# When Does if Make Sense to Treat for BRD8 ASAPb 

Respiratory Bacteria Multiply More Quickly Than You Might Believe

## Bacterial populations can double every 30 minutes.

- Just 24 hours after a single organism invades the lungs, the population can be explosive, and by 48 hours it can be uncontrollable.
- As bacteria multiply, they give off toxins that produce pain, swelling, and inflammation in the lungs.
- The toxins also travel throughout the body and produce fever, depression, loss of appetite and weakness.


## A single infectious BRD

 organism can explode into trillions in less than 24 hours.| Time | Number of Organisms |
| :--- | :--- |
| - | 1 |
| 1 Hour | 4 |
| 4 Hours | $250+$ |
| 8 Hours | $65,000+$ |
| 12 Hours | $16,000,000+$ |
| 16 Hours | $4,000,000,000+$ |
| 20 Hours | $1,000,000,000,000+$ |
| 24 Hours | $281,000,000,000,000+$ |



Cattle lungs at the moment of infection


Cattle lungs 24 hours after infection without protection

## What to do?

- Give cattle both a non-steroidal anti-inflammatory and an antibiotic for Lung Protection Therapy (LPT).
- The anti-inflammatory will break the vicious circle of inflammation.
- The antibiotic will kill the bacteria that initiate the infection process.
- Administer Lung Protection Therapy (LPT) early to save lives and protect performance and profit.

With BRD, fast-acting treatment is critical. Cattle need all the help you can give.

