

Biosecurity

Getting On and
Off The Farm



GOOFY
n & ff the
etting



Goals of **GOOF**

1. Bring no pathogens onto the farm
2. Bring no pathogens off the farm
3. Reinforce the importance of biosecurity – “Teachable Moment”
4. Producer confidence

Here is how you keep
your farm safe

This guy seems
to have his act
together



THOUGHTS

GOOF Principles



Getting On And Off The Farm

GOOF Principles

1. Think Safety

- Where you park
- Disinfectants
- Handling animals
- Equipment
- etc



GOOF Principles

2. Communicate with owner/manager
 - Why are you visiting?
 - What you will need to see/do?
 - Where to park?
 - Specific biosecurity protocols or visitor polices?



STOP



DO NOT ENTER or APPROACH

**these animal premises without permission
if you have been in a foreign country
in the past TWO WEEKS. If you have any
questions, please call (269) 671-2507
Thank you for your cooperation.**

GOOF Principles

3. Preparation

- Make sure you have proper supplies and equipment to be “biosecure”

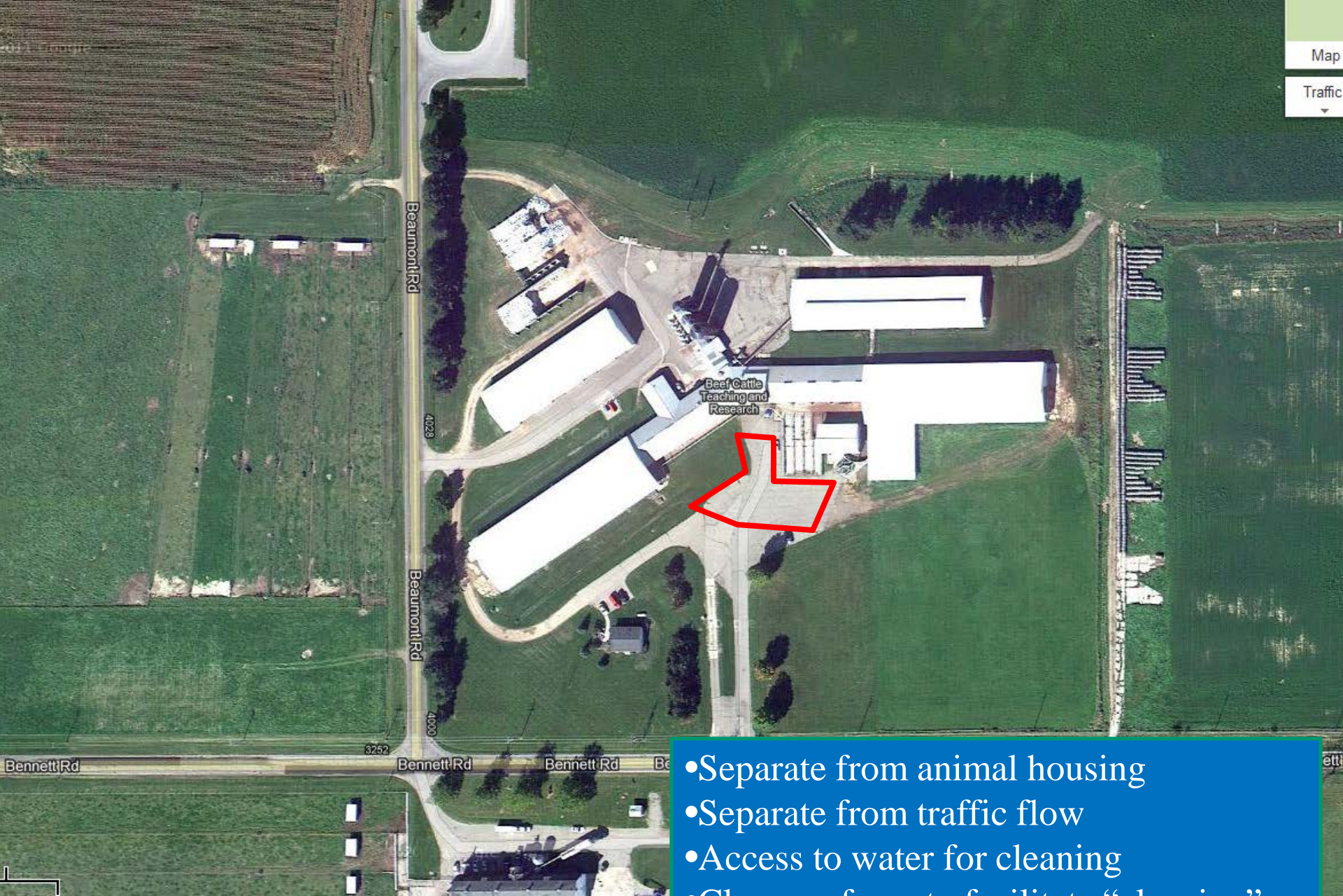


Getting On And Off The Farm

GOOF Principles

4. Where to Park on Arrival

- In designated visitor parking areas
- Away from “biologically sensitive” areas
- Where vehicle won’t have to be moved
- Where clean up is easy to facilitate



- Separate from animal housing
- Separate from traffic flow
- Access to water for cleaning
- Clean surfaces to facilitate “cleaning”

Getting On And Off The Farm

GOOF Principles

5. Consider all premises contaminated
 - As soon as you step out of your vehicle, assume the ground/premises is covered with “bad bugs”



GOOF Principles

6. Minimize contamination on the farm

- Avoid areas with organic debris fields
- Avoid handling “biologically sensitive” items if possible



GOOF Principles

7. Everything going onto farm potentially to become contaminated
 - Anything coming off needs to be protected or disinfected



GOOF Principles

8. Proper C & D

1. Remove organic material
2. Clean – detergent, soap and water
3. Sanitize & disinfect

GOOF Principles

9. Proper use of disinfectants

- Match disinfectant to pathogen
- Proper mixing
 - Dilution
- Contact time
- Inactivators

Example

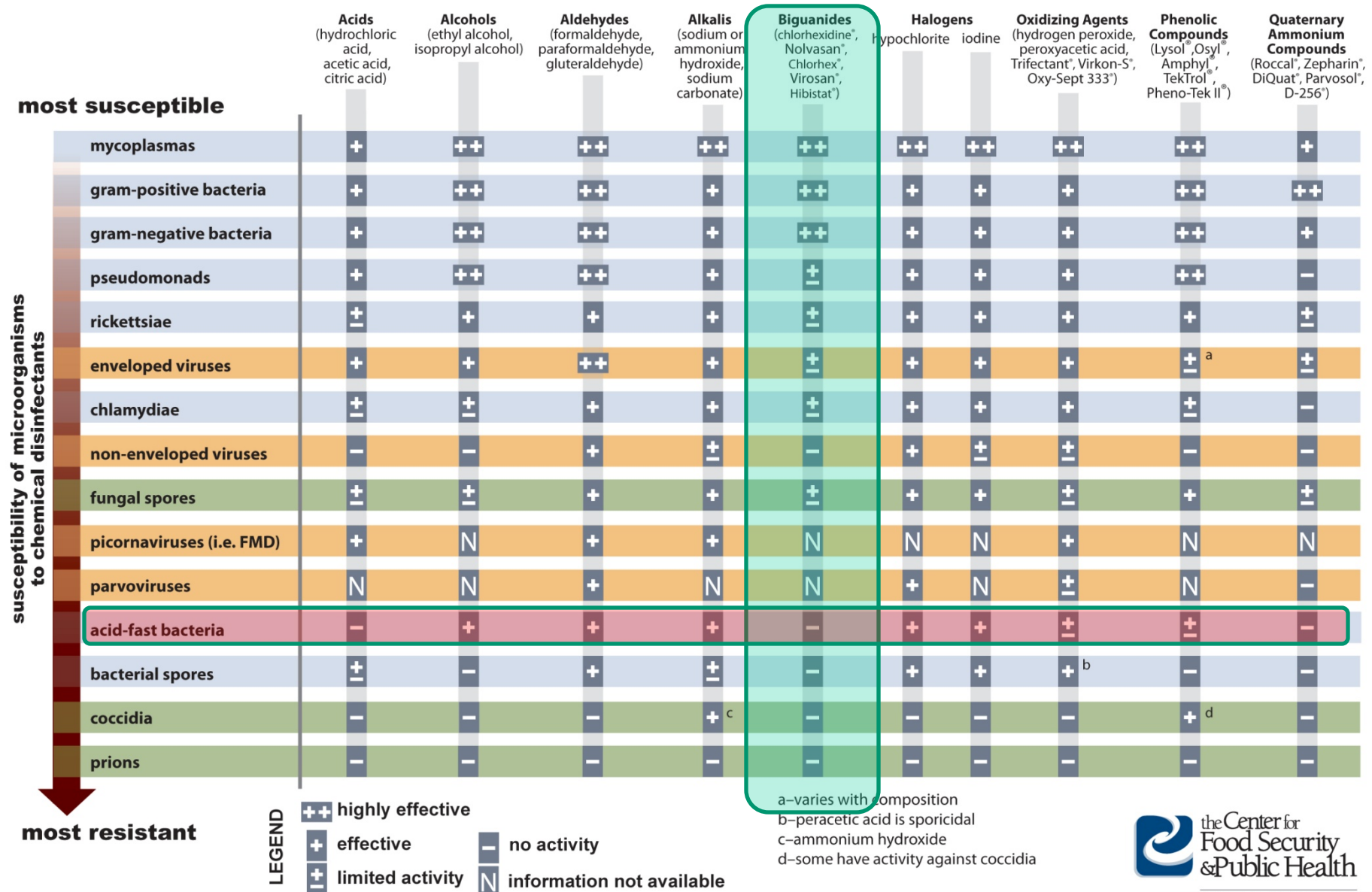
- Nolvassan = Biguanide disinfectant
- Concentration
 - 1%
- Contact time
 - 10 minutes
- pH
 - 5-7
- Pathogens.....



The Antimicrobial Spectrum of Disinfectants

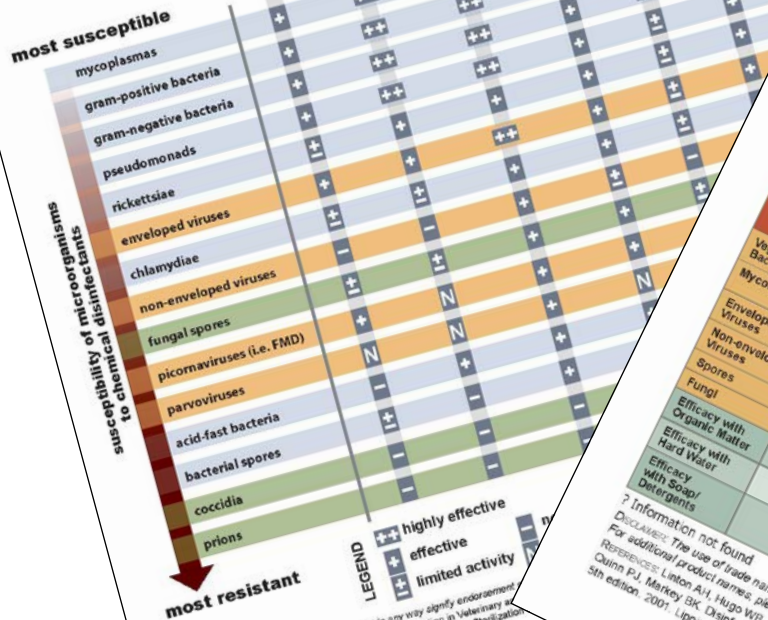
Chemical Disinfectants

Note: Removal of organic material must always precede the use of any disinfectant.



The Antimicrobial Spectrum of Disinfectants

Note: Removal of organic material must always precede the use of any disinfectant.



LEGEND
 +++ highly effective
 ++ effective
 + limited activity

DISCLAIMER: The use of trade names does not in any way signify endorsement. Adapted from: Linton AH, Hugo WB, Russel AD. Disinfection in Veterinary Practice. 5th edition. 2001. Lippincott, Williams and Wilkins: Philadelphia.

Characteristics of Selected Disinfectants

Disinfectant Category	Alcohols	Aldehydes	Biguanides	Halogens: Hypochlorites	Halogens: Iodine Compounds	Oxidizing Agents	Phenols	Quaternary Ammonium Compounds (QAC)
Sample Trade Names	Ethyl alcohol, Isopropyl alcohol	Formaldehyde, Glutaraldehyde	Chlorhexidine, Neovisan [®] , Virisan [®]	Bleach	Betadine [®] , Providone [®]	Hydrogen peroxide, Peroxyc acid, Virkon S [®] , Oxy-Sect 333 [®]	One-Stroke Environ [®] , Tek-Trol [®]	Roccal [®] , Diquat [®] , D-256 [®]
Mechanism of Action	•Precipitates proteins •Denatures lipids	•Denatures proteins •Alkylates nucleic acids	•Alters membrane permeability					
Advantages	•Fast acting •Leaves no residue	•Broad spectrum	•Broad spectrum					
Disadvantages	•Rapid evaporation •Flammable	•Carcinogenic •Mucous membranes and tissue irritation •Only use in well ventilated areas	•Broad spectrum					
Precautions								
Vegetative Bacteria	Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Mycobacteria	Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Enveloped Viruses	Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Non-enveloped Viruses	Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Spores	Not Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Fungi	Effective	Effective	Effective	Effective	Effective	Effective	Effective	Effective
Efficiency with Organic Matter	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Efficiency with Hard Water	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced
Efficiency with Soap/Detergents	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced

FOR MORE INFORMATION, SEE THE "DISINFECTION 101" DOCUMENT AT www.cfsph.iastate.edu

<http://www.cfsph.iastate.edu/>

Getting On And Off The Farm



GOOF Principles

10. Keep vehicle clean and disinfected

- Don't make them a pathogen source
 - Frequent cleaning inside and out
- Perception



Getting On A Farm



Big Medicine.
BIG RESULTS.
Equine. Production Animal.
Public Health. Foods Safety.

Department of Large Animal Clinical Sciences
College of Veterinary Medicine
Michigan State University

Find out more: cvm.msu.edu/lcs

Dan Grooms DVM, PhD
Michigan State University
College of Veterinary Medicine
517-432-1494
groomsd@cvm.msu.edu

