The One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART™)

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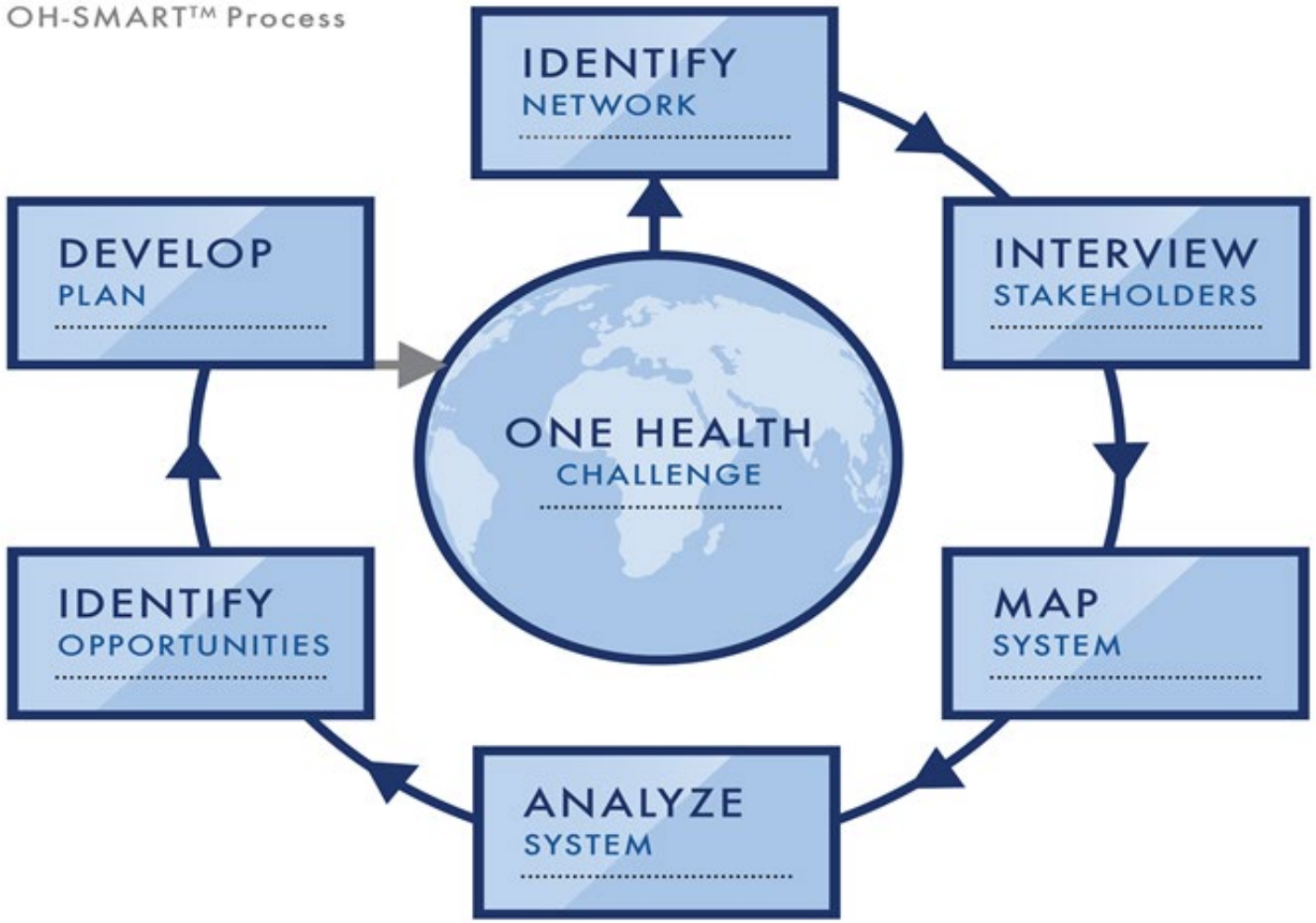
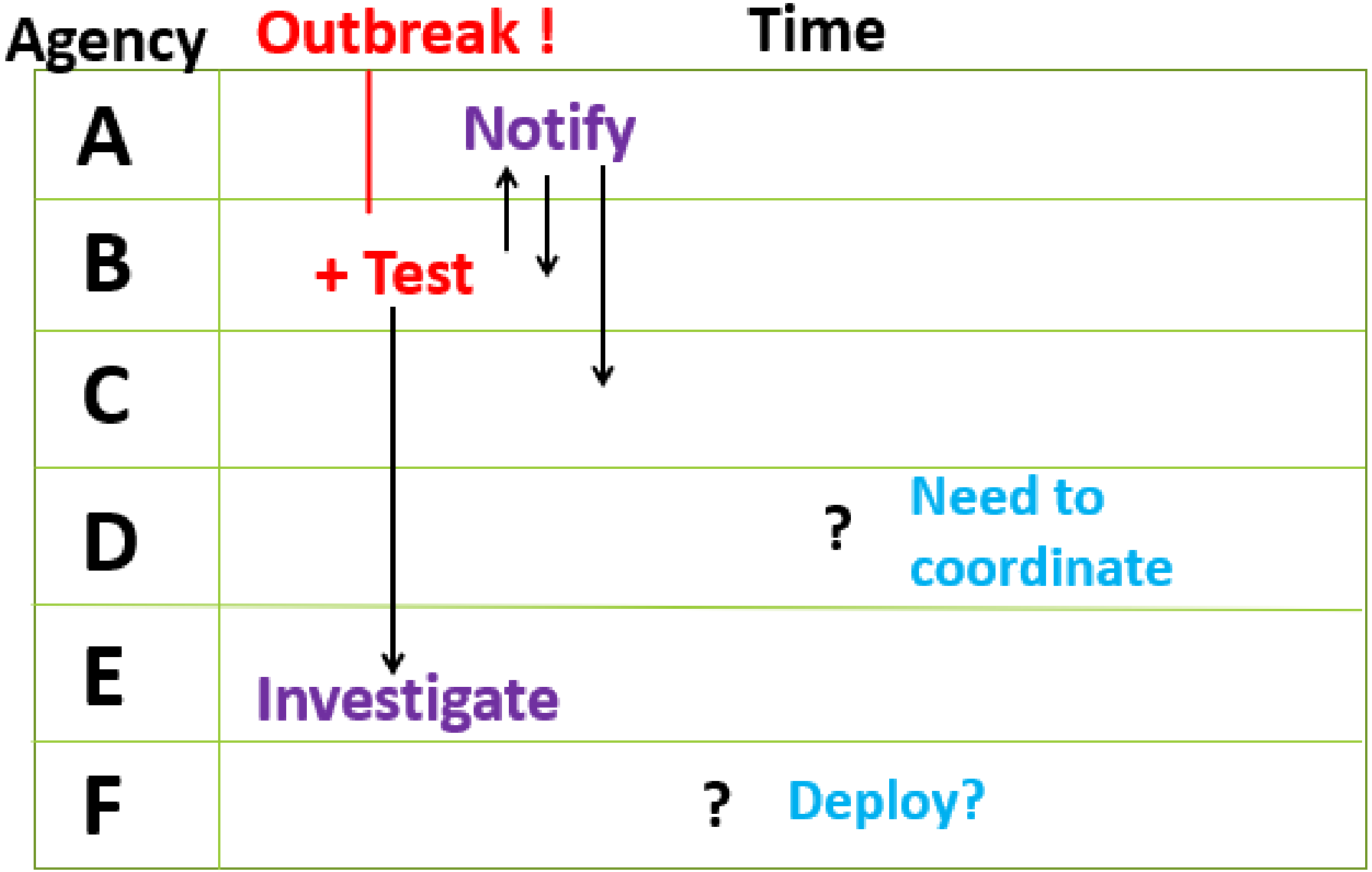
Background



Co-developed by USDA and University of Minnesota

Systems Mapping at a Glance



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Applied in 30 US states and 18 countries

Proactive:

- **AMR National Action Planning (Govt-led with FAO) - Cambodia, Laos**
- One Health Implementation Planning (Govt-led with P&R, FAO) - Ethiopia, Uzbekistan
- Zoonotic Disease planning (with USDA, CDC- ZDPT)- Pakistan, US
- **Zoonotic Disease Workforce Planning (OHW: OHCEA-led, P&R, FAO) - Rwanda, Uganda, Senegal, Cameroon, Tanzania, Ethiopia**
- Petting zoo zoonotic disease risk (State gov't led, with USDA)-US
- Climate change- related emergency planning (with USDA, Arctic Council-led)- Circumpolar countries
- Select agent planning (Govt-led, with DTRA, USDA)- Turkey
- **Rabies National Action Plan development (INDOHUN-led on own) - Indonesia**
- **Operationalizing OH at provincial level (INDOHUN-led) - Indonesia**
- Climate change disease risk (USDA-led) - US
- Food-borne illness rapid response planning (State Gov't led, with USDA)- US

Retroactive:

- AI After Action Review (with USDA)- US

Just in time:

- Ebola response (State Govt-led on own), Texas, US
- Chronic Wasting Disease coordination and collaboration (State-led, with USDA) - US

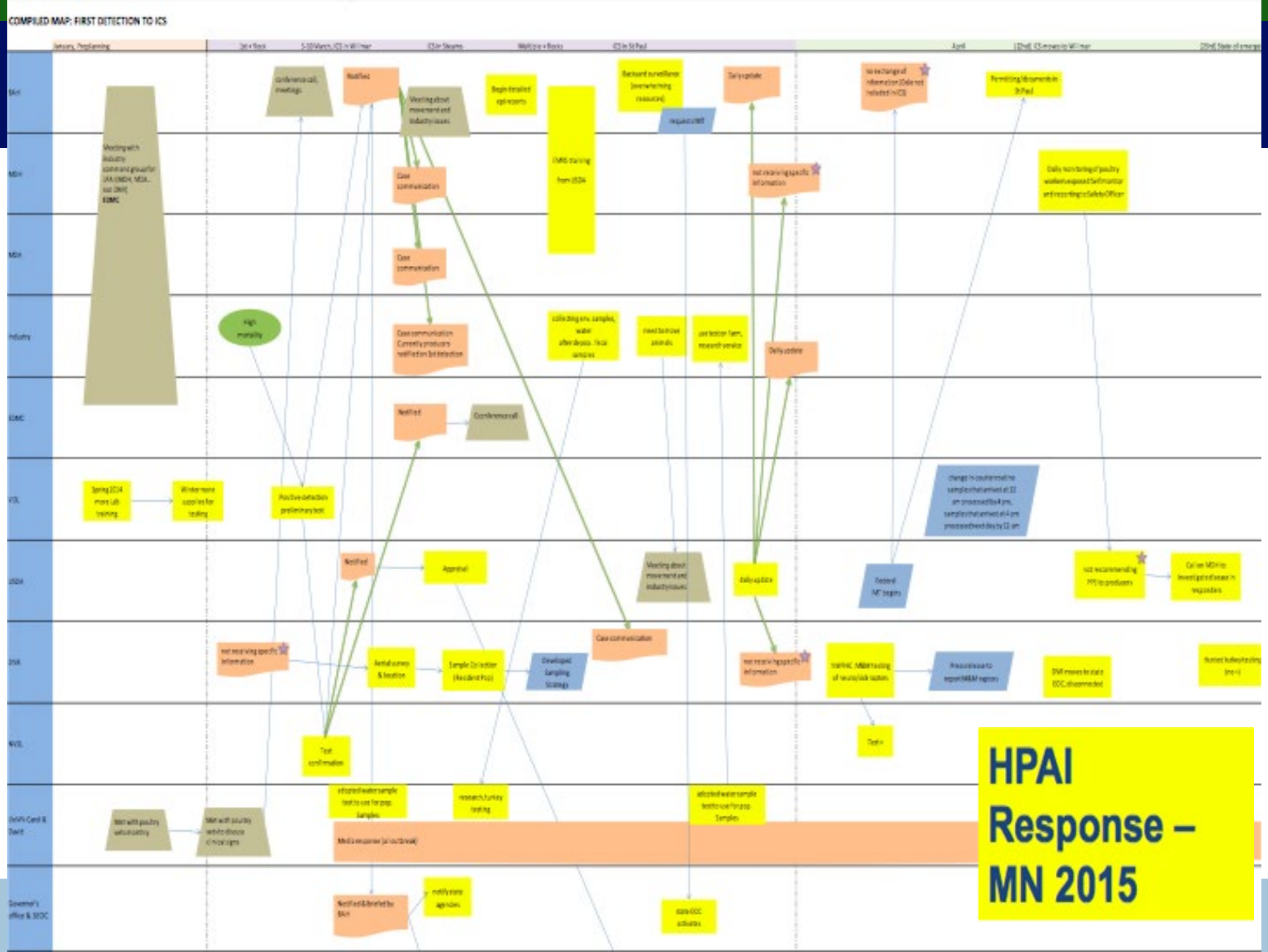
Value of Process Mapping

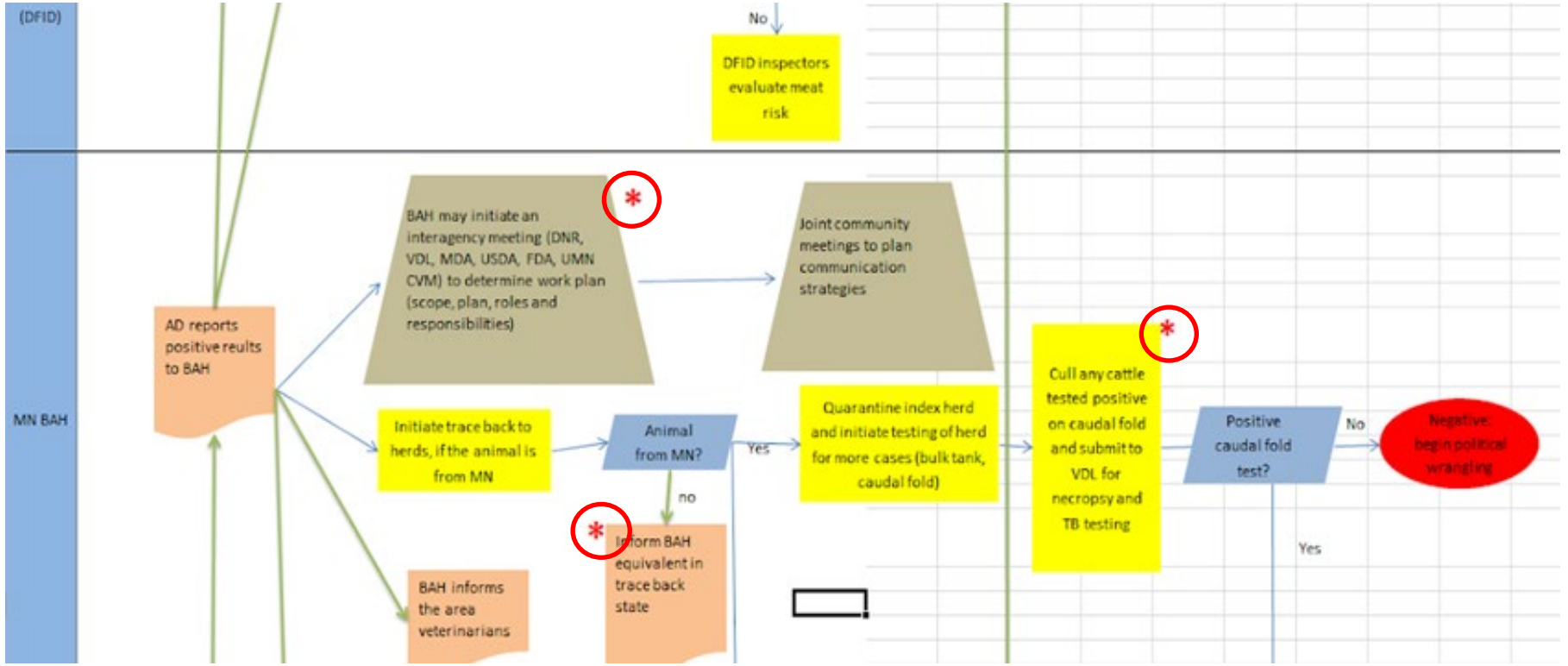
- It's **all about the process**
  - Value in not knowing every step or every player
- Viewing the system **'as is'**
  - There is some level of existing cross-sectoral interaction – both formal and informal
- **Opportunity**: Jointly build on the existing system
  - Mapping often leads to finding new stakeholders

Examples: Operational Applications

- MN HPAI Response (2015-2016)
- National Antimicrobial Resistance Action Planning (Lower Mekong)

110 poultry flocks
9.5 million birds
520 responders
$650 million
MINNESOTA RESPONDS TO AVIAN INFLUENZA


COMPILED MAP: FIRST DETECTION TO ICS
HPAI Response – MN 2015


(DFID)
MN BAH
No
DFID inspectors evaluate meat risk
AD reports positive reults to BAH
BAH may initiate an interagency meeting (DNR, VDL, MDA, USDA, FDA, UMN CVM) to determine work plan (scope, plan, roles and responsibilities)
Joint community meetings to plan communication strategies
Initiate trace back to herds, if the animal is from MN
Animal from MN?
Yes
no
Quarantine index herd and initiate testing of herd for more cases (bulk tank, caudal fold)
Cull any cattle tested positive on caudal fold and submit to VDL for necropsy and TB testing
Positive caudal fold test?
No
Negative: begin political wrangling
Yes
Inform BAH equivalent in trace back state
BAH informs the area veterinarians

MN HPAI Outcomes –

- Policies and Practices notification & information sharing
- Operational Framework for Multisectoral response revised animal health emergency response positions to identify those open to various disciplines/experts
- Improved Coordination dedicated position for public health on animal health response team
- Improved information sharing portal with different levels of access to facilitate sharing information about infected premises, quarantine zones, and movement restrictions

Antimicrobial Resistance Planning: OH-SMART in Lower Mekong

One Health Systems Mapping and Analysis Resource Toolkit

- OH Leadership and OH-SMART training Feb 2017
- OH-SMART workshop in each country
- Collaborating with FAO and WHO to support Antimicrobial Resistance (AMR) National Action Planning

Results

- Updated AMR National Action Plans and Road Maps.
- Themes and gaps identified for AMR systems
- Multi-sectoral agreement on gaps and resolutions and specific action steps identified to achieve resolutions.
- Action plans created

Why OH-SMART™?

- **Visualizes** the existing system
- **Applicable** and **adaptable** to any process
- **Platform** for positive interactive dialogue, creativity and innovation
- **Builds** shared leadership and vision across disciplines, sectors, cultures
- Moves One Health from **theory to application**

One Health Systems Mapping and Analysis Resource Toolkit

For more information:

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