability and damage claims

From : [Dr Jean Claude FABER](#) (LUXEMBOURG)

Date :

12 / 06 / 2003 (dd/mm/yyyy)

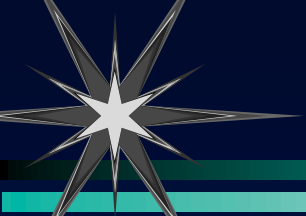
Subject :

Dokument: Übermittelt



We work in a *globalized, complex and vulnerable* world:  
things can go wrong ...even if regulated, controlled and managed





# ***Blood establishments/centers work under robust QMS***

Commission Directive 2005/62/EC - art. 11: QS for BE

- (a) Quality management and change control
- (b) Personnel and organisation
- (c) Premises, including mobile sites
- (d) Equipment and materials
- (e) Documentation
- (f) Donor session
- (g) Processing
- (h) Storage and dispatch
- (i) **Quality monitoring**
- (j) **Quality control** and laboratory testing
- (k) Contract management
- (l) **Deviations**, complaints, adverse events or reactions, **recall, corrective / preventive actions**
- (m) Self-inspection, audits and improvement

RAS may be used in the case of a « signal »:

- a **proven** problem / defect
- a **potential** problem / risk
- a **justified doubt**

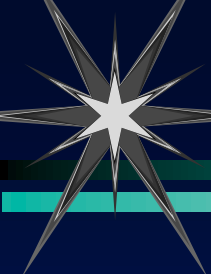
(f.ex. defective lots not used; batches returned to manufacturer because they failed to pass validation,...)

*N.B. It is all about the threshold of the alarm trigger!*

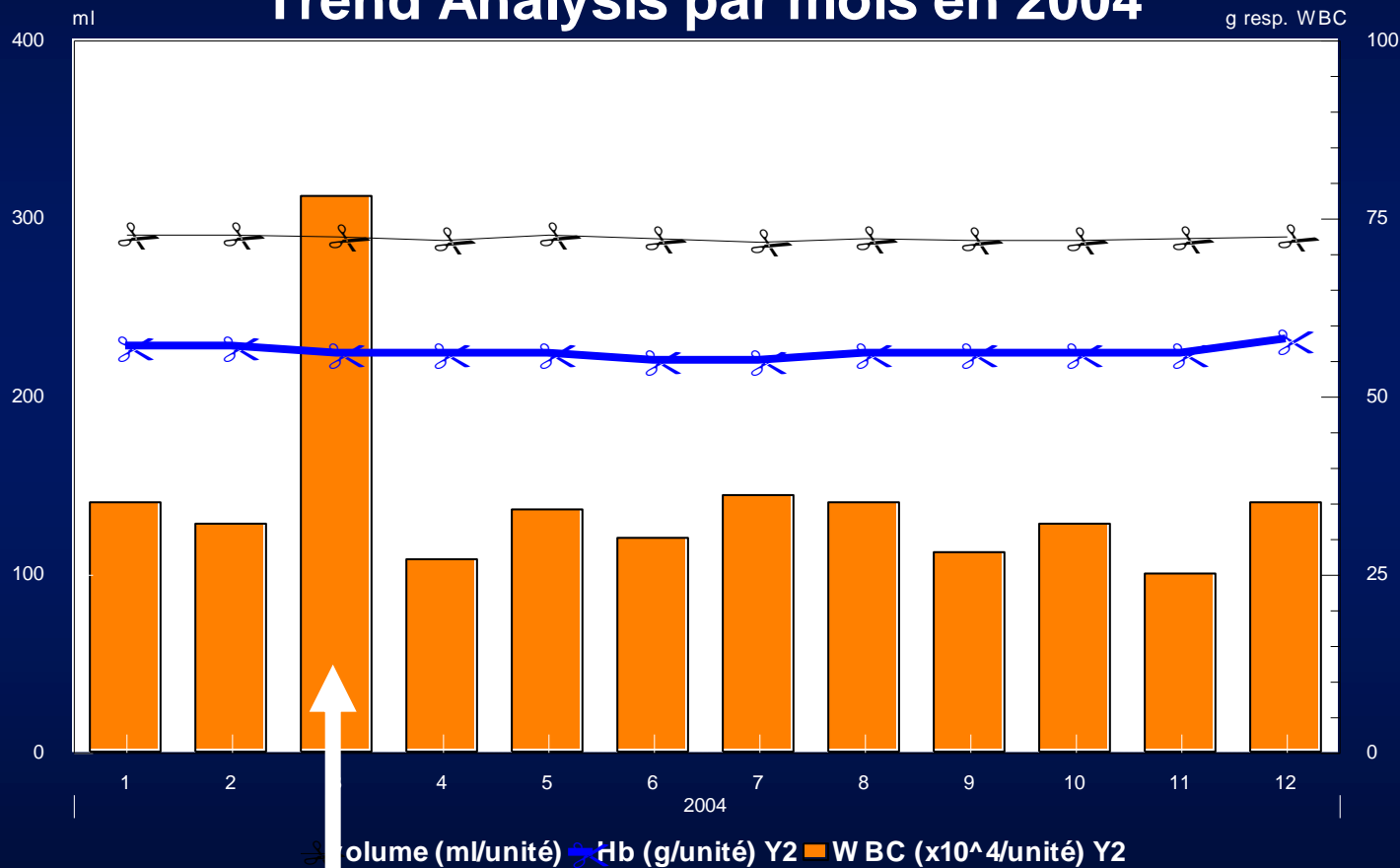


### **IHN-RAS has been used on different occasions:**

- appearance of clusters of **clinical signs** / symptoms / adverse reactions during or after transfusion
- hidden or apparent defects of **disposable material / MD** used in donation, production and transfusion transfusion (like, leakages of filter housings, holes in collection bags, defects in apheresis material,...)
- problems with **equipment / instruments**
- deficiencies with **reagents** (for example, ELISA tests producing false negative results - sensitivity problem; or giving high numbers of false positive results - specificity problem; blood grouping antisera failing to give the correct phenotype; immuno-haematological in vitro diagnostics failing to detect weak allo-antibodies,...)



## PS05-2BC: Quality Indicators Q.I. Trend Analysis par mois en 2004



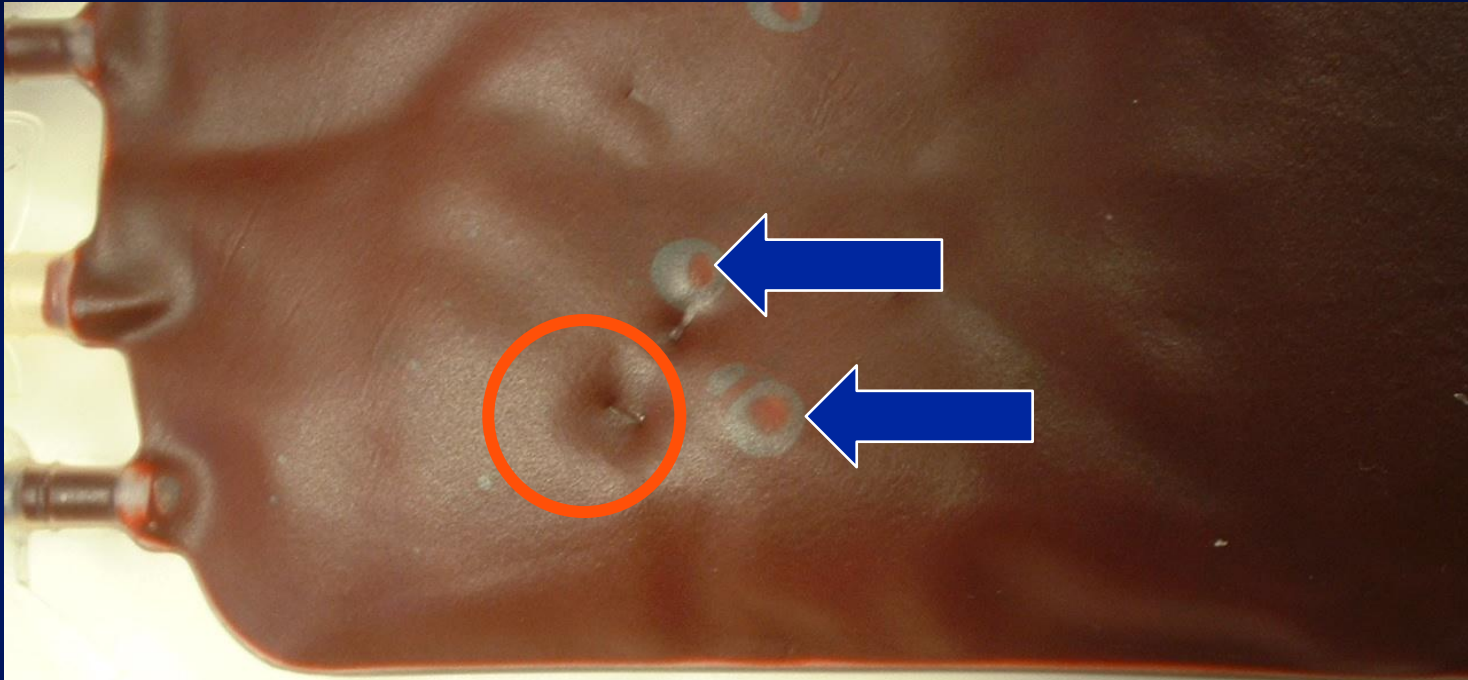
G:\HGW\DR\_FABER\SUIV104\PS05-QI4.CHT

new lot of filters

**CAPA:** defective batch returned; lot validation introduced

## *Alerts triggered by the field*

Early warning approach – application of precautionary principle

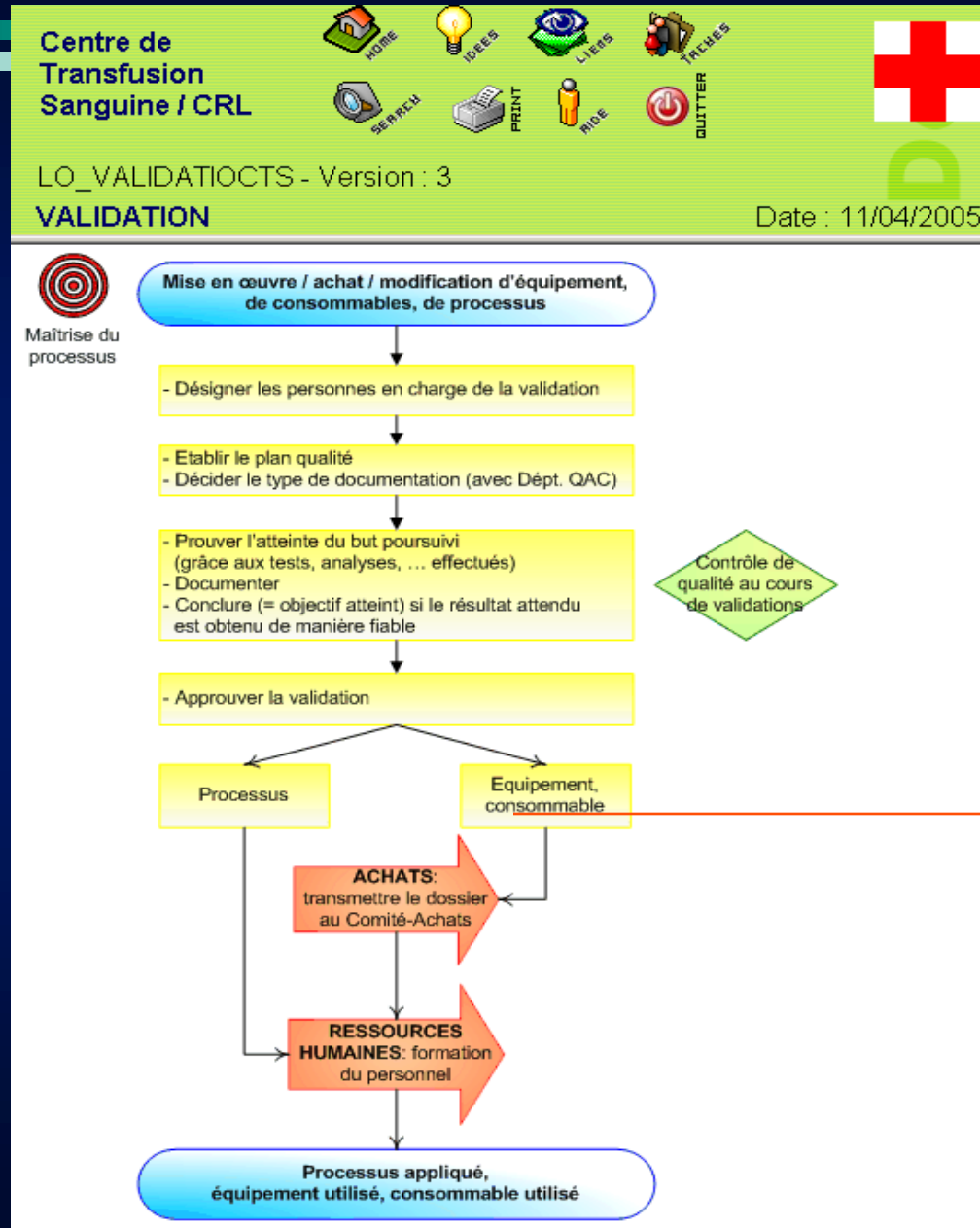


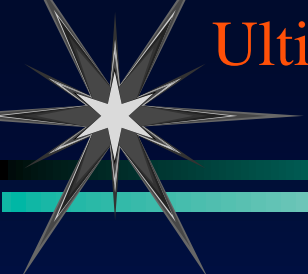
Micro-holes detected through lot validation

# QMS: CAPA – quick response

## Key materials:

- blood bags,
- apheresis kits,
- production disposables,
- reagents,
- etc...





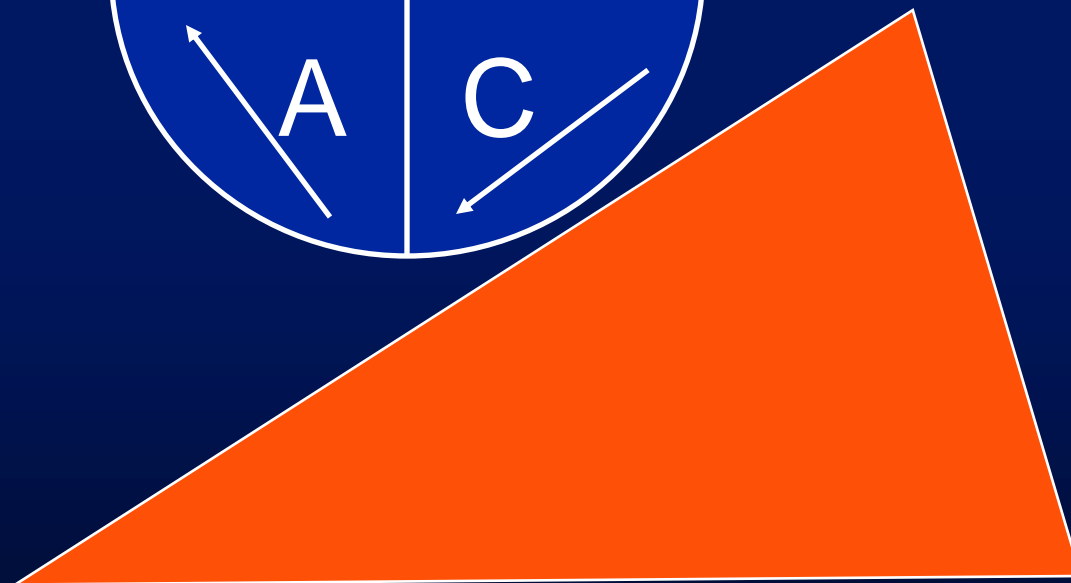
**Ultimate goal:** HV is a quality tool for continuous improvement of quality and safety in the blood chain

## Deming Q cycle

- **P**lan
- **D**o
- **C**heck
- **A**ct



**Q + S ↑ in tx**



BEs: reply, response and reaction - **narrow Q cycle**



For effective vigilance: *Comprehensive* vs. splitted approach  
*Pragmatic* vs. official character

In some countries, IBC are MP ( $\rightarrow$  PhV)

... but there is only an obligation to notify side-effects that are not yet known

In other countries, some IBC are MP (like FFP or “treated” FFP  $\rightarrow$  PhV), others are not ( $\rightarrow$  HV)

Medical devices influence the quality of BP/BC;  
if AR/AE appear are they to be reported into HV, PhV or materiovigilance?

*What matters?*

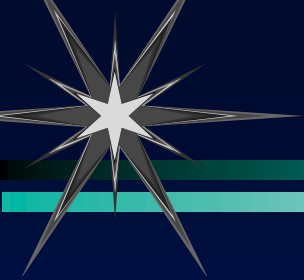
Responsiveness vs. competency, verification, validation





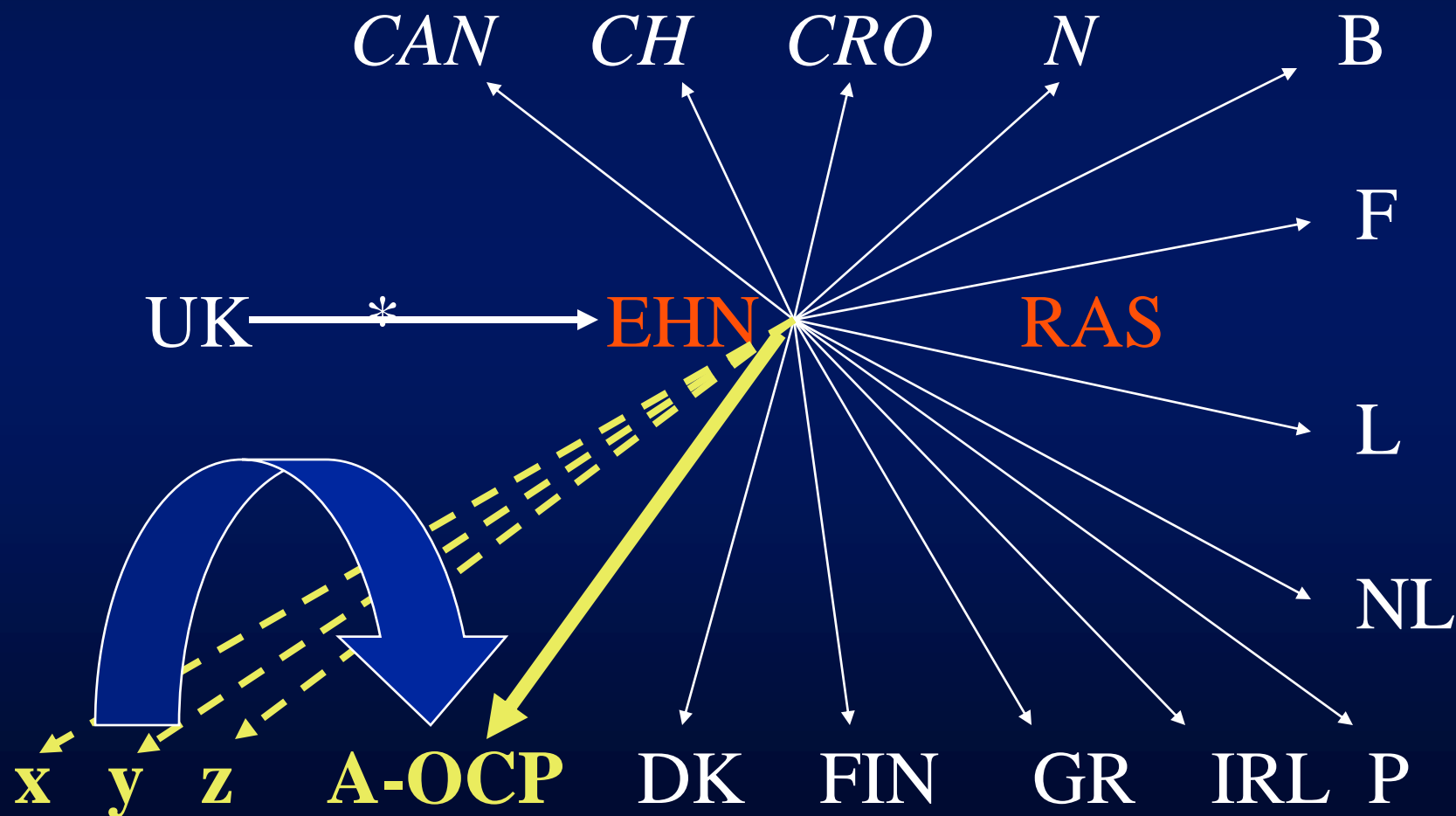
## FR: ANSM – ex-AFSSAPS: 8 Vigilances

- la pharmacovigilance pour les médicaments à usage humain et les matières premières à usage pharmaceutique
- la pharmacodépendance ou addictovigilance pour les substances psychoactives dont les stupéfiants et les psychotropes
- l'hémovigilance pour l'ensemble de la chaîne transfusionnelle du prélèvement du donneur au suivi post-transfusionnel du receveur de produits sanguins labiles
- la matéiovigilance pour les dispositifs médicaux et les produits thérapeutiques annexes
- la réactovigilance pour les dispositifs de diagnostic in vitro
- la biovigilance pour l'ensemble de la chaîne de greffe du prélèvement du donneur au suivi post-greffe du receveur d'organes, de tissus, de cellules d'origine humaine excepté le sang et les gamètes, et pour les produits thérapeutiques annexes
- la cosmétovigilance pour les produits cosmétiques
- la vigilance des produits de tatouages pour les produits de tatouages



RAS / Rapid Alert in IHN (32 members): 1/2 are not EU

*International* networking





## Why we need IHN-RAS:

*Field* triggered (through BEs)

*Early* warning approach

*Precautionary* principle

*Quick* reply and response time

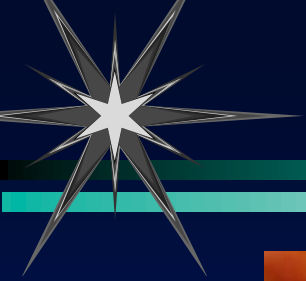
*Effective* reaction (implementation of CAPA)

*Comprehensive* approach (not compartmented)

*Pragmatic* character (not official, regulatory)

*International* networking (inclusive)

**→it helps to increase safety and improve quality  
of the entire blood chain**



Bon appétit for tonight!