



United States Department of Agriculture

# AVIAN INFLUENZA & NEWCASTLE ACTIVITIES



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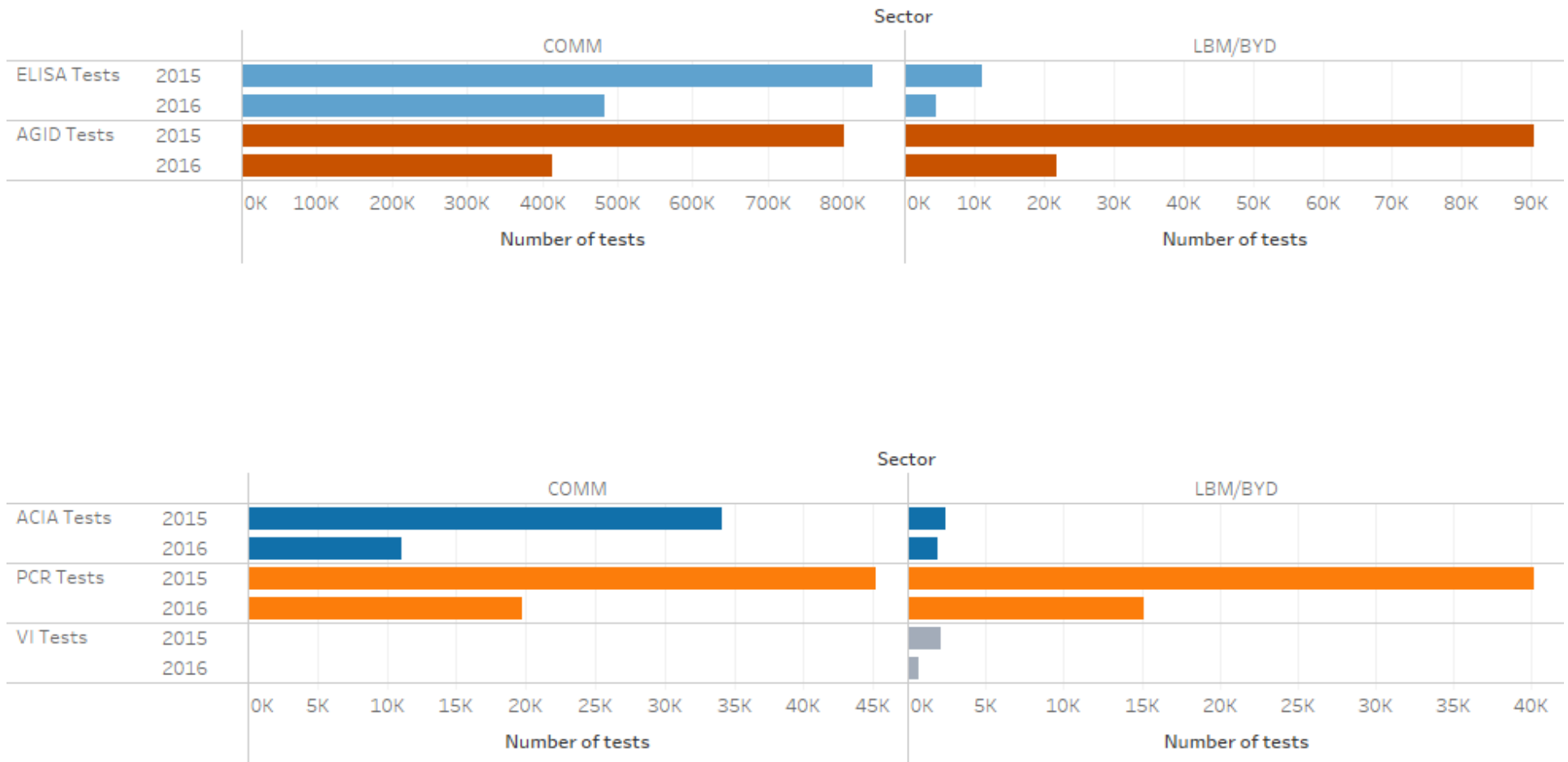
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SECTION HEAD - AVIAN, DIAGNOSTIC VIROLOGY LABORATORY  
U.S. DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
VETERINARY SERVICES  
NATIONAL VETERINARY SERVICES LABORATORIES

OCTOBER 2016

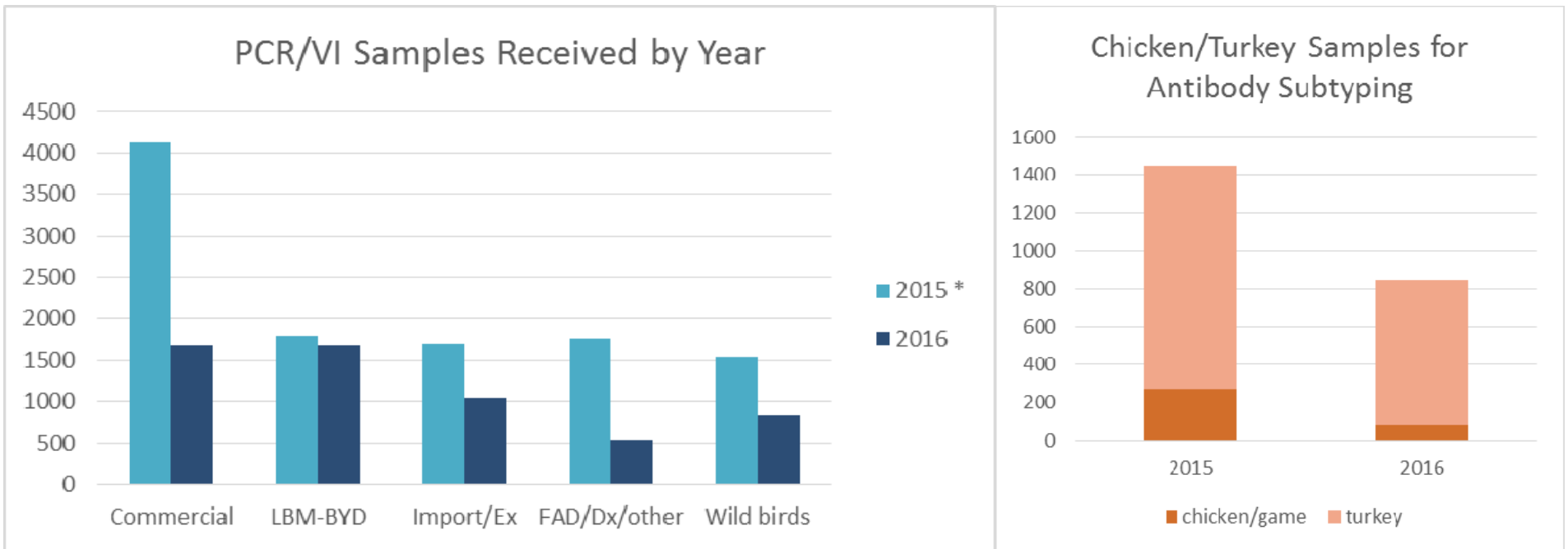


# Avian Health Cooperative Agreement Testing: Estimated number of tests by sector and calendar year





# Samples received for testing





# 2015-16 H5/H7 Commercial Events

excluding H5 2.3.4.4 HPAI 2015

Date	State	Surv stream	initial sample	Subtype	Species	Action	Trade affected
Mar-15 REPORTED 2015 USAHA	CA	COMM	swab	H7N3 LPAI	turkey	Quarantine, depopulation, C&D, 10 km surveillance	Japan, Korea, Taiwan, China
Jan-16	IN	COMM	swab	HPAI/LPAI H7N8	turkey	Quarantine, depopulation, C&D, 10 km surveillance, 20km for wild birds	Mexico, Canada, and Japan limited exports, EU and Korea restricted at the county level
Apr-16	MO	COMM	swab	LPAI H5N1 (AM)	turkey	Quarantine, depopulation, C&D, 10 km surveillance	Japan, Korea, Taiwan, China












# 2015-16 H5/H7 LBM/BYD Events

excluding H5 2.3.4.4 HPAI 2015

Date	State	Surv stream	initial sample	Subtype	Species	Action	Trade affected
<b>Feb-15</b> REPORTED 2015 USAHA	<b>NJ</b>	LBM	swab	H5N1 LPAI (AM)	chicken	Quarantine & selldown/routine slaughter, C&D, traces	Japan
<b>Oct-15</b> Not on 2015 USAHA	<b>PA</b>	LBM	swab	H7N7 LPAI (AM)	mixed poultry and waterfowl	Quarantine & selldown/routine slaughter, C&D, traces	None
<b>Oct-15</b> Not on 2015 USAHA	<b>MI</b>	BYD	swab	H5N2 LPAI (AM; seq)	mixed poultry and waterfowl	Quarantine, depopulation, C&D, 10 km surveillance	Japan
<b>Jun-16</b>	<b>NJ, NY, PA</b>	LBM	swab	H5N2 LPAI (AM; seq)	Muscovy ducks traced to single distributor/ source flock	Quarantine & selldown/routine slaughter, C&D, traces	Japan, Hong Kong



# Non H5/H7 IAV Summary for Poultry

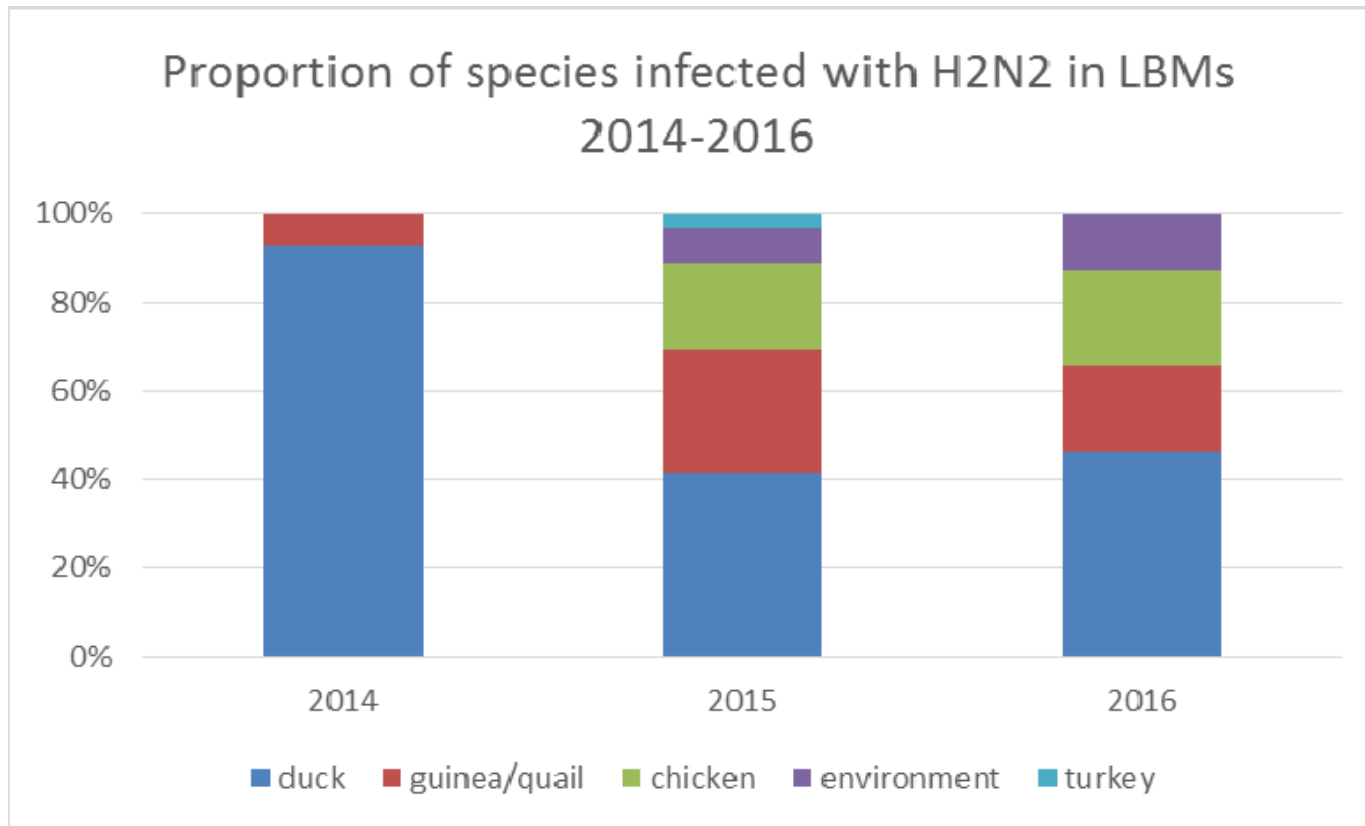
Turkey IAV(s)	2015	2016	LBM H2N2	2015	2016
IA	H1, H3		CT	 3	 4
IL	H3	H3	MA	0	 1
IN		H1*, H3	NJ	 7	 13
MI		H1*	NY	 8	 5
MN	H1	H1*, H3	PA	 3	0
MO		H1*	RI	0	 1
NC	H1	H3	<b>NJ, PA (ducks)</b>		<b>H1N9</b>
SD		H1, H3	<b>CA</b>		<b>H3N2 (quail)</b>
					<b>H1N1</b>
					<b>H9N2 (pheasant)</b>

\* H1N1pdm09

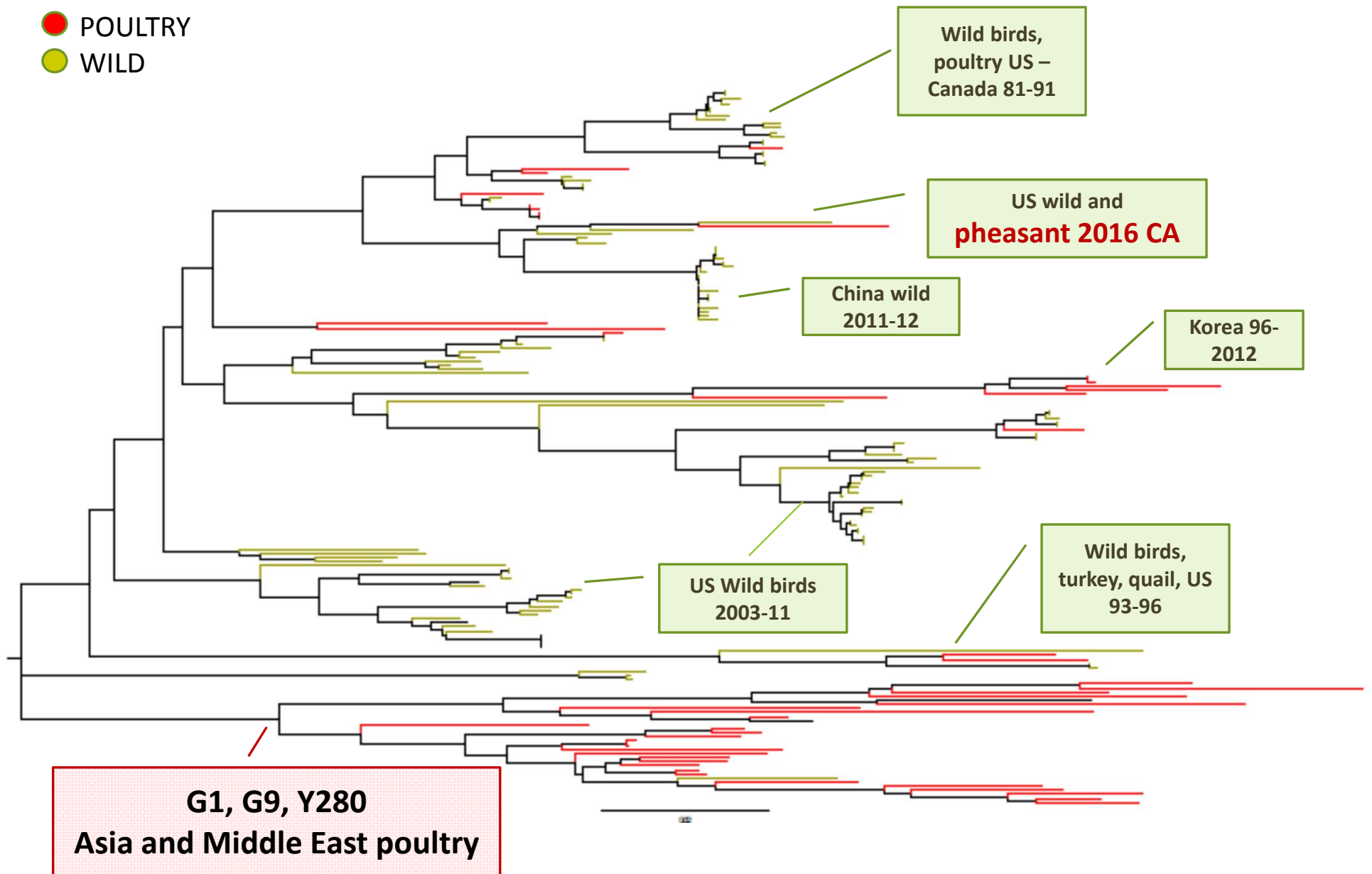
## 2016 Antibody Detection LBM-BYD

Month	State	Species	H-type	N-type
MAR	MA	Chicken	H7	N3
APR	IA	Pheasant	H9	N2

# Adaptation? H2N2



- POULTRY
- WILD



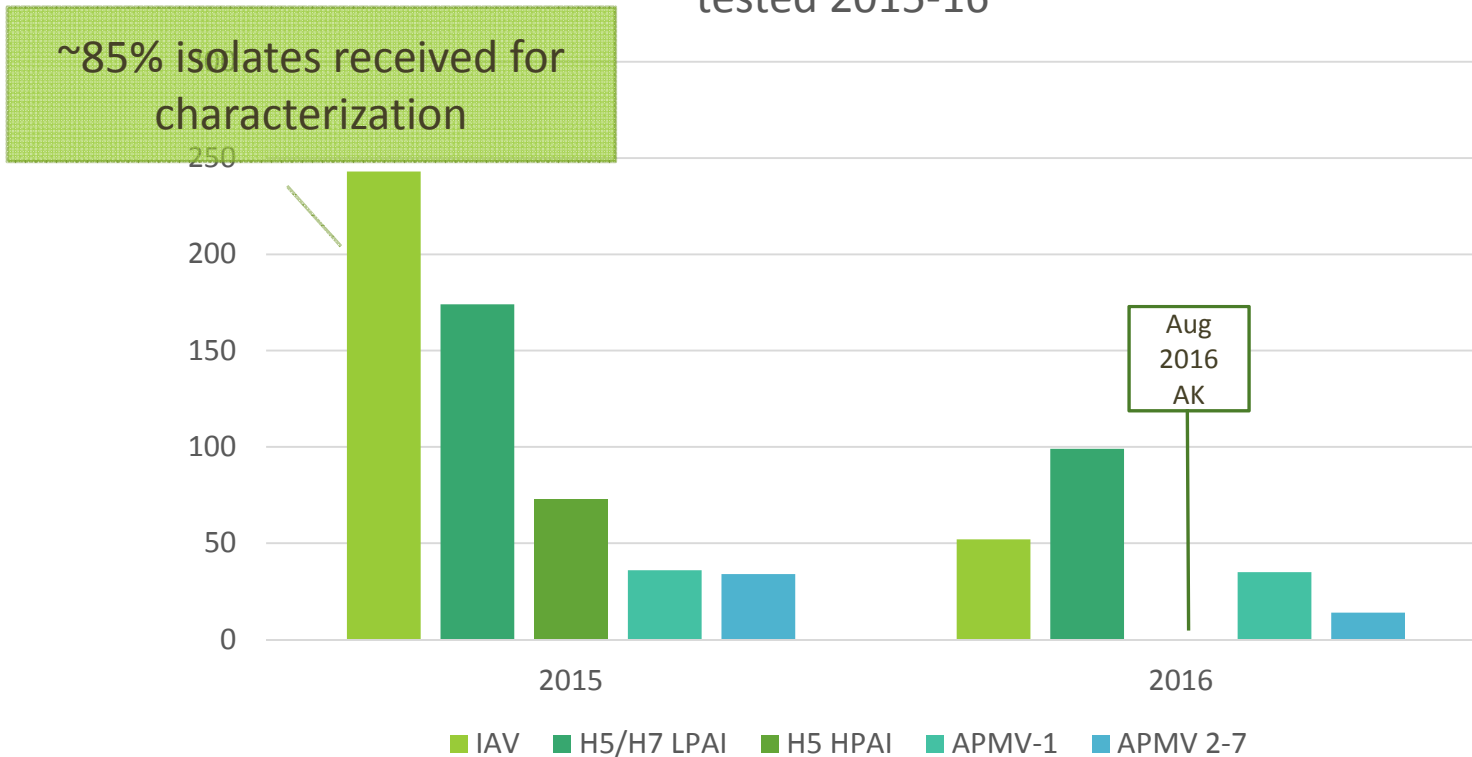




# Wild Bird Summary 2015-16

WS samples received in real time – other sample streams may not be from current year

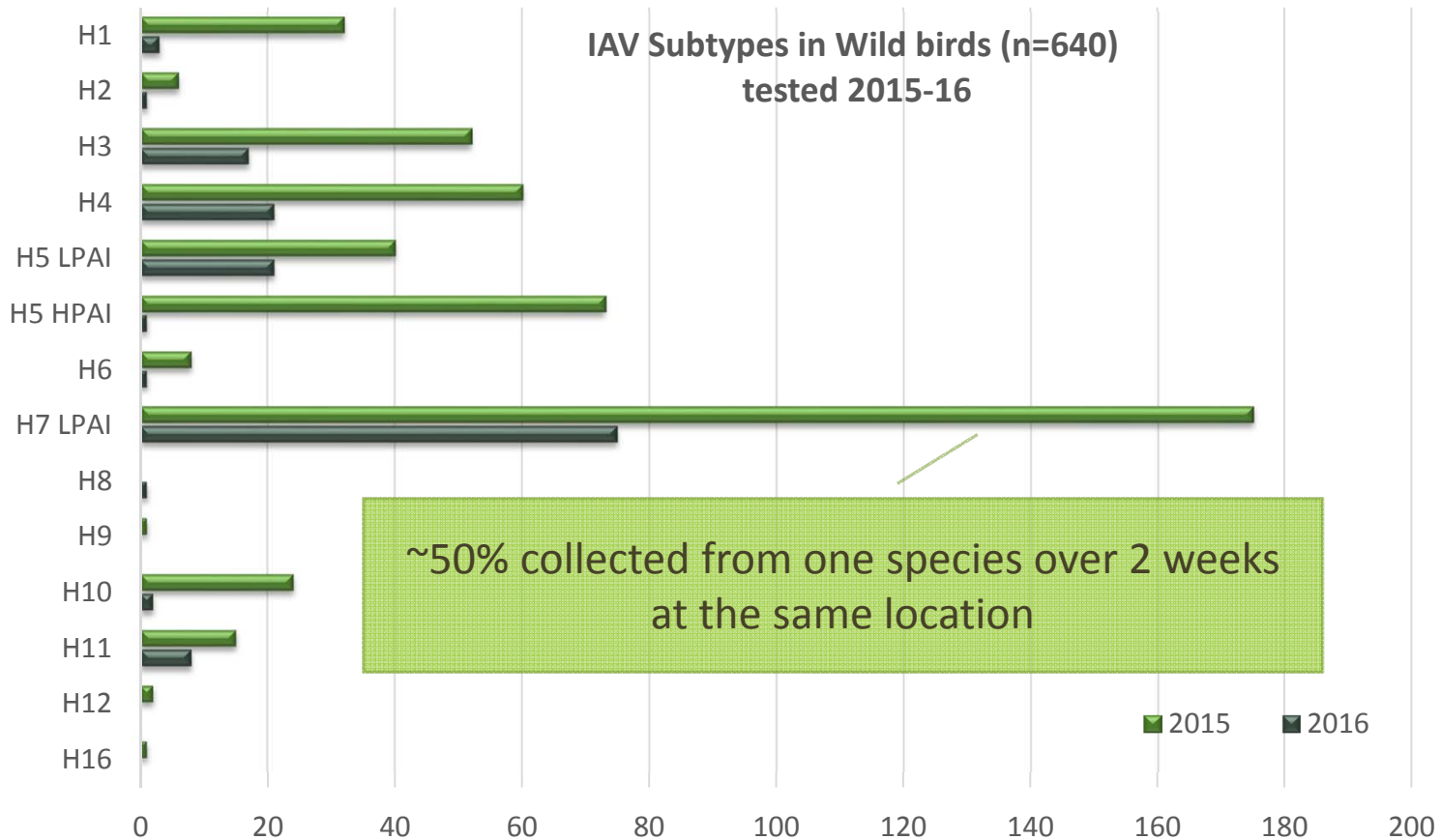
Wild birds IAV & APMV-1 (n=761)  
tested 2015-16





# Wild Bird Summary 2015-16

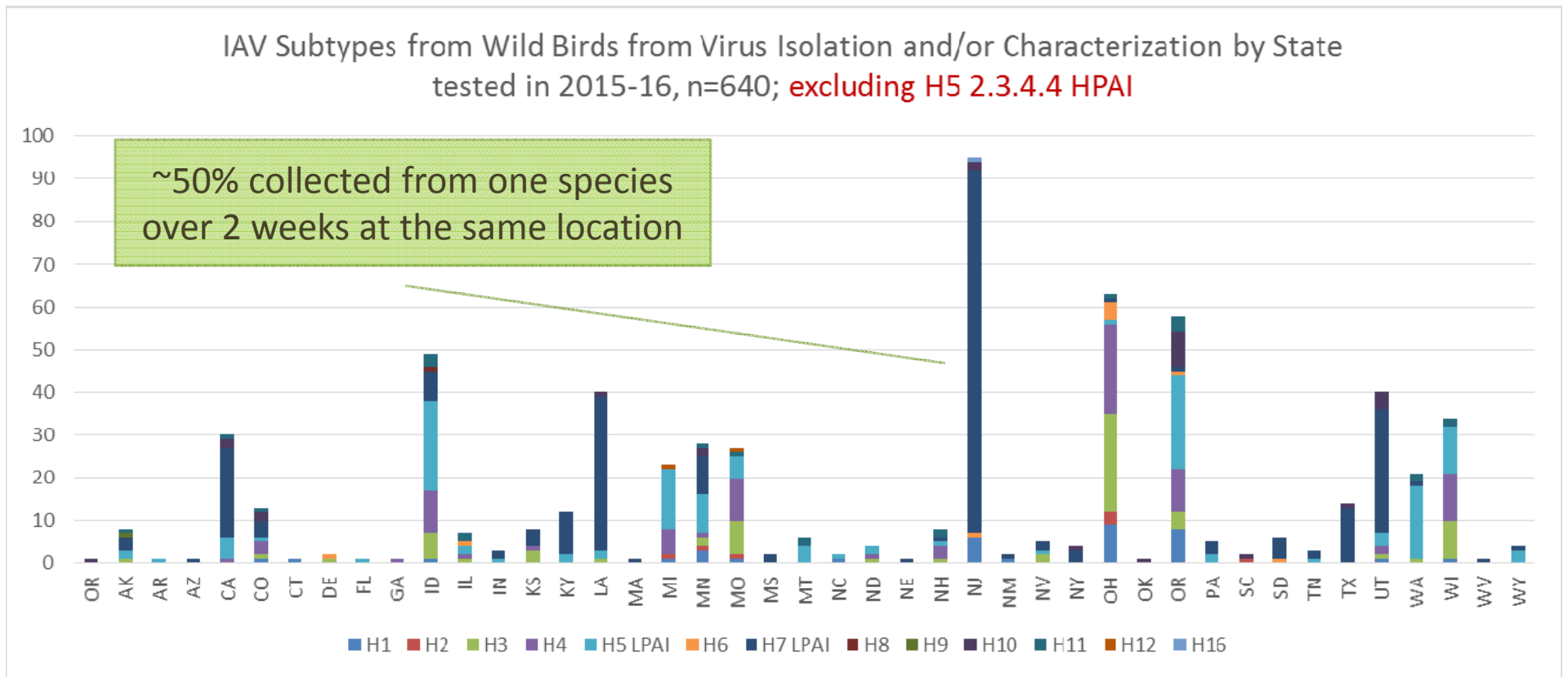
WS samples received in real time – other sample streams may not be from current year





# WB Subtype by State

WS samples received in real time – other sample streams may not be from current year





# APMV Summary

LBM-BYD	2015	2016
APMV1(loNDV)	90	66
APMV-6	2	2
<b>IMPORT (pet)</b>		
APMV1	LoNDV	0
other APMV	APMV3	APMV2 (6 acc)

### Other APMV in WILD birds

2016 vNDV cormorants in IL, MN, WI

APMV-1 in LBM isolated from the environment, poultry and domestic waterfowl represent low virulent vaccine and wild bird lineage viruses

PPMV-1	2015	2016
AZ	2	0
CA	9	16 (+wild)
DE	1	3
ID	1	0
MN	0	3
NY	2	0
OR	1	0
PA	3	0
RI	0	1
WY	9	11 (wild)

Show, racing, and rock pigeons – and Eurasian collared doves (wild)

## For Routine AI Surveillance:

Determine virus status of the flock for non-negative results from AGID, ELISA (unvax) or ACIA tests: collect swab samples for PCR testing

NAHLN / NPIP FORWARDS non-negative samples

NVSL CONFIRMS (molecular testing or HI/NI for serology)

NVSL SEQUENCES for full subtype and LPAI vs HPAI

If HPAI suspected, depopulation may be initiated where:

- **H5 or H7** is detected at a NAHLN lab from a flock meeting **HPAI case definition** AND there is **agreement** between state and federal officials

AND forward samples to NVSL



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