



Preventing PESTICIDE DRIFT

IOWA

College of Public Health



GREAT PLAINS
Center for Agricultural Health

Reduce Pesticide Drift & Save Money by Following these Guidelines...

TEMPERATURE & HUMIDITY

Pesticide drift can result from droplets evaporating too quickly, becoming very small and moving fast, and therefore traveling farther away from the intended area.

★ Do NOT spray when **temperatures** are **ABOVE 70°F** & when **humidity** is **BELOW 40%**.

BUFFER ZONES = Distance between application and other crops or animals

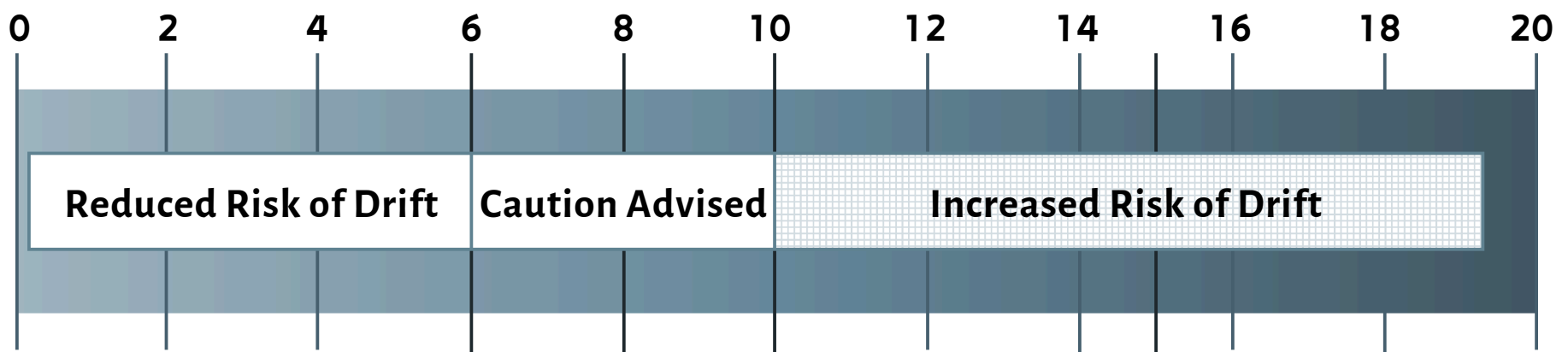
Drift Reduction Recommendations: Zones ranging from 200 to 500 feet, depending on pesticide.

WIND SPEED

- When wind speed **increases**, sprayed pesticides **do not deposit** on plants as intended.
- When wind speed is **too low**, pesticides also **may not deposit** well on plants. *Check below for recommendations by pesticide type.*

★ To minimize risk of pesticide drift, applications should occur in wind speeds **<6 mph**.

Wind Speed (mph)



For reduced risk, spray in wind speeds <6 mph.

>50% of reported drift cases in Iowa involved applicators spraying in wind speeds >10 mph.

14% of reported drift cases in Iowa involved applicators spraying in wind speeds >15 mph. These speeds would be considered extreme.

Most herbicide labels suggest spraying at wind speeds 8-10 mph or below.

GLYPHOSATE:

- **Lowest Potential Drift:** Wind 2-10 mph
- **Wind Up to 5 mph:** Do not apply aerially within 500 ft of other crops
- **Wind 5-10 mph:** 500 ft buffer zone may not be sufficient
- **Wind Exceeds 10 mph:** Do not apply

2,4-D:

- **Wind Speeds > 15 mph:** Do not apply; Buffer zone of 250 ft
- **Wind Speed < 3 mph:** Do not apply unless no inversion layer is confirmed

DICAMBA/2,4-D DMA MIX:

- **Wind Speeds > 15 mph:** Do not apply; Buffer zone of 250 ft
- **Wind Speed < 3 mph:** Determine if temperature inversion is present or stable atmospheric conditions are at or below nozzle height; If yes to either, do not apply



Listen to our FarmSafe podcast episode, *Pesticide Application Technology: Drones vs Boom*, to learn about the differences in pesticide aerosols & drift when using different application methods.