

# Market Haul Sanitation



**Industry, State, & Federal Partnership**

**Market Haul Sanitation Work Group (Spring 2022)**

*Rodger Main*

# Definitions

- **US SHIP Resolutions:** Working group or project approved by majority vote at the US SHIP House of Delegates to further explore specific issues to further inform US SHIP program content and direction.
- **US SHIP Program Standard:** Requirements to be met or exceeded by enrolled producers and slaughter facilities to be certified in US SHIP, as approved by majority vote at the US SHIP House of Delegates.



## Guiding Principles

- Don't recreate the wheel
- Keep simple
- Broadly inclusive
- Scalable & flexible
- Synergistic with other FAD preparedness efforts
- Founded on sound & practical science

## Litmus Test

- Does it improve the status-quo for FAD preparedness?
- Will a broad spectrum of producers/packers agree to it?
- Can it be implemented across the full spectrum of the US pork industry and all states?
- Can it be improved and updated over time?

**Building a foundational platform for swine health**

## *2021 Resolution #5: Sanitary standards of transportation to/from terminal markets*

The US SHIP House of Delegates requests the commissioning of a working group centering on:

- 1. Quantifiably understanding the status-quo of the standards of practice and existing infrastructure for cleaning and disinfecting trailers returning from terminal points concentration.
- 2. Identifying existing production systems and supply chains routinely cleaning and disinfecting all trucks leaving terminal points of concentration prior to returning to farm sites to gauge best practices, costs, and infrastructure requirements.
- 3. Obtaining stakeholder sentiment from a broad range of producers and slaughter facilities across the country.
- 4. Preparing a summary of findings and formulating a set of recommendations to be presented and considered at the US SHIP HOD in 2022.

# Market Haul Sanitation Work Group

## PRIVATE INDUSTRY (46)

Grant Allison, Walcott Veterinary Clinic

Tom Barragy, Brookestone Truckwash

Mary Battrell\*, Smithfield

Daniel Boykin, Cactus Feeders

Nick Cullen, Eichelberger Farms

Laura Dalquist, Swine Vet Center

Don Davidson\*, Cooper Farms

Matt Davis, Hord Family Farms

Josh Duff, Country View Family Farms

Lauren Glowzenski, TriOak Foods

Cara Haden, Pipestone

Katie Hanigan, Smithfield

David Hanneman\*, Christensen Farms

Melissa Hensch\*, The Maschhoffs

Jessica Higgins, Kalmbach Feeds

Bill Hollis, Carthage System

Clark Huniker – Fairmont Vet Clinic

Jason Kelly, Suidae Health & Production

Seth Krantz, Tosh Pork

Tiffany Lee\*, Clemens Food Group

Joe Locke\*, Seaboard Foods

Duane Long, 4-Star Veterinary Services

Jeff Johnson, Tyson

Dylan Lape, Pork Veterinary Services

Hunter Thomas, Thomas Livestock

Pete Thomas\*, Iowa Select Farms

A Vennekotter, Prestage Farms

David Wade, Hanor

Jamie Williams, Hog Slat

Barry Wiseman, Triumph Foods

Adam Wixtead, Hord Family Farms

Joe Wolfe, JBS

Darin Madson, JBS

Christine Mainquist-Whigham\*, Pillen Family Farm

Barb Masters, Tyson

Joel Nerem, Pipestone

Tom Petznick, ArkCare

Ty Rosburg\*, Rosburg Livestock

Brandon Schafer, Schafer Farms

Peter Schneider, Innovative Ag Solutions

Mark Schwartz\*, Schwartz Farms

Cary Sexton, TDM Farms

Terri Specht, Heimerl Farms

Michelle Sprague, AMVC

Greg Stephens, Prestage Farms

Jesse Sumner, Prestage Farms

## STATE/FEDERAL/& National Industry Organization (9)

Lisa Becton, National Pork Board

Joyce Bowling-Heyward, USDA APHIS

Jeff Kaisand, Iowa State Veterinarian

Katie Rose McCullough, North American Meat Institute

Michael Neault, South Carolina State Veterinarian

Dustin Oedekoven, National Pork Board

Kevin Petersburg, USDA

Lisa Rochette, USDA APHIS

Kelli Werling, Indiana Board of Animal Health

## UNIVERSITY (1)

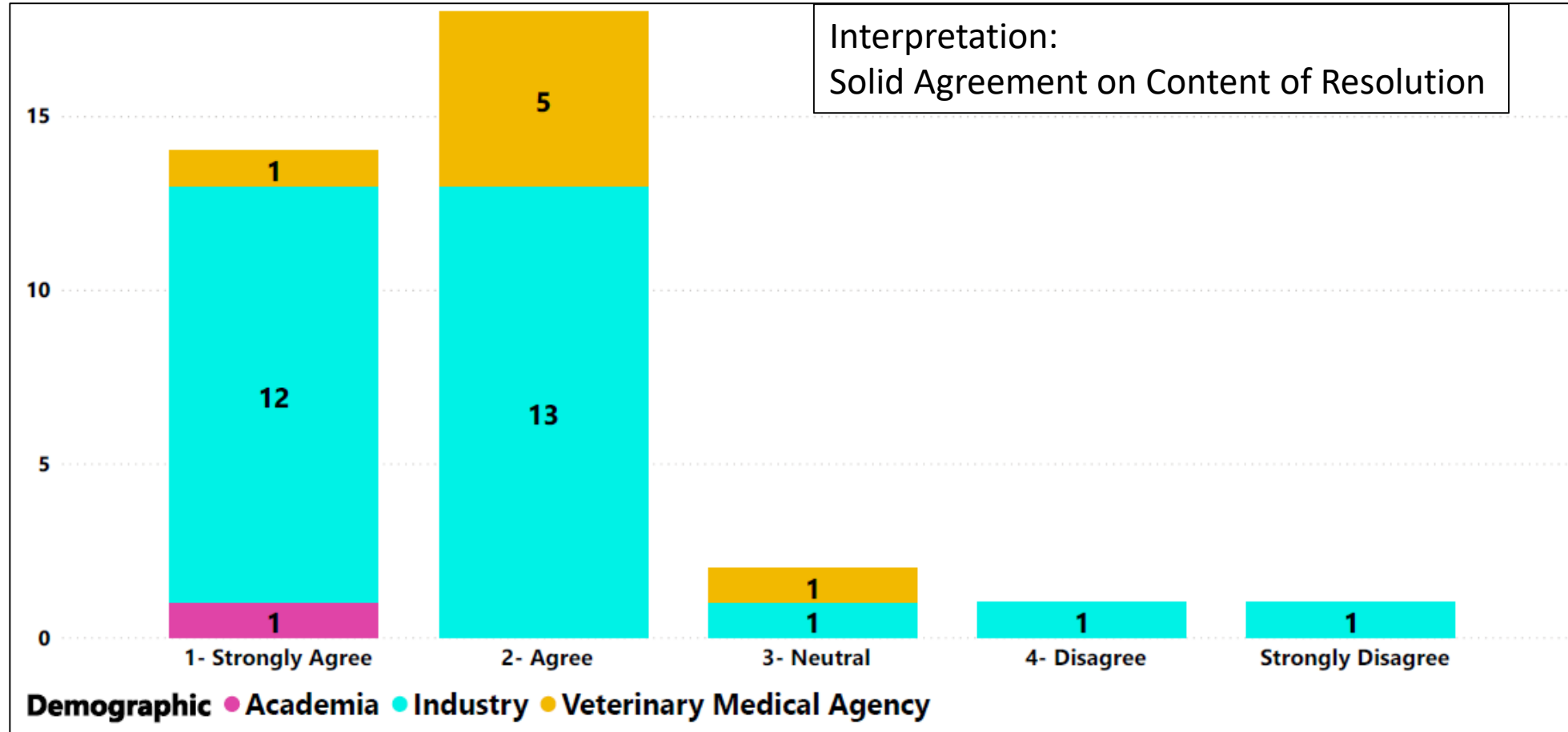
Rodger Main, Iowa State University

Listing of individuals solicited for participation

Tier I\* and Tier II



I believe the items raised in the 2021 US SHIP Resolution #5, entitled “Sanitary standards of transportation to/from terminal markets”, as being a reasonable description of status-quo in the context of the greater expanse of the US Pork Industry.

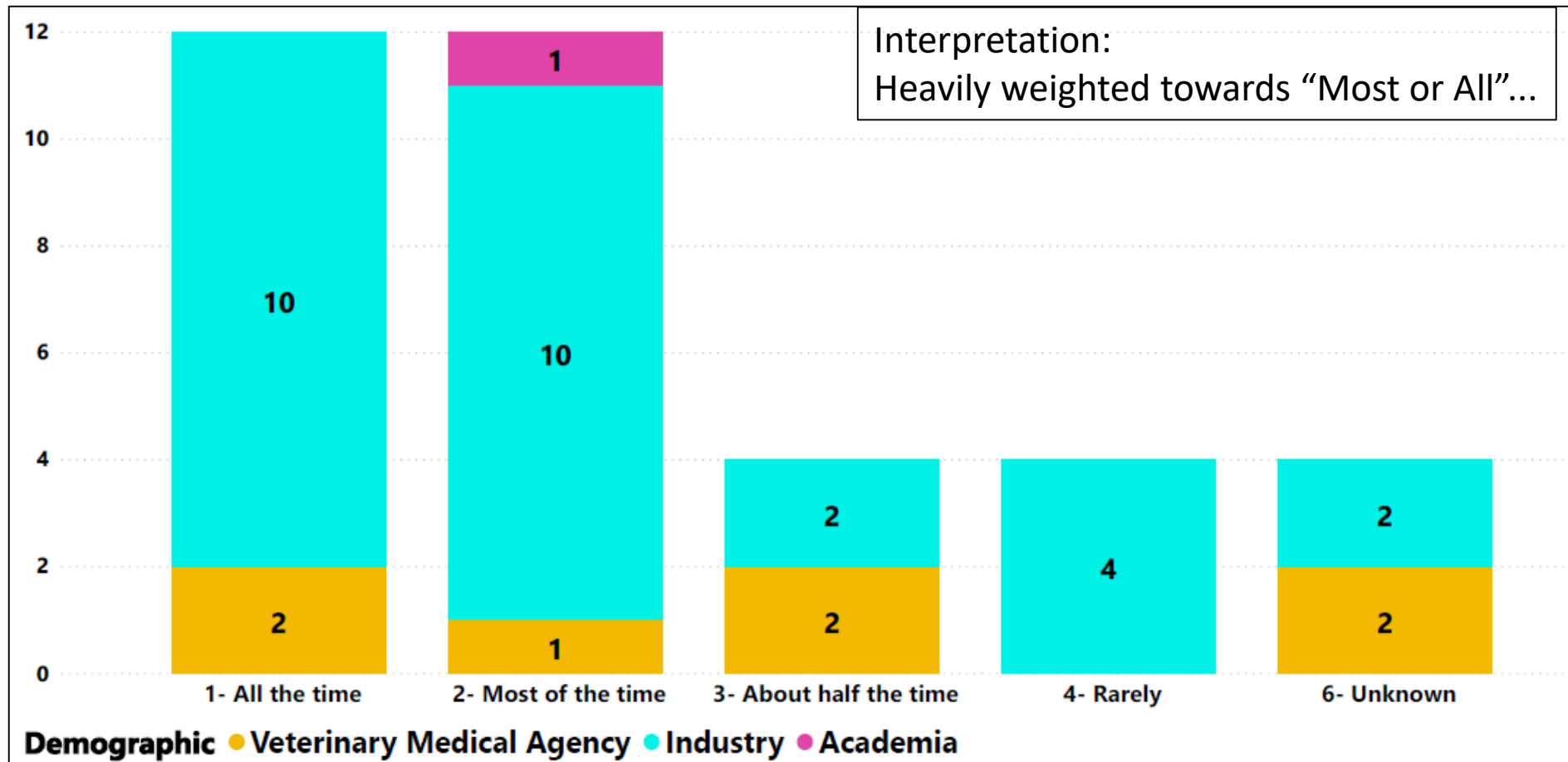


# Current Standards of Practice and Estimated Costs

**Objective #1:** Quantifiably understand the status-quo of the standards of practice and existing infrastructure for cleaning and disinfecting trailers returning from terminal points of concentration.

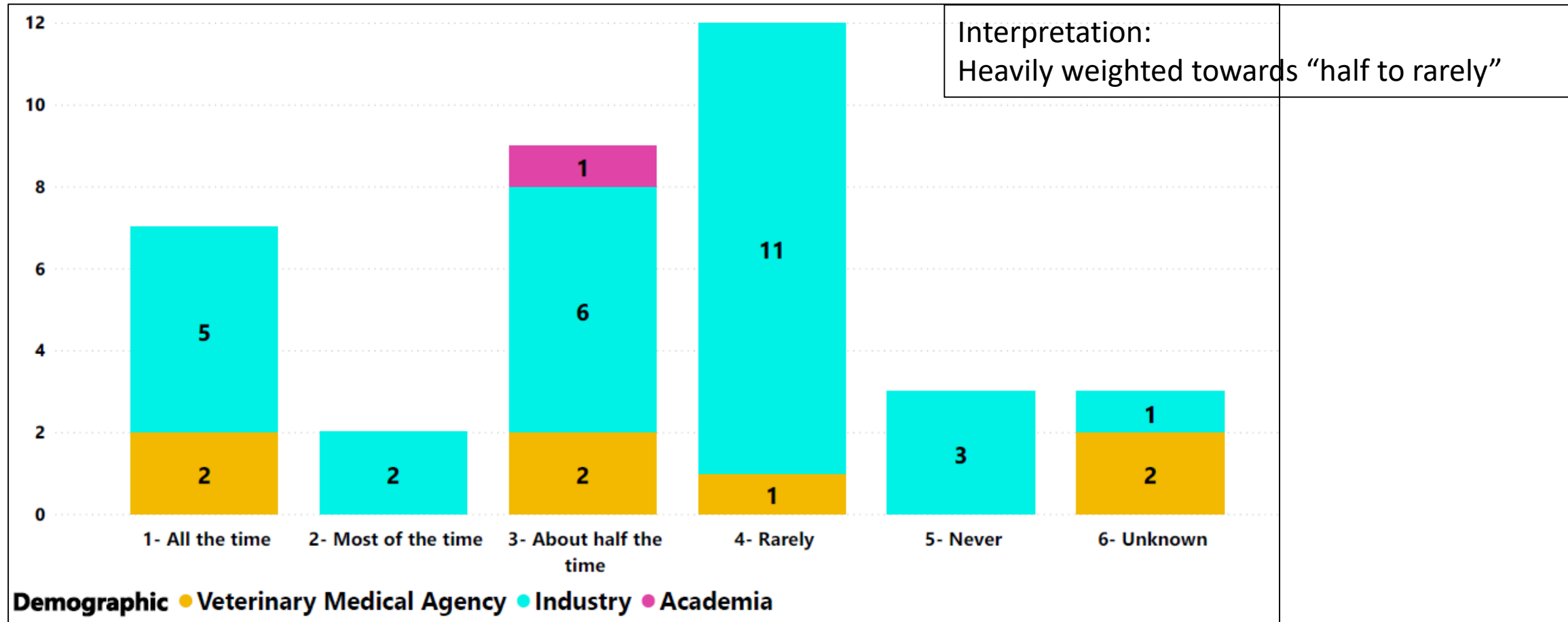


When transporting *top (graded) loads* from GROWING PIG sites to terminal points of concentration (i.e., slaughter facility, buying station, cull market, etc.): Livestock trailers being used to pick-up *top (graded) loads* of pigs from GROWING PIG sites have been cleaned and disinfected since last returning from a terminal point of concentration.

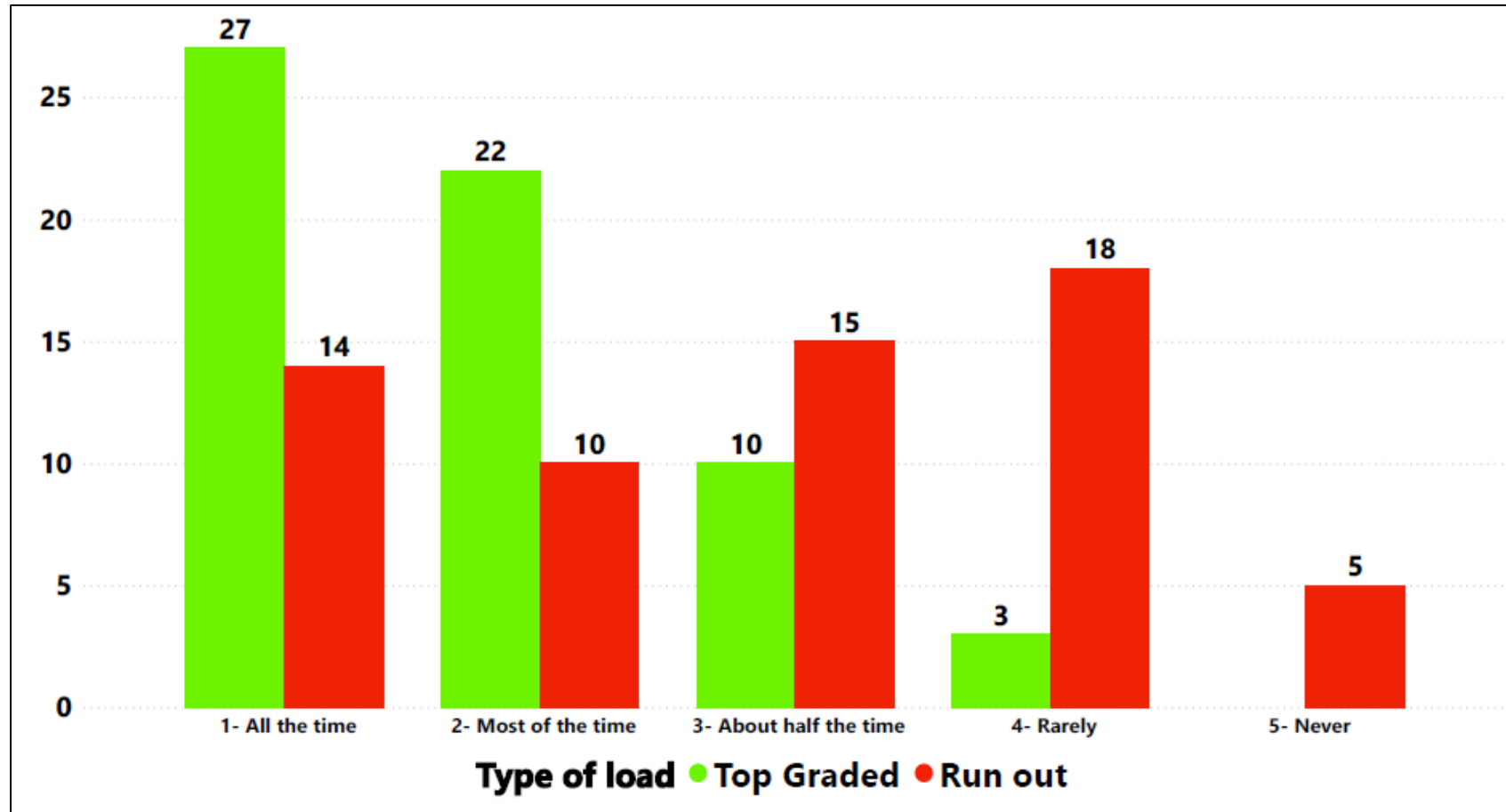




When transporting *run out loads* from GROWING PIG sites to terminal points of concentration (i.e., slaughter facility, buying station, cull market, etc.): Livestock trailers being used to pick-up up *run out loads* from GROWING PIG sites have been cleaned and disinfected since last returning from a terminal point of concentration.



When transporting *top (graded) loads (green) and run out loads (red)* from GROWING PIG sites to terminal points of concentration (i.e., slaughter facility, buying station, cull market, etc.), livestock trailers being used to pick-up top (graded) loads of pigs from GROWING PIG sites have been cleaned and disinfected since last returning from a terminal point of concentration?

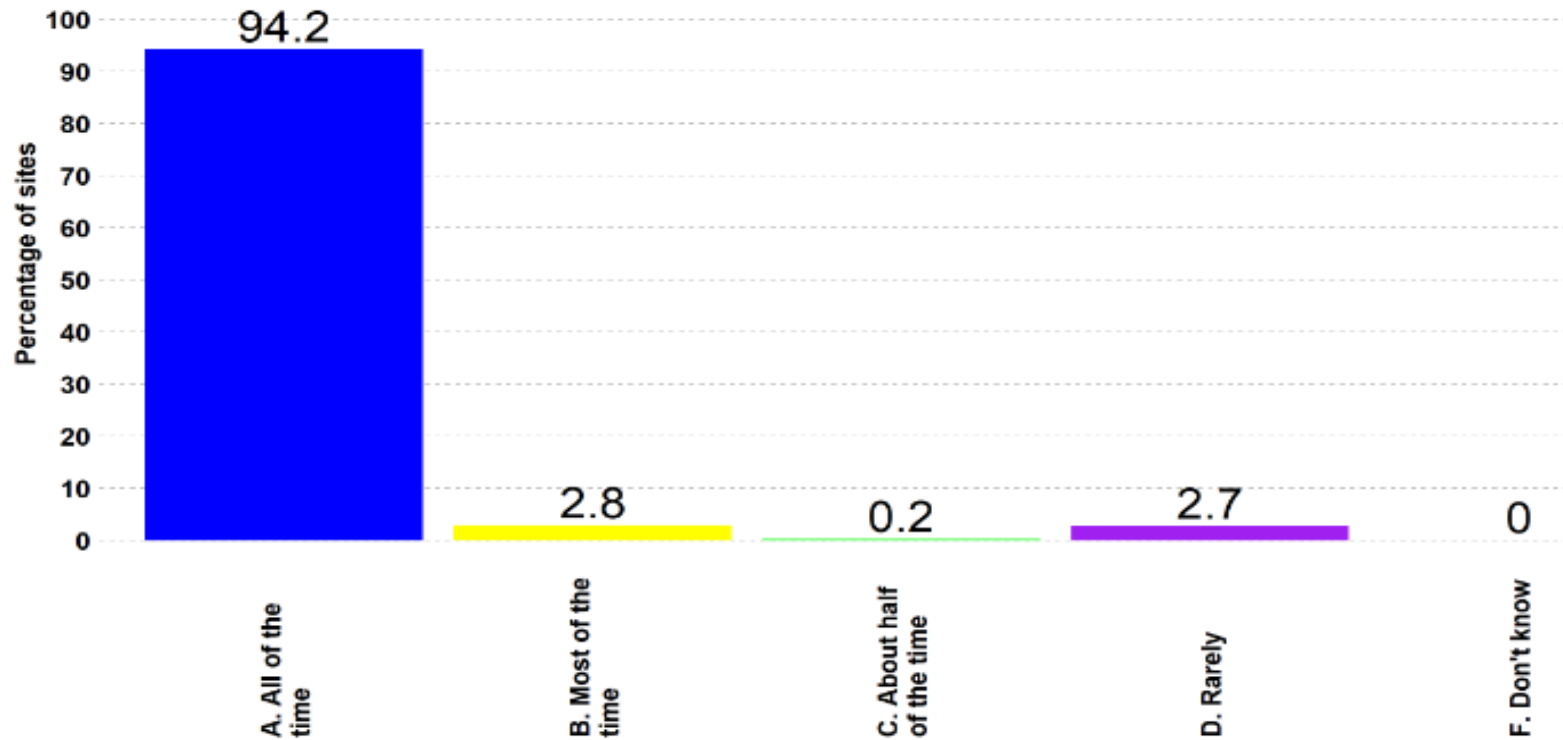


Survey of Sampling of 65 US Swine Veterinarians speaking to their estimate of practice in the region of the US in which they operate.

(April 2022)

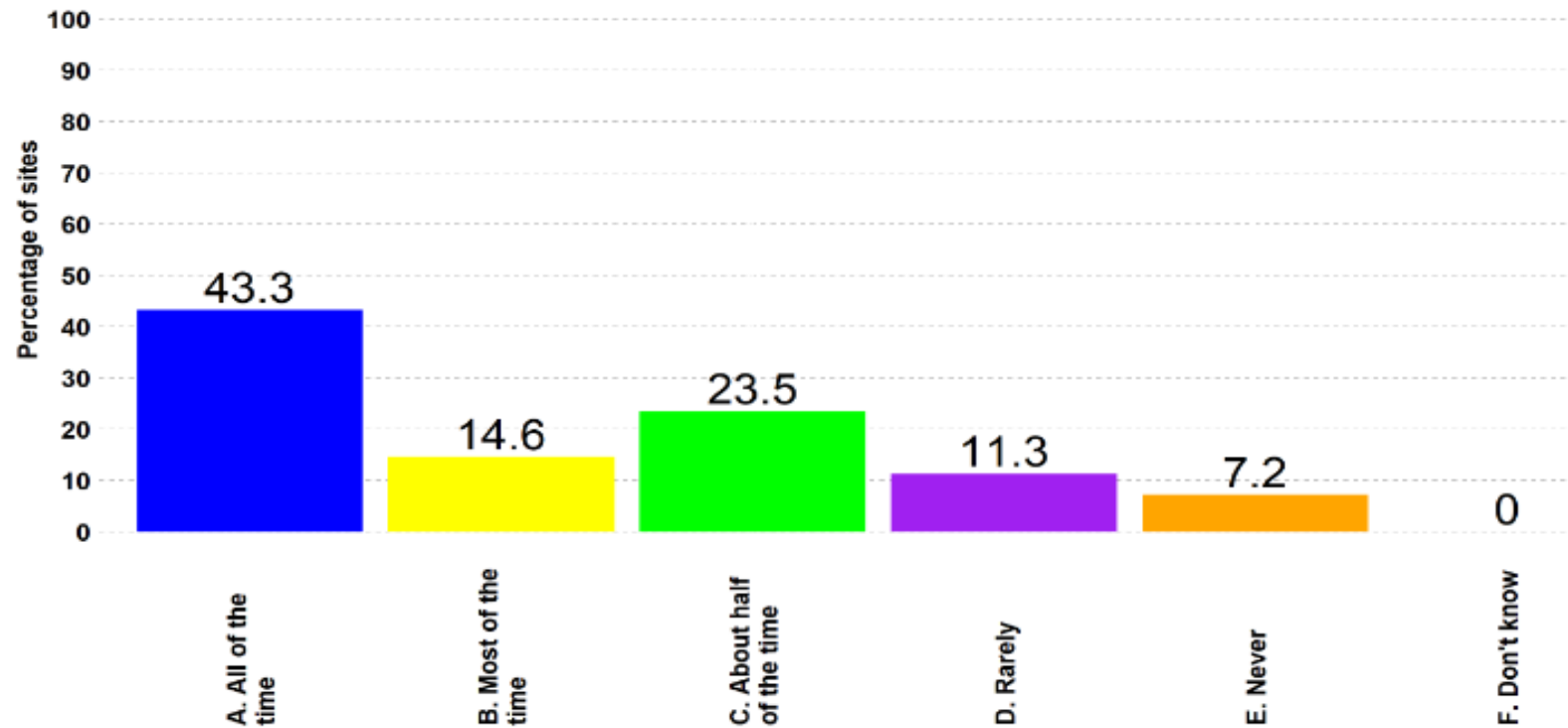
Interpretation:  
Consistent with US SHIP Working Group Responses

# How frequently pick-up trailers were washed before returning from point of concentration to growing pig sites – Top Grade



US SHIP Enrollment Survey Data

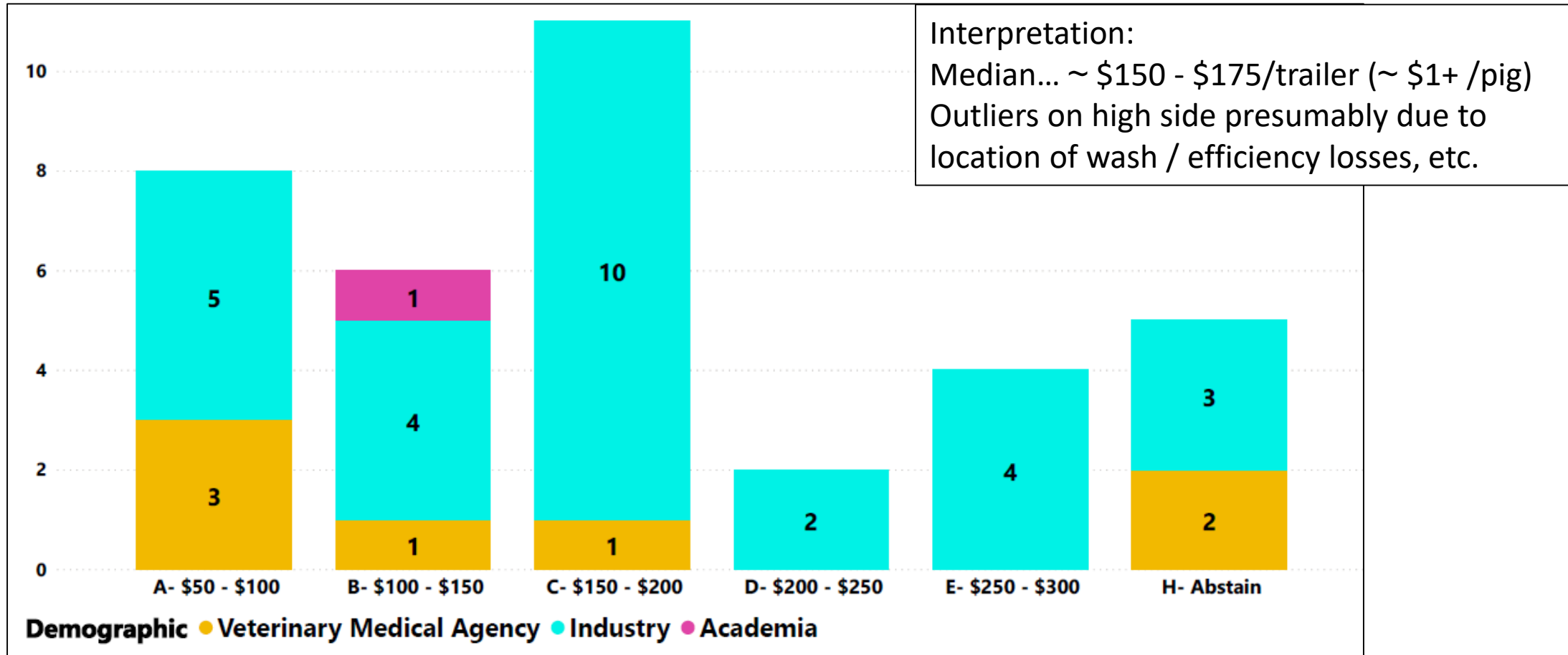
# How frequently pick-up trailers were washed before returning from point of concentration to growing pig sites – Run Out



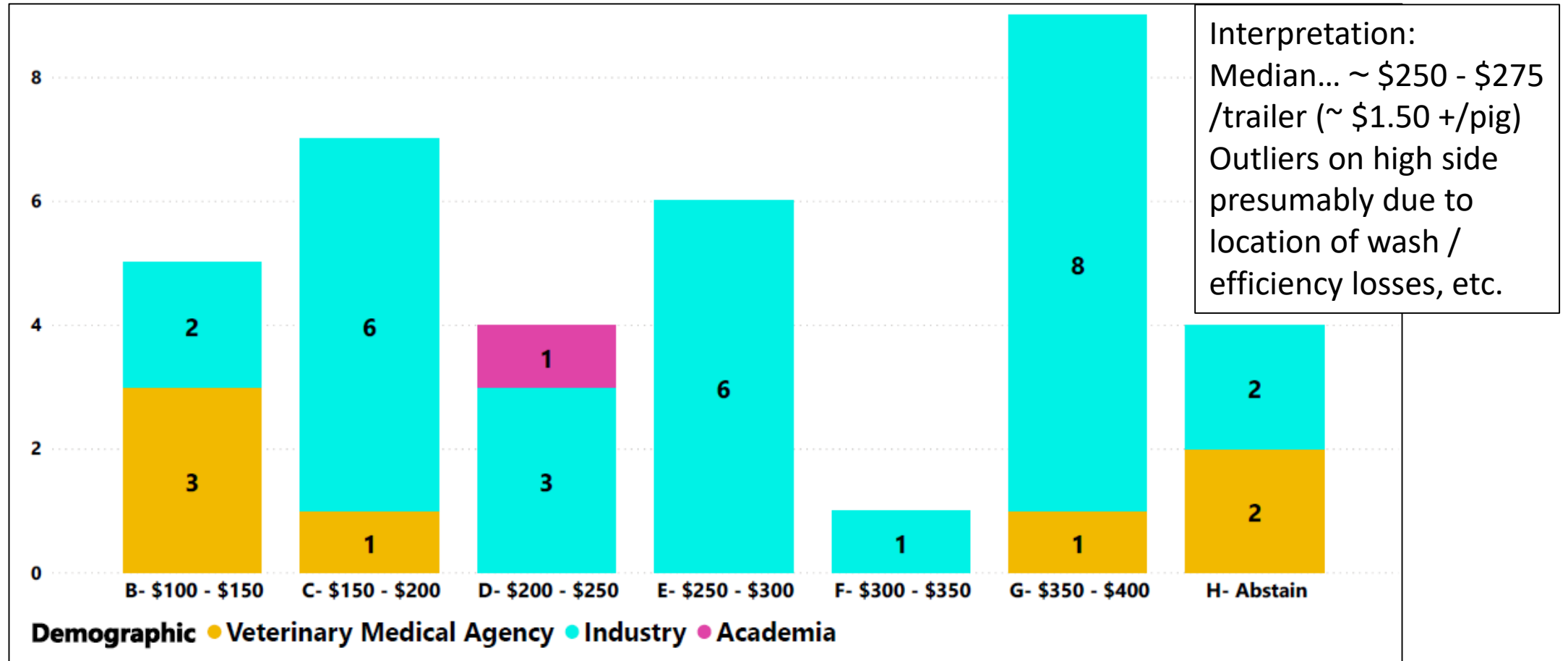
US SHIP Enrollment Survey Data

Provide estimated total cost for cleaning and disinfecting livestock trailers in which the washing process consists of the trailer being rinsed-out (fire-hose) and disinfected.

Estimates to be provided on a total cost per livestock trailer washed basis.



Provide estimated all-in cost for cleaning and disinfecting livestock trailers in which the washing process consists of the trailer being washed and disinfected with pressure and detergent to completely remove all organic matter from all surfaces. Estimates to be provided on a total cost per livestock trailer washed basis.

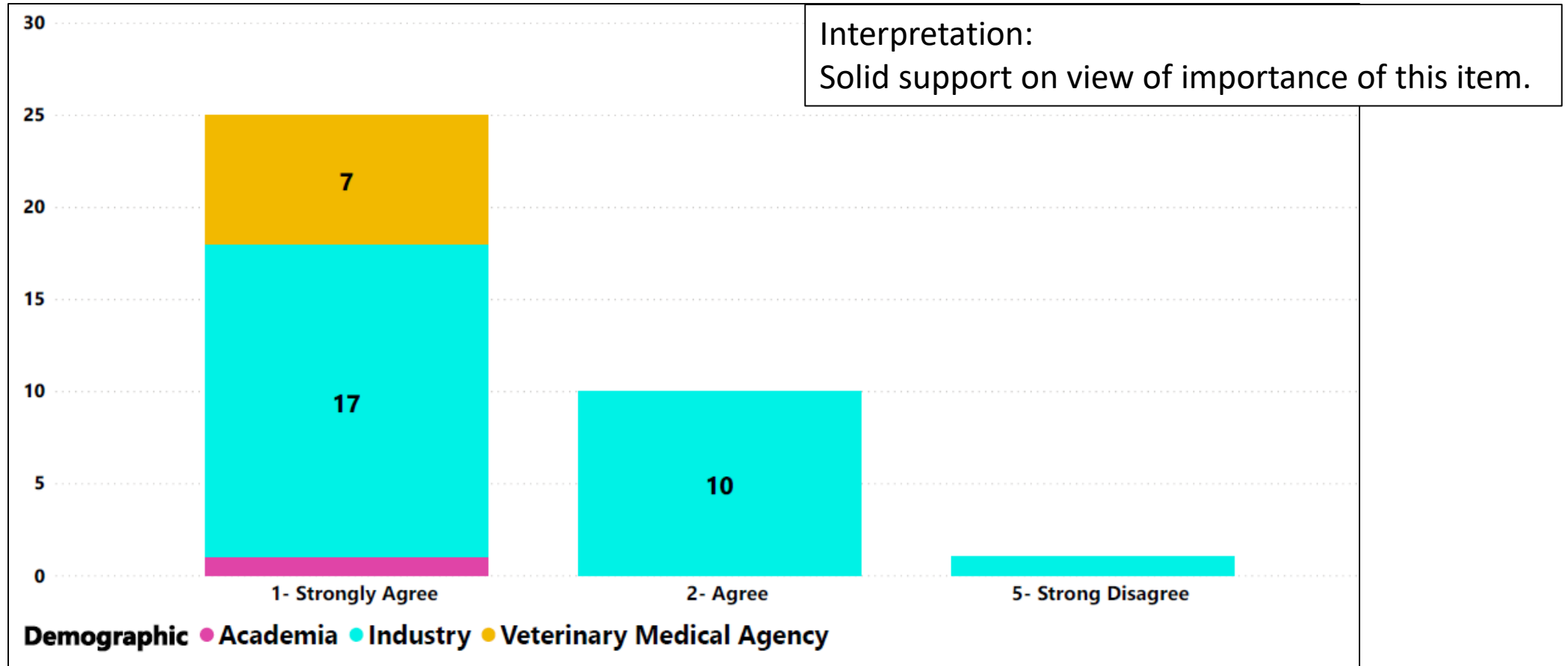


# Obtain Stakeholder Sentiment

**Objective #3:** Obtain stakeholder sentiment from a broad range of producers and slaughter facilities across the country.

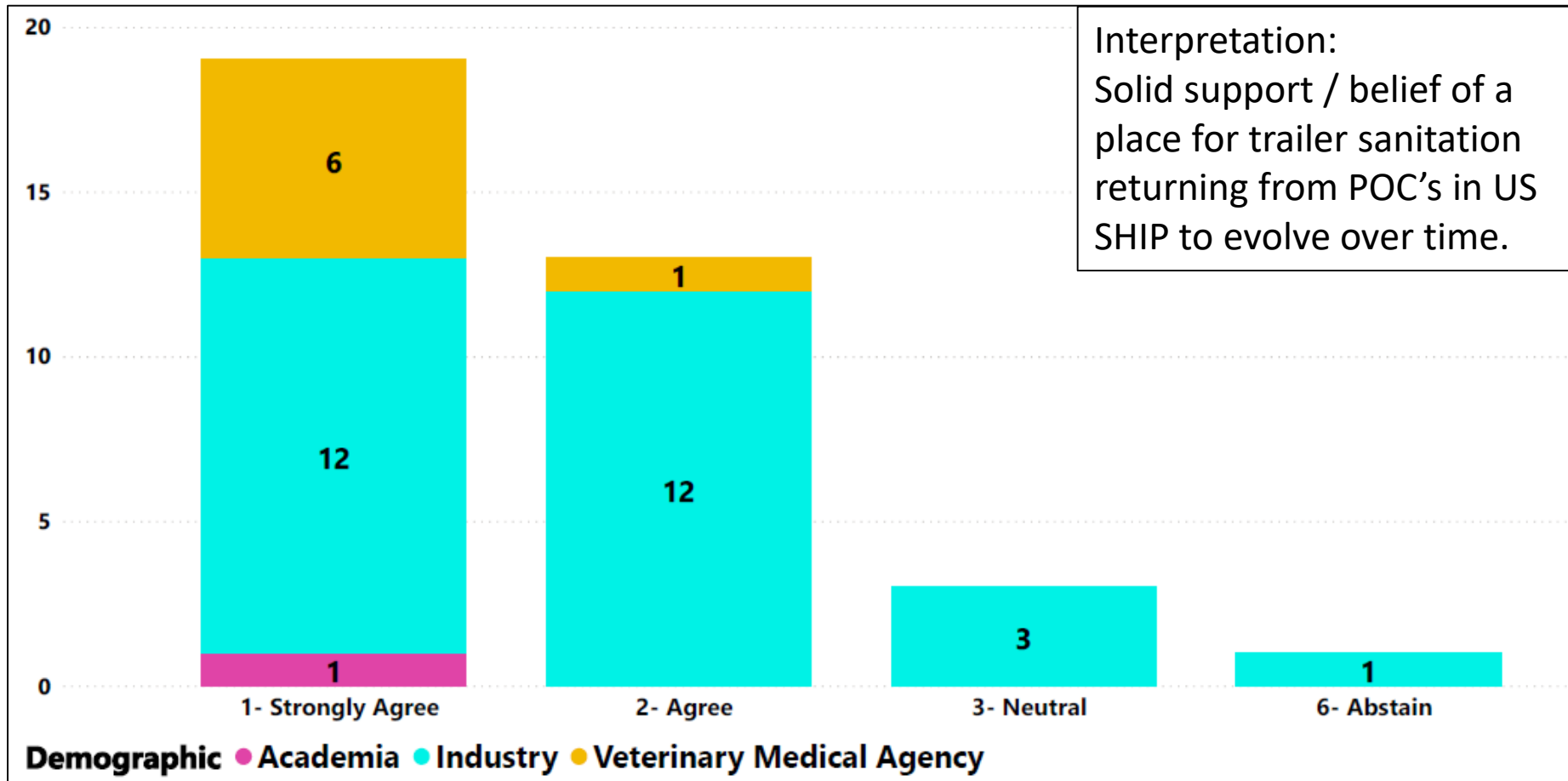


I believe enhancing the infrastructure and standards of practice associated with cleaning and disinfecting livestock trailers returning from terminal points of concentration (i.e., slaughter facility, buying station, cull market, etc.) presents as a substantive opportunity for improving the overall health of US swine and the longer-term sustainability of the US pork industry.

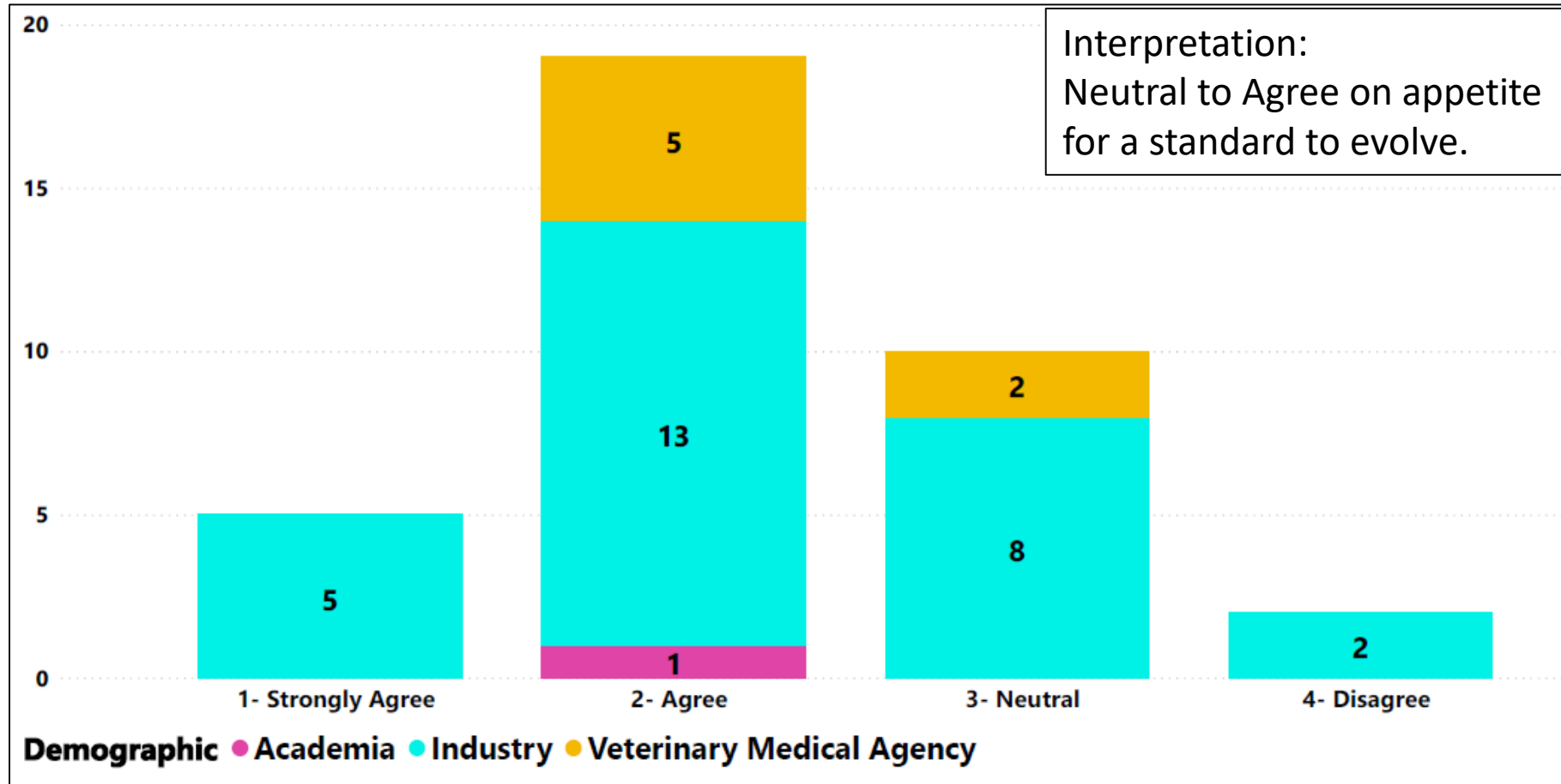




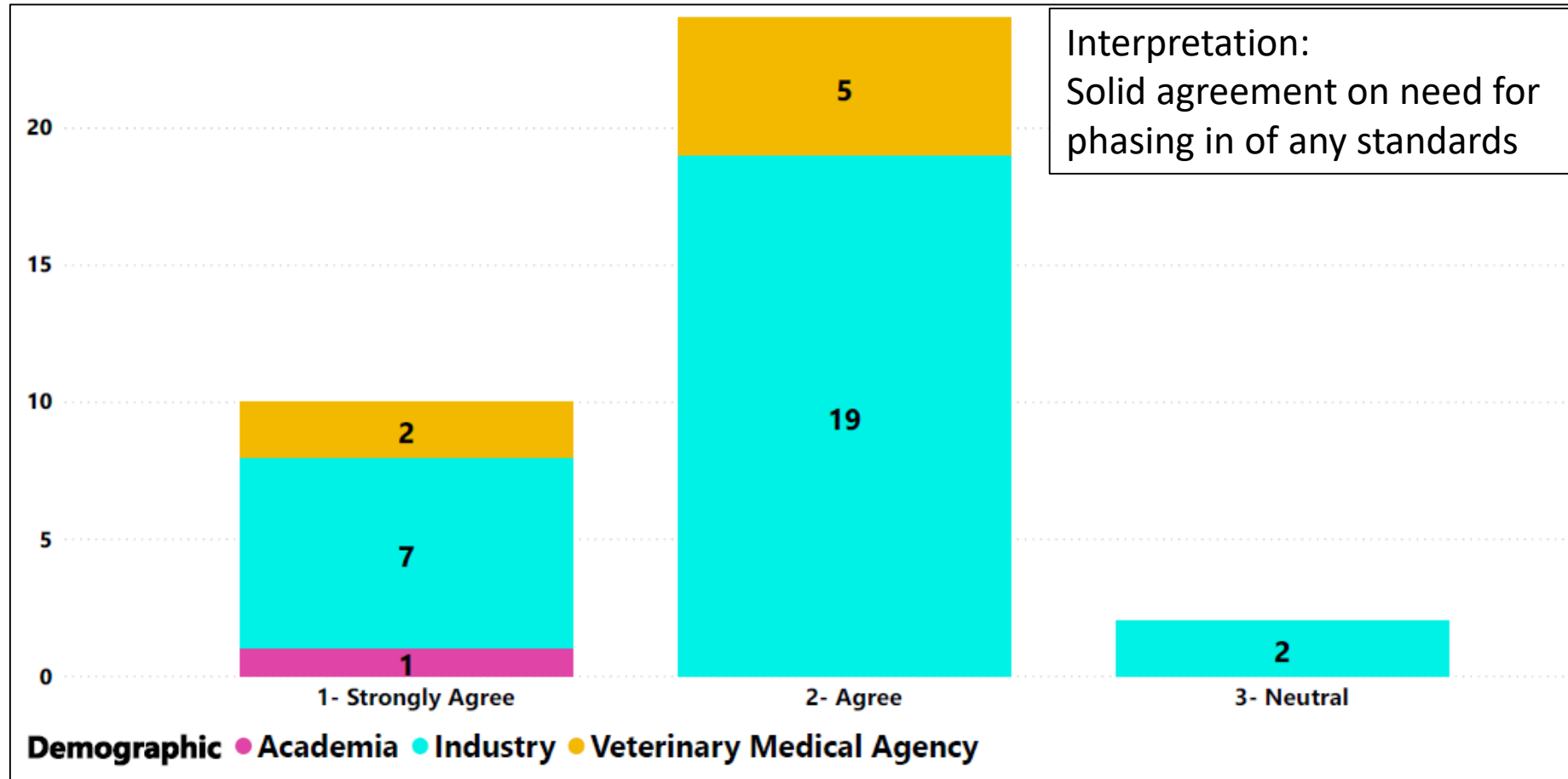
I believe there should be a set of *Program Standards* that evolve in US SHIP related to the cleaning and disinfection of livestock trailers returning from terminal points of concentration.



I believe there may be an appetite amongst the main-stream of commercial-scale US pork industry stakeholders for a set of *Program Standards* to evolve in US SHIP related to the cleaning and disinfection of livestock trailers returning from terminal points of concentration.

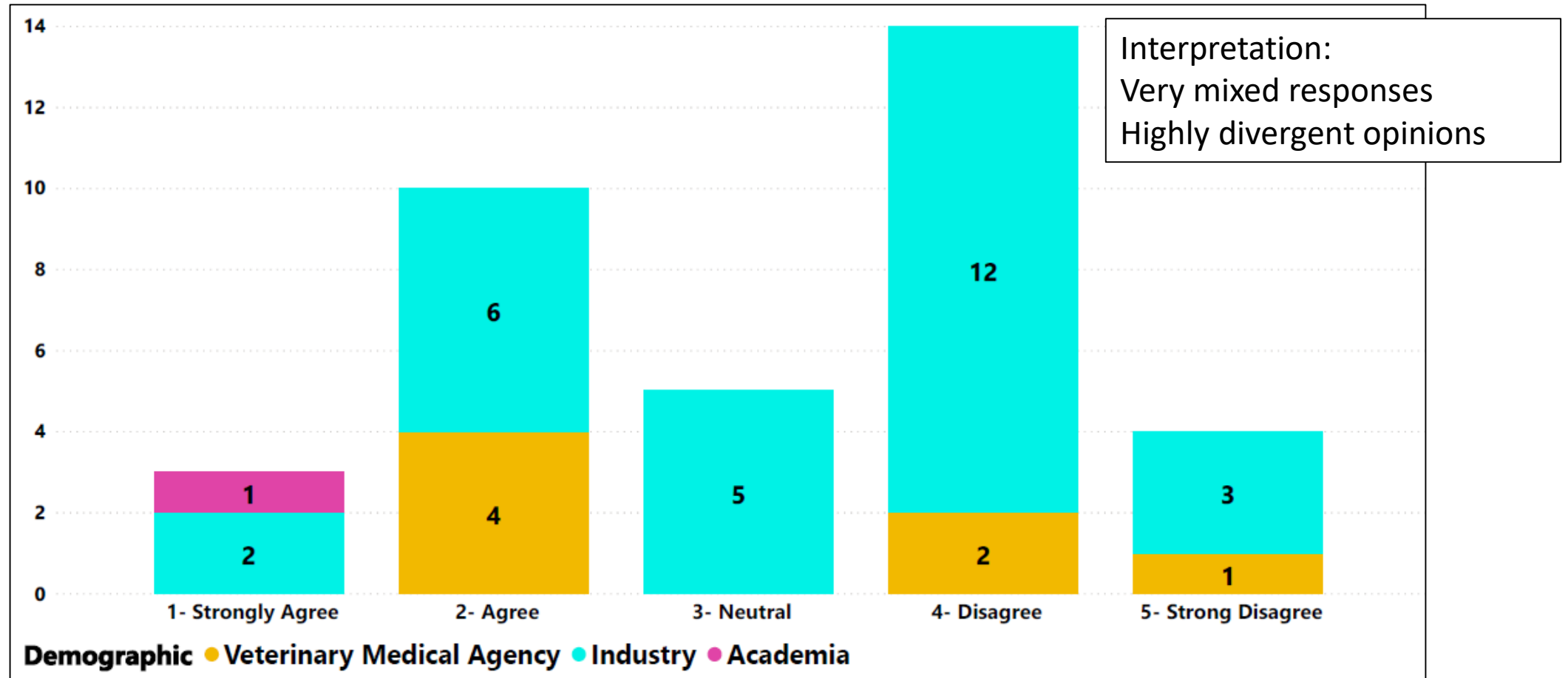


I believe a palatable set of *Program Standards* in US SHIP related to the cleaning and disinfection of livestock trailers returning from terminal points of concentration would need to be phased in over the course of time.

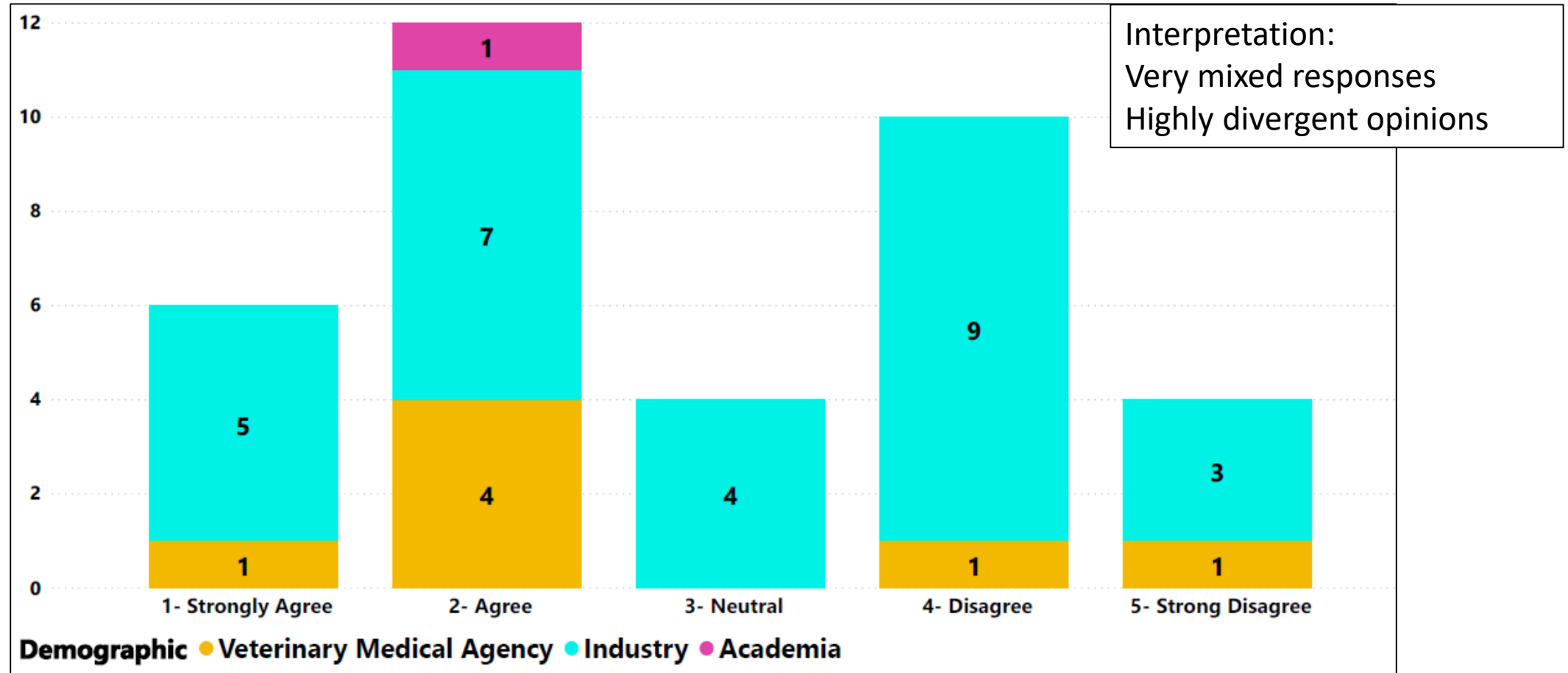


I believe a set of *Program Standards* in US SHIP related to the cleaning and disinfection of trailers returning from terminal points of concentration could or should vary by the status of the farm site they are returning to.

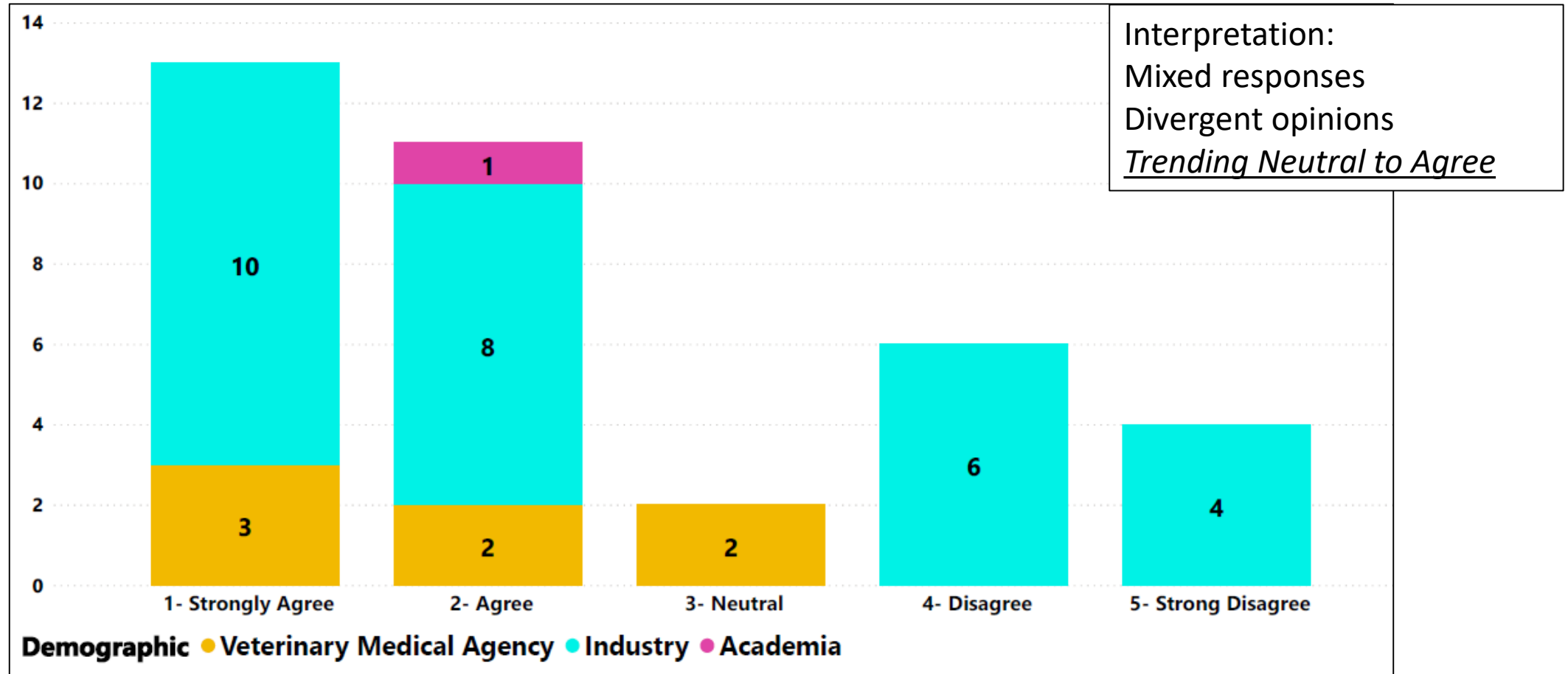
(Meaning, could or should requirements vary based upon whether the livestock trailers are returning to farm sites with pigs remaining on the site for > 7 days versus those livestock trailers returning to farms sites that will be completely depopulated within 7 days and subsequently cleaned and disinfected prior to being repopulated with pigs?)



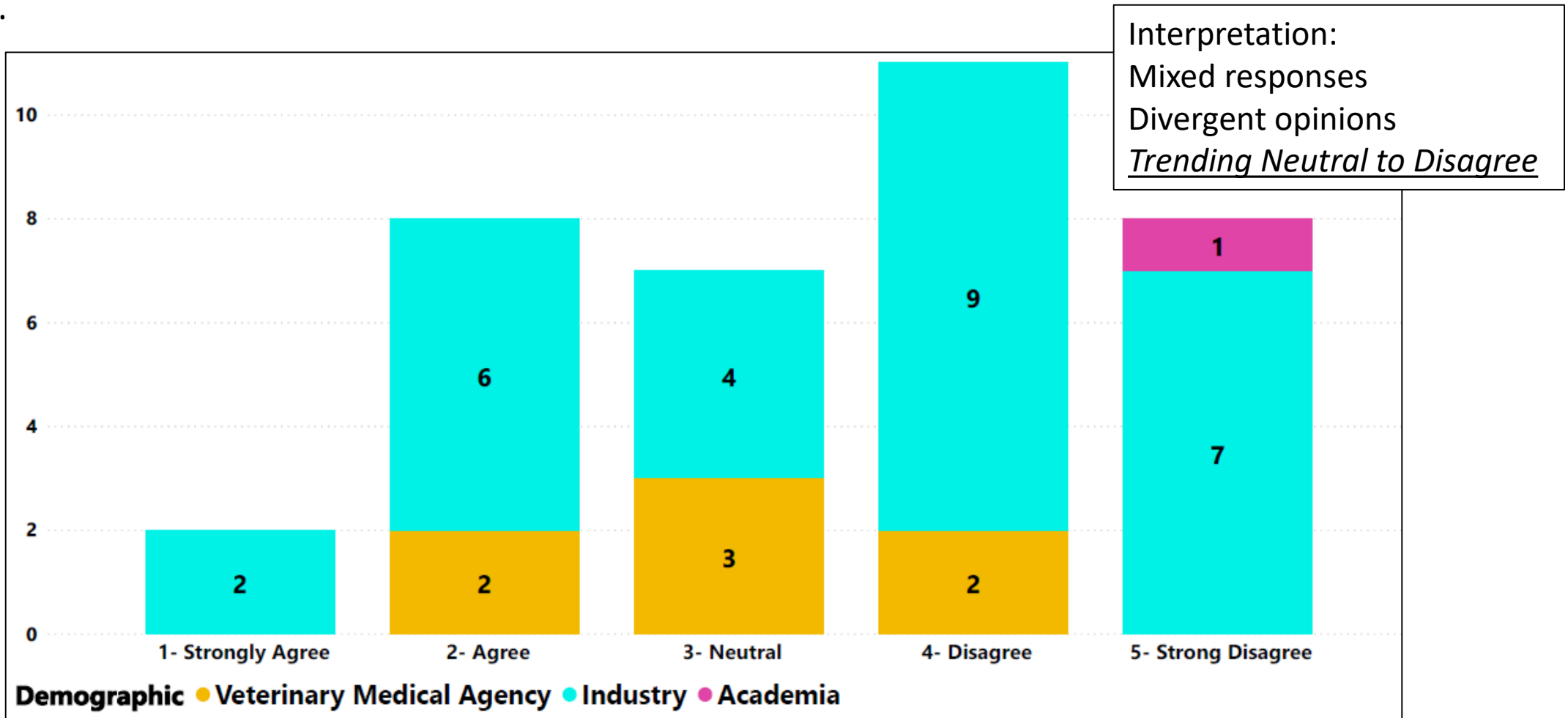
I believe a set of *Program Standards* in US SHIP related to the cleaning and disinfection of trailers returning from terminal points of concentration could or should vary by the type of farm site (i.e., premises site types) in which the trailer is returning.



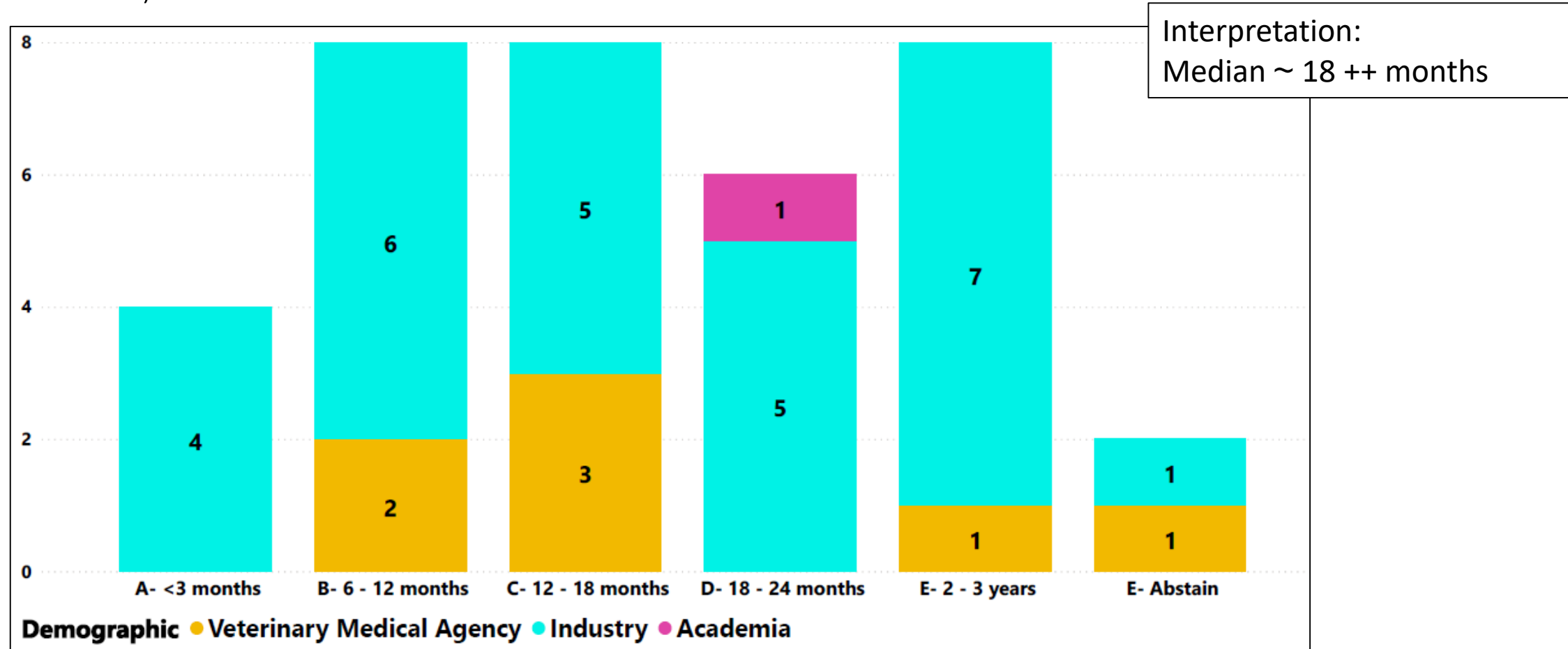
I believe a set of *Program Standards* in US SHIP related to the cleaning and disinfection of trailers returning from terminal points of concentration could or should vary by ASF/CSF status of country or region.



I believe the ability to clean and disinfect all of the of livestock trailers returning from terminal points of concentration to farm sites could be functionally initiated within days, weeks, or months of an introduction of ASF/CSF into the US commercial swine herd.

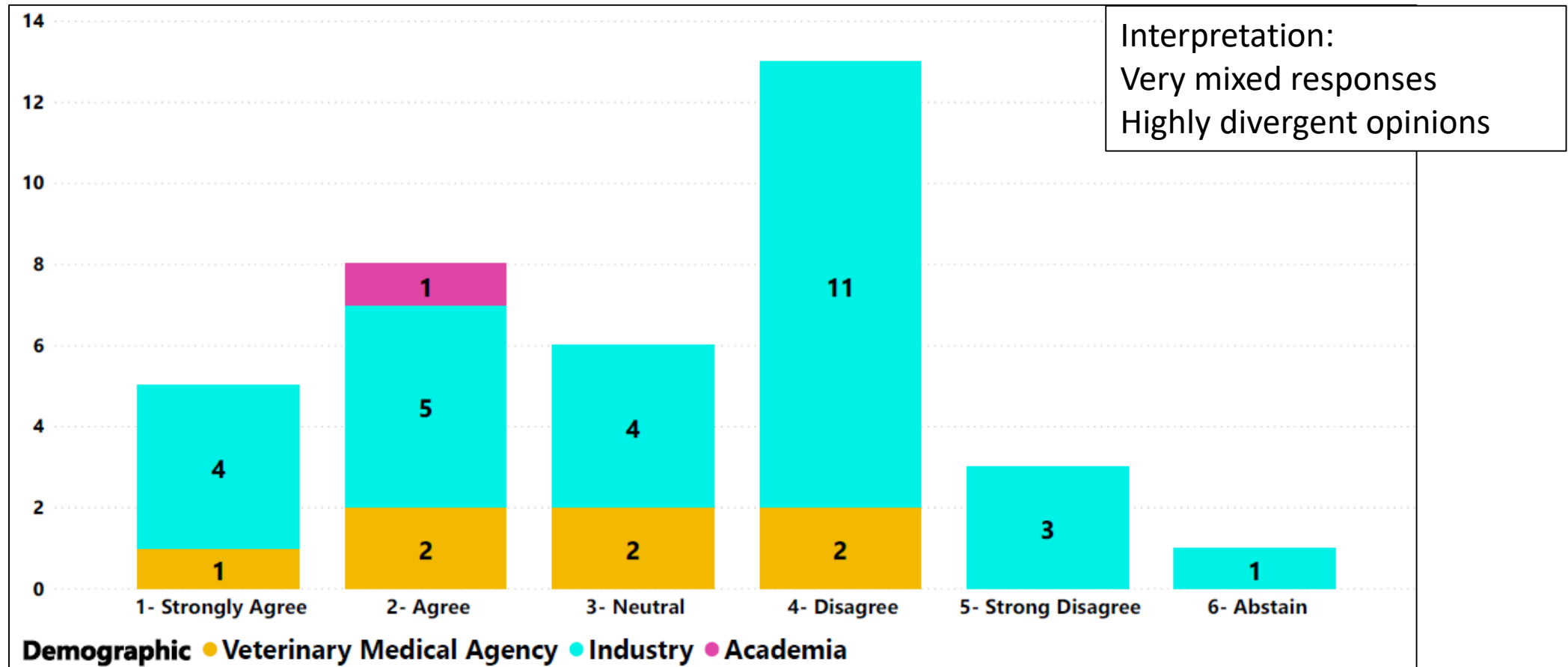


In the event of an ASF/CSF introduction into the US (inclusive of your State or Region) and livestock trailers departing terminal points of concentration were then required by state or federal animal health rule to be cleaned and disinfected prior to returning to farm sites, approximately how long do you believe it would take the pork production operations in your state or region to build and operationalize the livestock trailer washing capacity to readily accomplish this task on a day to day (year-around) basis?

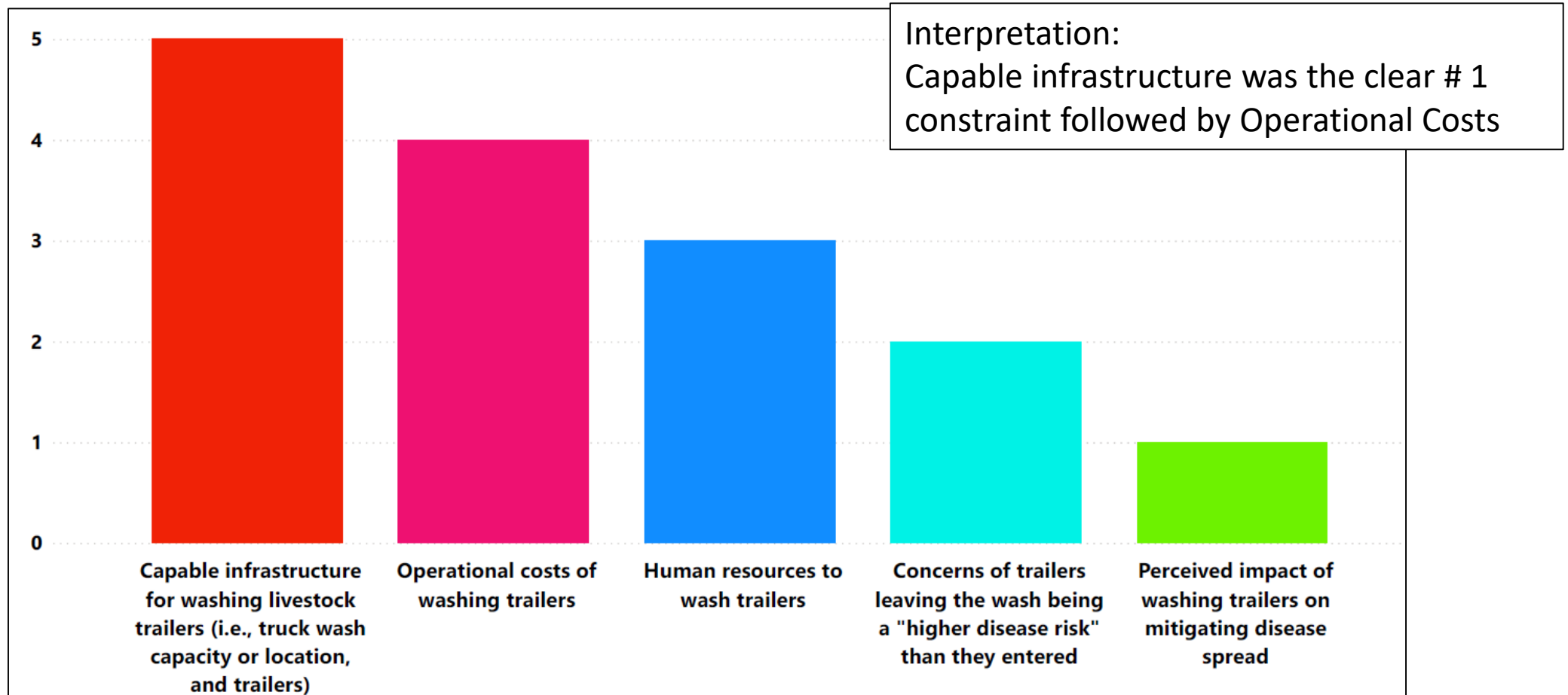




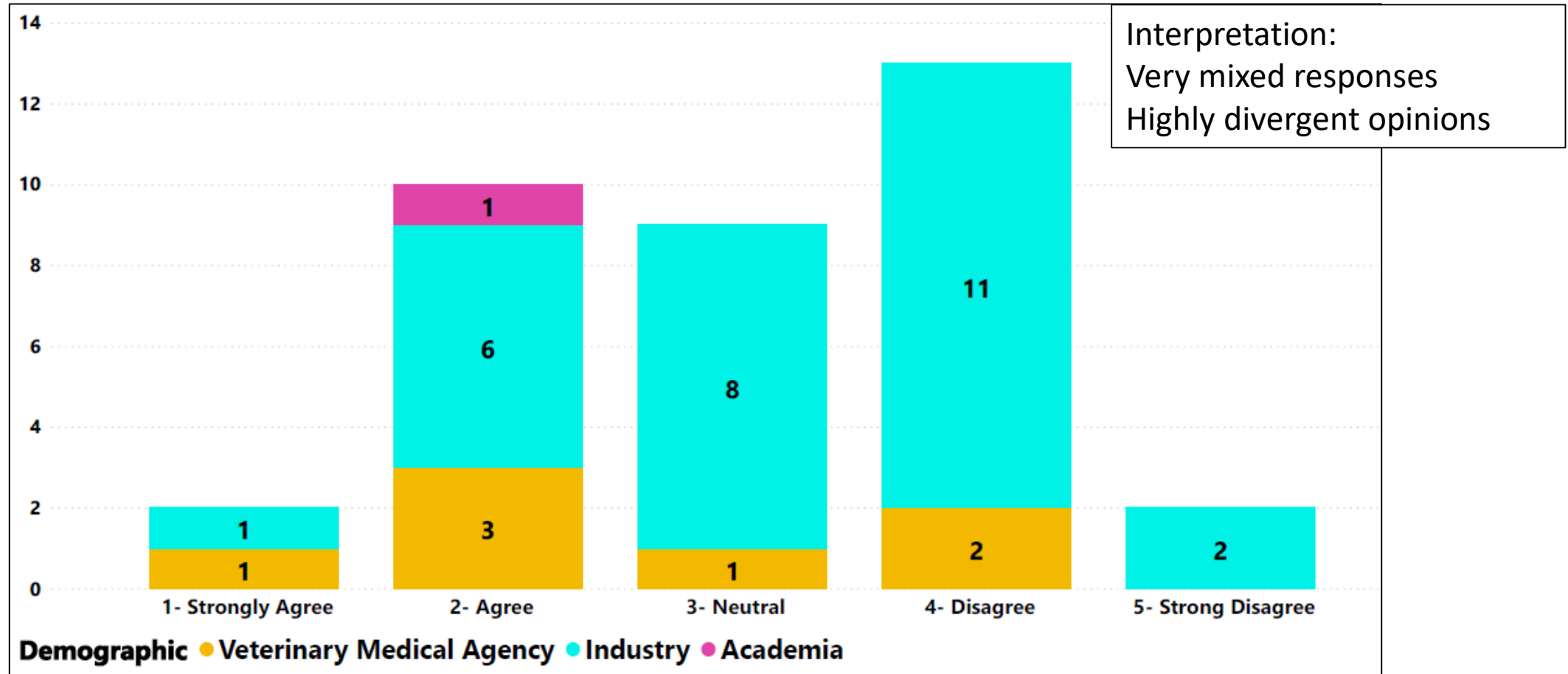
In situations where the necessary infrastructure exists to clean and disinfect all of the livestock trailers returning from terminal points of concentration to farm sites, all of the livestock trailers returning from terminal points of concentration are routinely being cleaned and disinfected prior to returning to farms sites as a routine standard of practice.



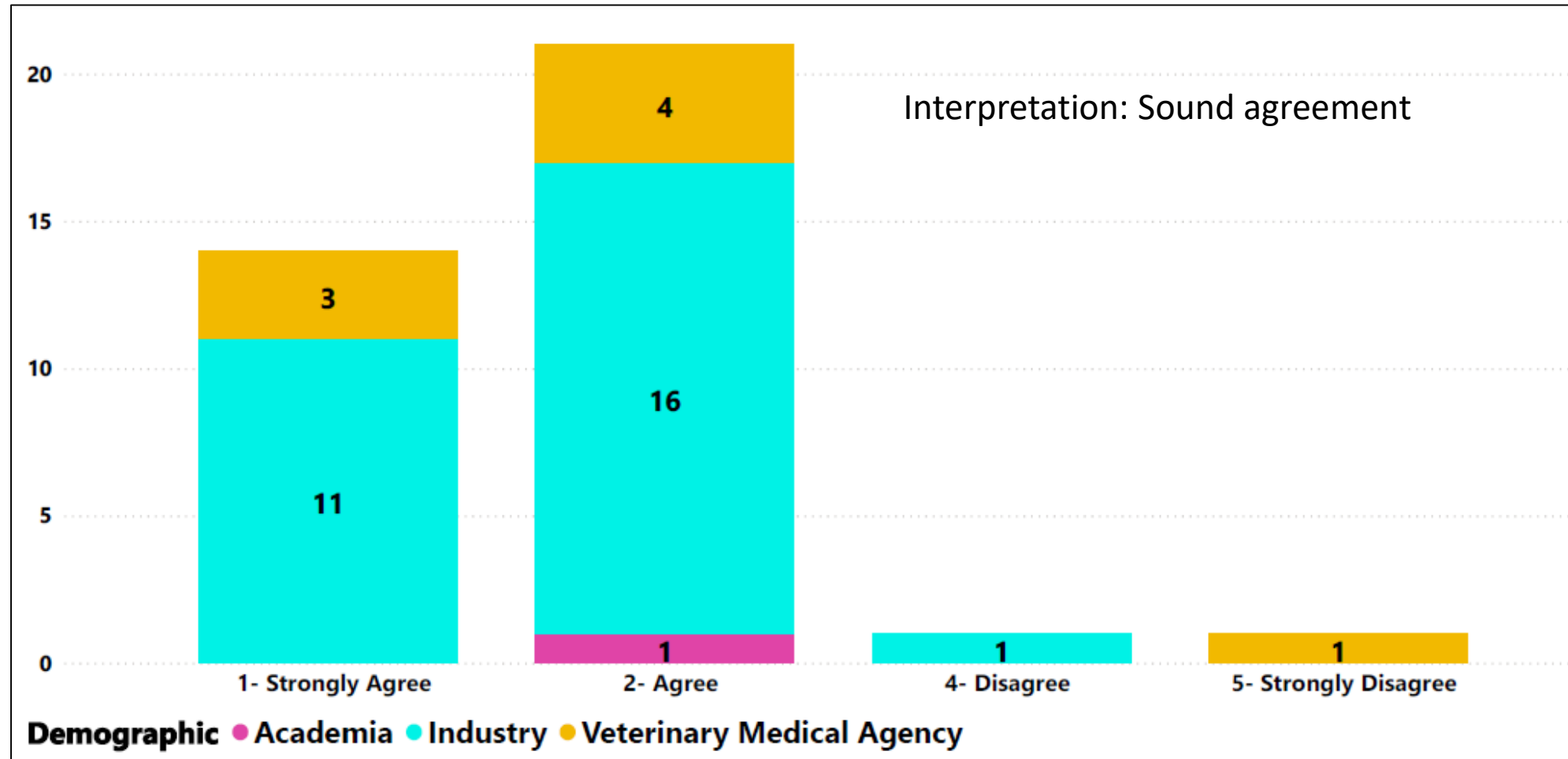
Please rank the following constraints that are limiting the percentage of livestock trailers from being cleaned and disinfected when returning from terminal points of concentration.



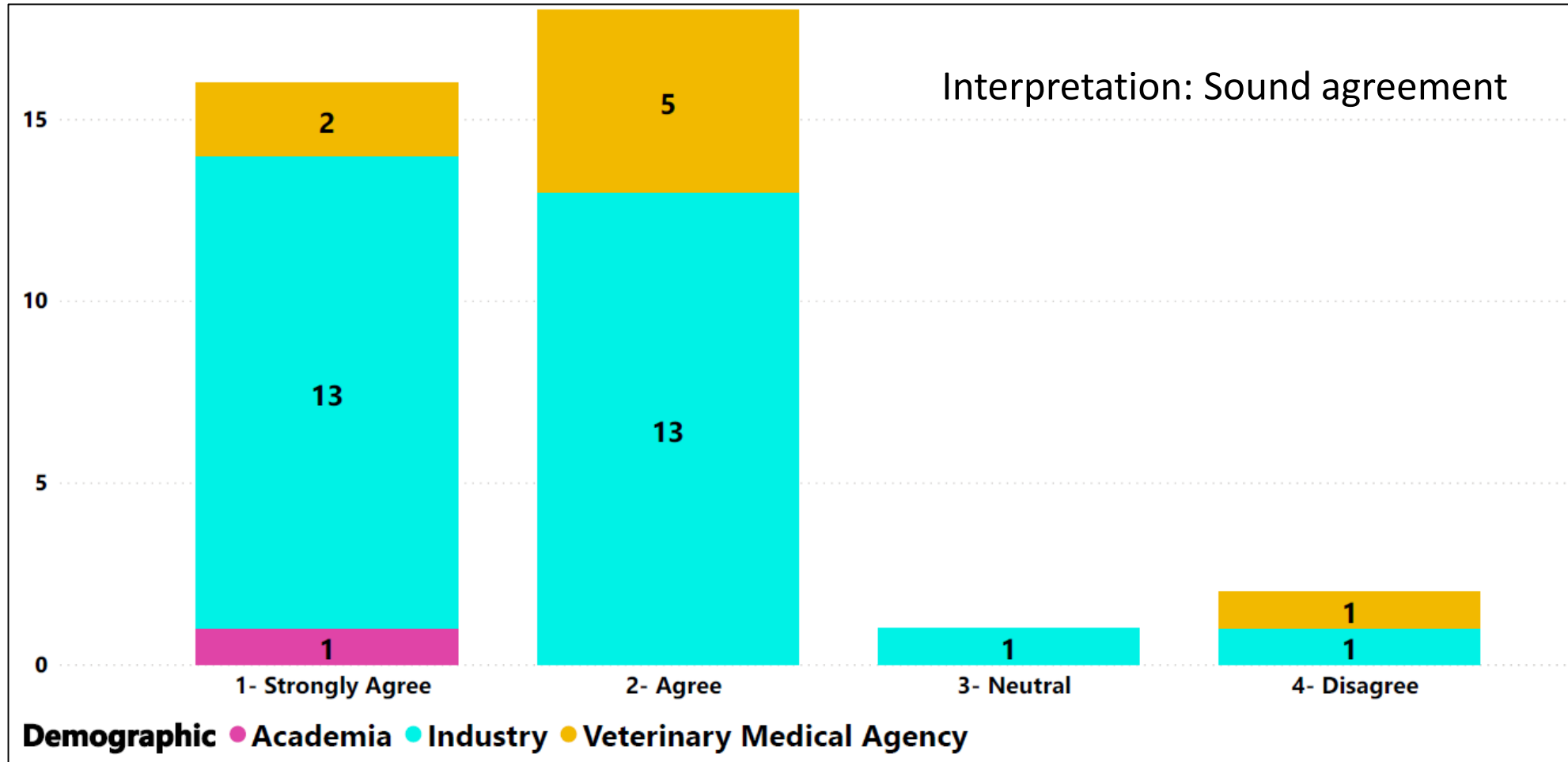
In the event of an introduction of ASF/CSF into the US commercial swine herd, I believe there are a set of industry led (producer specific) options that could be implemented (via use of AIAO off-site depots / transfer stations) to temporarily mitigate the risks of uncleaned livestock trailers returning to farm sites.



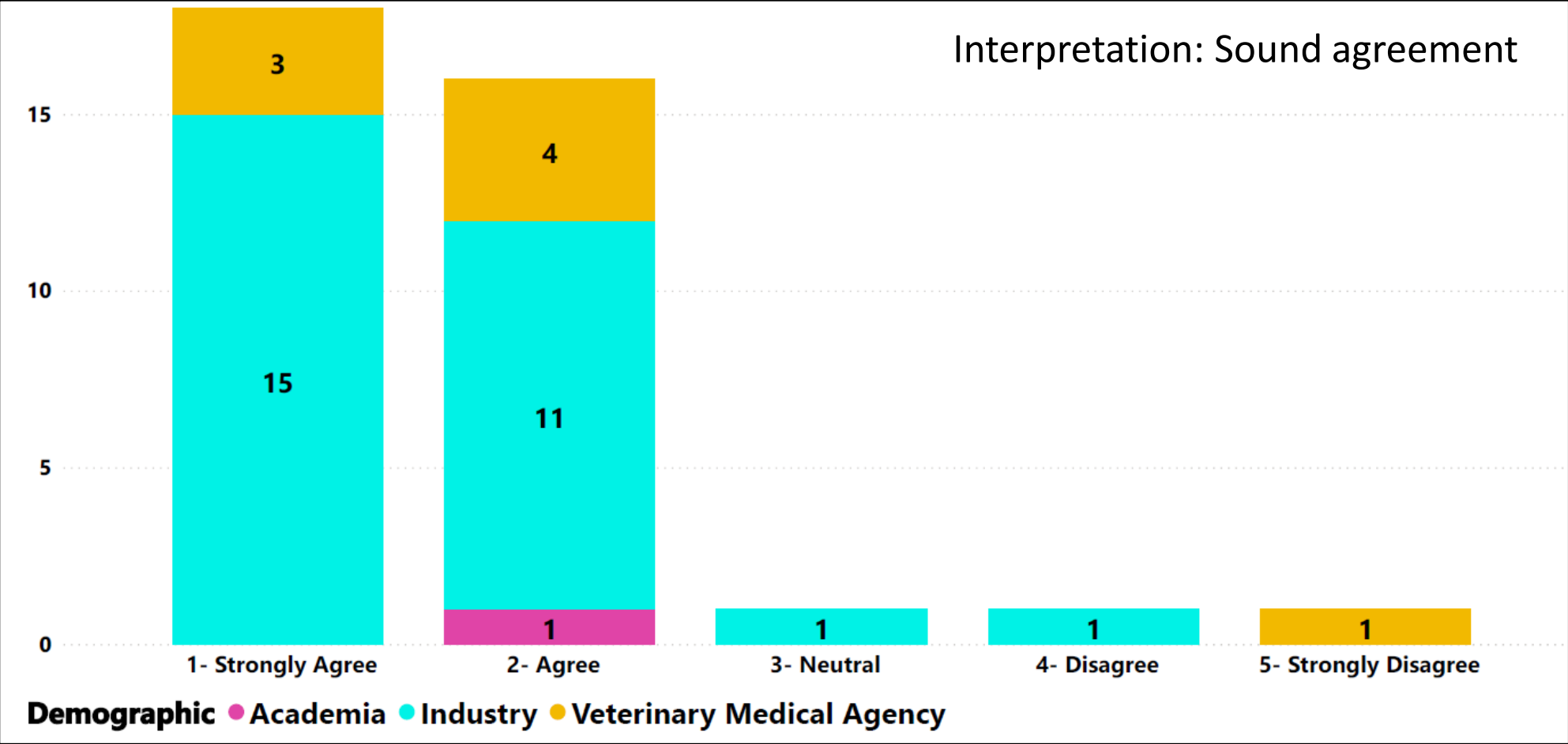
**After 2<sup>nd</sup> Tier II Meeting:** I believe there should be a set of Program Standards that evolve in US SHIP related to the cleaning and disinfection of livestock trailers returning from terminal points of concentration.



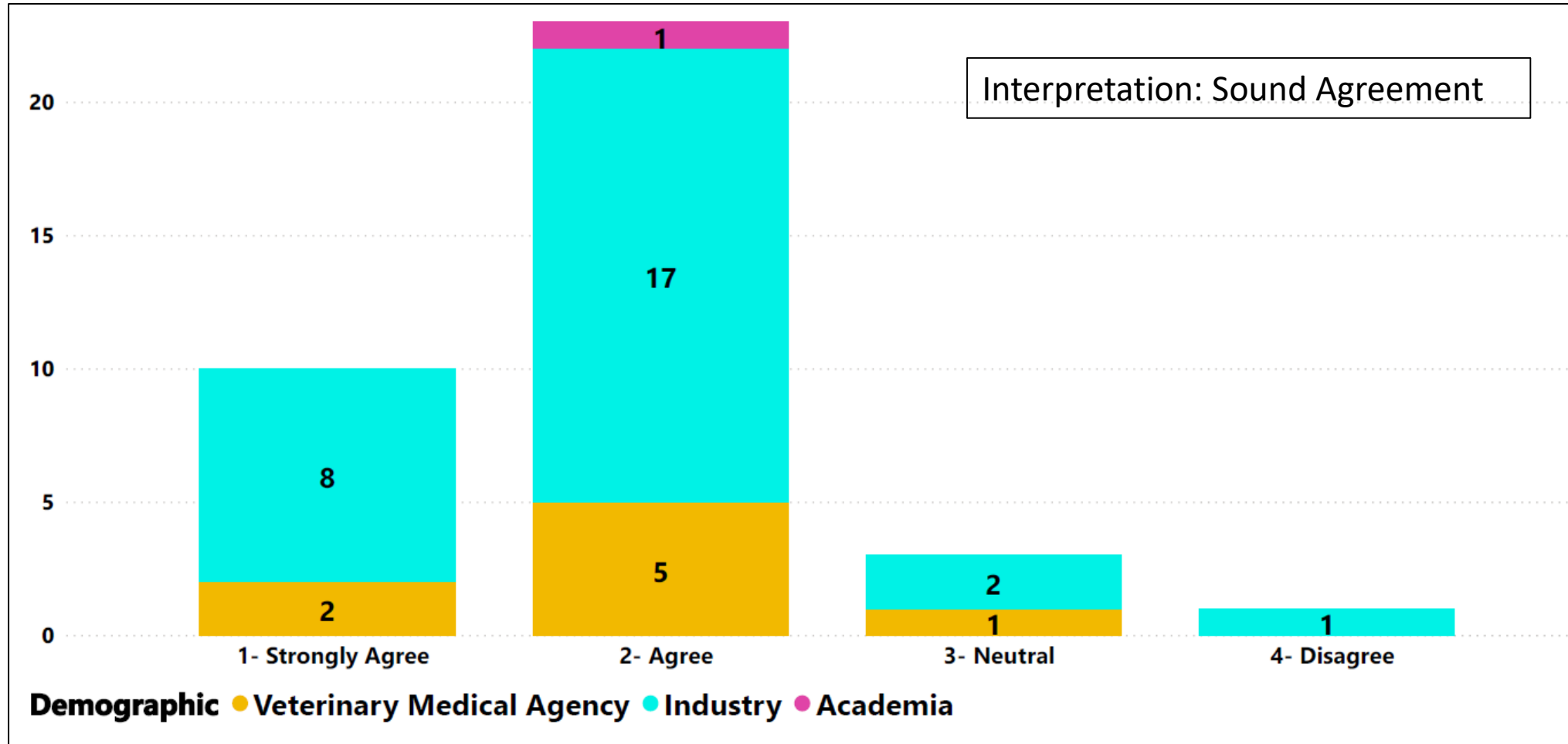
**After 2<sup>nd</sup> Tier II Meeting:** I believe a palatable set of Program Standards in US SHIP related to the cleaning and disinfection of livestock trailers returning from terminal points of concentration would need to be phased in over the course of time.



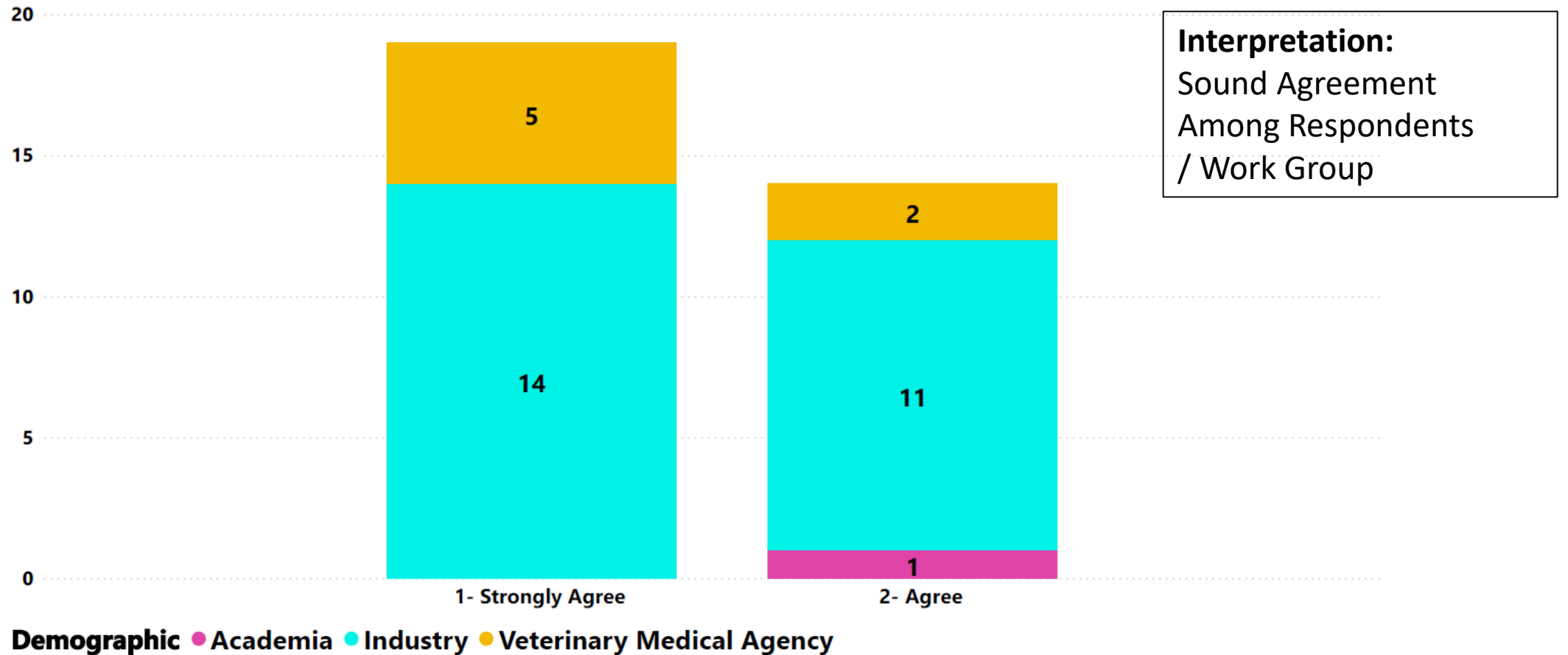
After 2<sup>nd</sup> Tier II Meeting I support basic concepts behind draft language of Program Standard below:  
“Livestock trailers departing terminal points of concentration (i.e., slaughter facilities, buying stations, and cull-market channels) are to be cleaned and disinfected prior to returning to farm sites or farm site collection points (depots).”



*After 2<sup>nd</sup> Tier II Meeting:* I believe maintaining an auditable log of the key events (identified to the license plate number of the trailer) would be needed to monitor progress and adherence to the standard.

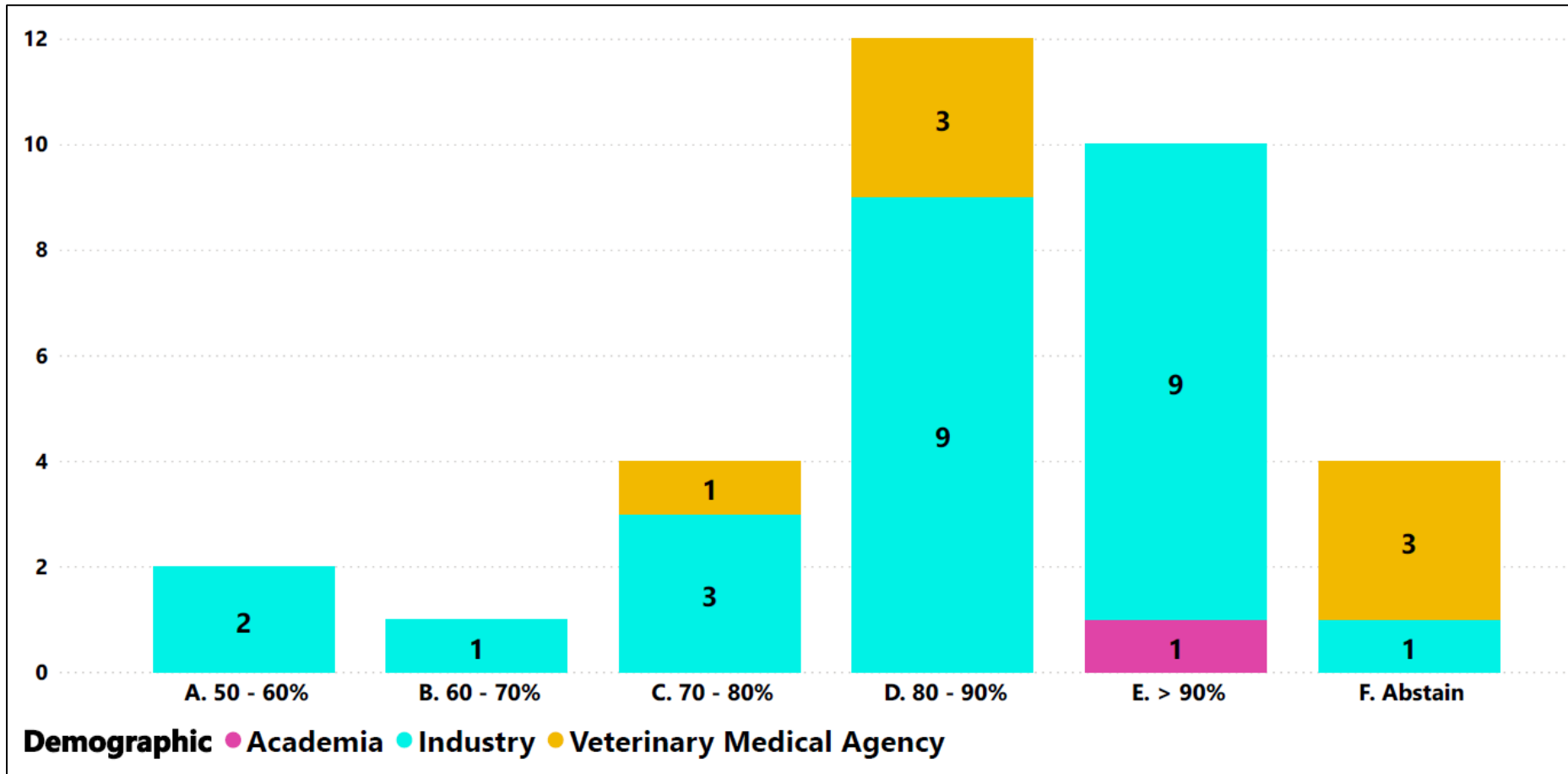


**After 3<sup>rd</sup> Tier II Meeting:** I am supportive of the principal intent language of the Resolution drafted as one outcome of this US SHIP Working Group on Market Haul Sanitation to be put forward for further discussion and consideration at the US SHIP House of Delegates Meeting in September.





**After 3<sup>rd</sup> Tier II Meeting:** Please provide your best estimate of the following based on your working knowledge of the US pork industry in your region or across the country:  
Estimated percentage of finishing pigs delivered to large-scale commercial swine slaughter facilities that are made on livestock trailers whose primary utility (day to day use) is for hauling swine to terminal points of concentration (e.g., slaughter facilities, buying stations, or cull markets).



Median responses suggest > 80% trailers used for delivering swine to slaughter are principally used for such terminal movements

# Areas of Reasonably Sound Agreement and Broad Support Among Working Group

- Recognition of the importance of “Market Haul Sanitation”
  - *“Well understood industry-level deficit / liability of national importance”*
  - *“Industry level impact (swine health and longer term sustainability & competitiveness)”*
- Need to incorporate “Market Haul Sanitation Standards” into US SHIP certification over the course of time.
- Standards need to be phased in over time.

**1 of 2**

# Areas of Reasonably Sound Agreement and Broad Support Among Working Group

- Standards need to be very straightforward.
- Standards are not to be overly prescriptive as to how, where, or who is responsible for the cleaning and disinfecting the livestock trailers.
- Standards and timeline need to provide a palatable pathway for acceptance and success.

**2 of 2**

# Key Items of Highly Divergent Opinions / Lack of Broad Support Among Working Group:

- Interest in parsing out or having program standards to vary by specified premises site types, types of swine movements, or by ASF/CSF status of country/region.
  - Premises Type
  - Graded Loads vs Run-Out Loads
  - ASF/CSF Status of Country (only one trending Neutral to Agree)

# Status-Quo & Costs

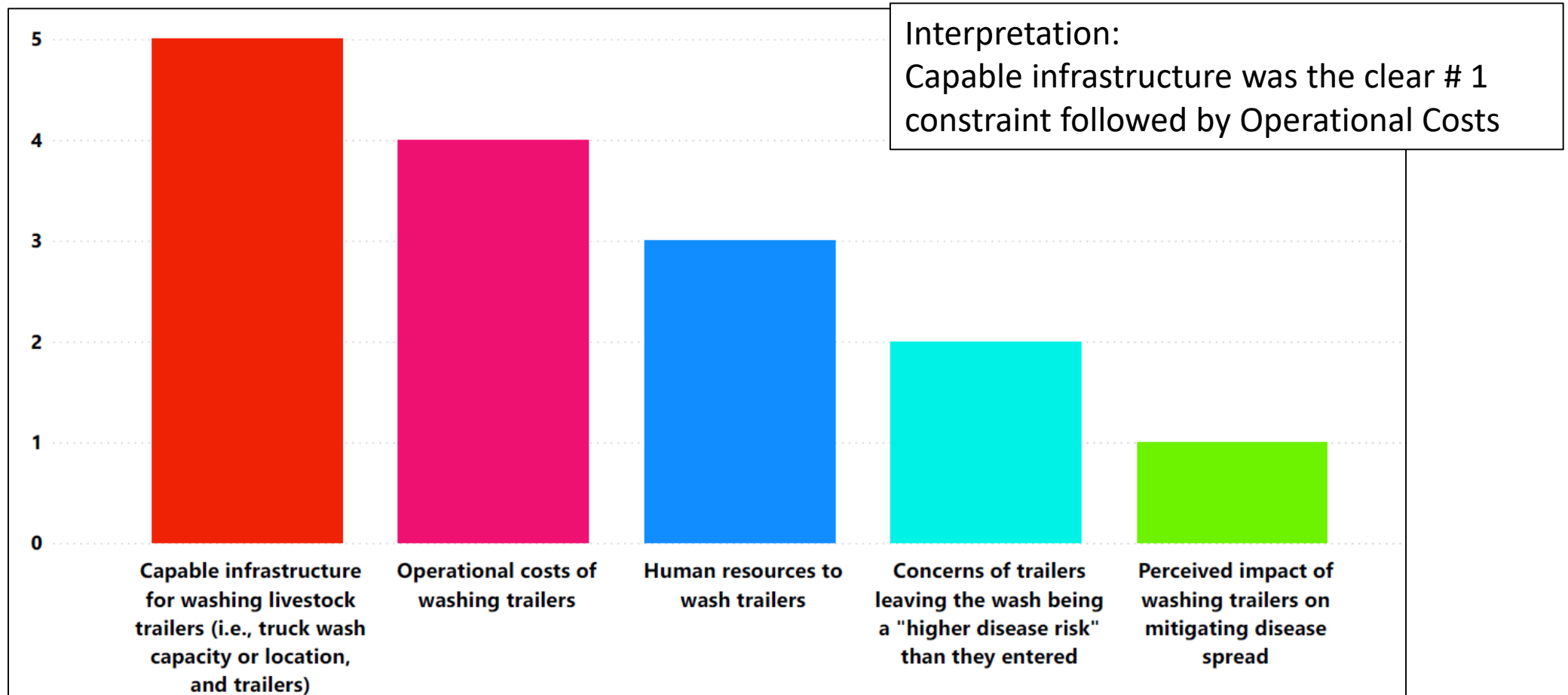
## Current Standards of Practice

- “Most” graded loads being washed
- “About half or less” of run-out loads being washed

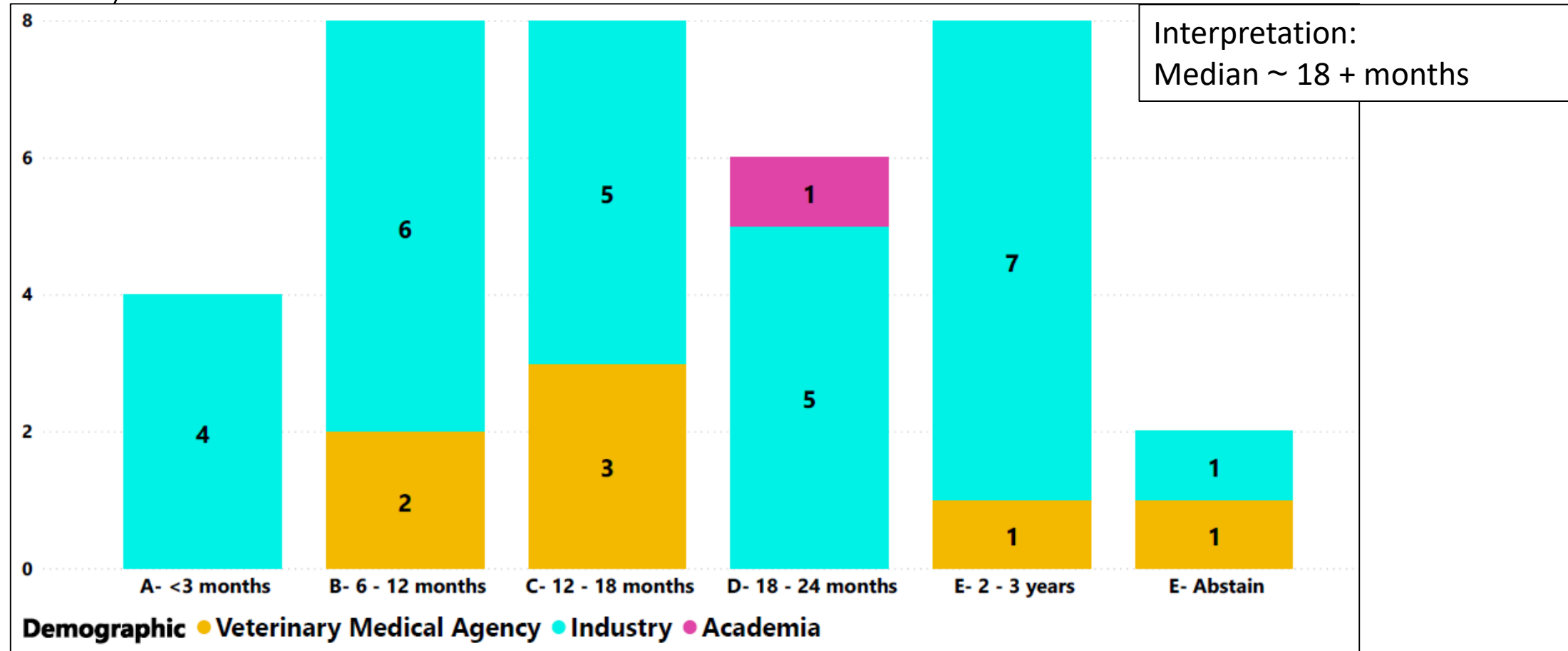
- Reasonable Description of Costs

- \$150 - \$175 (Volume Hose Clean & Disinfect).... ~ \$1 + / pig
- \$250 - \$275 (Power-wash free of all organic matter & Disinfect) ~ \$1.50 + / pig

Q11. Please rank the following constraints that are limiting the percentage of livestock trailers from being cleaned and disinfected when returning from terminal points of concentration.



Q9. In the event of an ASF/CSF introduction into the US (inclusive of your State or Region) and livestock trailers departing terminal points of concentration were then required by state or federal animal health rule to be cleaned and disinfected prior to returning to farm sites, approximately how long do you believe it would take the pork production operations in your state or region to build and operationalize the livestock trailer washing capacity to readily accomplish this task on a day to day (year-around) basis?



## Resolution #4: Market Haul Sanitation (pg. 31-32)

“ US SHIP House of Delegates supports moving forward with a series of efforts leading towards the future consideration of a program standard requiring livestock trailers returning from terminal points of concentration (e.g., slaughter facilities, buying stations, or cull markets) to be cleaned and disinfected prior to returning to farm sites or farm site collection points (depots).”



# Pilot Options for Measuring / Monitoring

- Pilot a suite of compatible options that provide a scalable means for monitoring (measuring) the percentage of livestock trailers delivering pigs to commercial slaughter facilities that are meeting the prescribed market haul sanitation standard to be considered.

# Working Forum for Sharing Information

- Establish a working forum and associated educational materials for sharing of best practices and examples of the various systems, technologies, and approaches being implemented by:
  - Pork producers and swine slaughter facilities (domestically and abroad) currently achieving this standard of practice en-masse.
  - US poultry producers sustainably achieving this standard of practice.

# Education, Policy, or Funding Opportunities

- Advocate for exploring educational, policy, or federal funding related opportunities associated with permitting and constructing such livestock truck-wash facilities in support of US animal agriculture and our nation's food supply.

# Applied Research & Development

- Advocate for applied research and development of engineering based improvements to reduce the labor and enhance the consistency, sustainability, and quality of high throughput market-haul washout procedures.

# Market Haul Sanitation Break-Out Session

- 1:30 – 3:00 pm

## Agenda

- In-Depth Review of Working Group Efforts / Outcomes / Findings
- Question / Answer / Discussion on Resolution

# Points of Clarification with US SHIP Resolutions

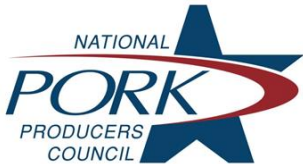
- US SHIP is an industry, state, and federal partnership en-route to be a USDA Swine Health Program (modeled after NPIP's longstanding system of shared governance) that centers on safeguarding and certifying the health of US swine in accordance with well-defined program standards.

**1 of 2**

# Points of Clarification with US SHIP Resolutions

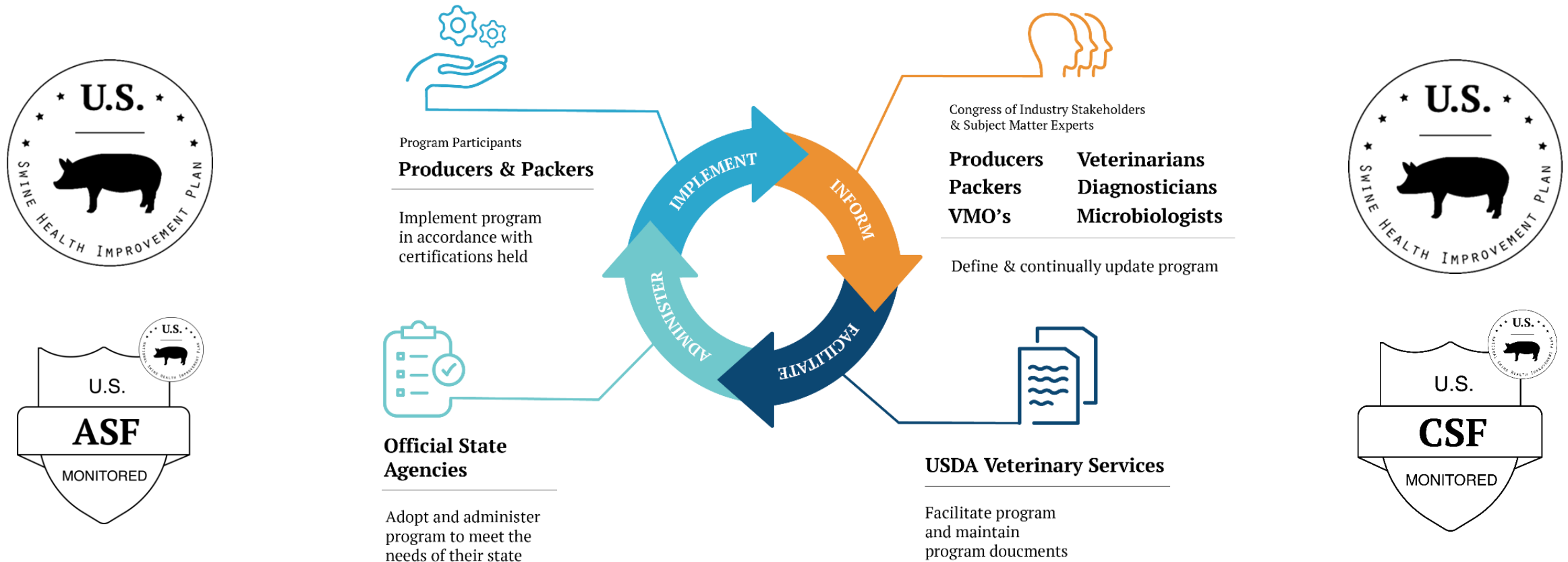
- Any project-based work involving research, new system development, collaborative forums, outreach, education, and advocacy for US SHIP related efforts are only possible through the support and self-evident synergies working in partnership with the national pork producer, packer, and veterinary organizations.

2 of 2



# US Swine Health Improvement Plan

*Partnering to safeguard, certify, and better the health of US swine and longer-term competitiveness of the US pork industry*



*Officially recognized platform for addressing US swine health related issues of high consequence over time*

ASF- CSF Monitored: Prevention & Demonstration of Freedom of Disease Outside of Control Areas