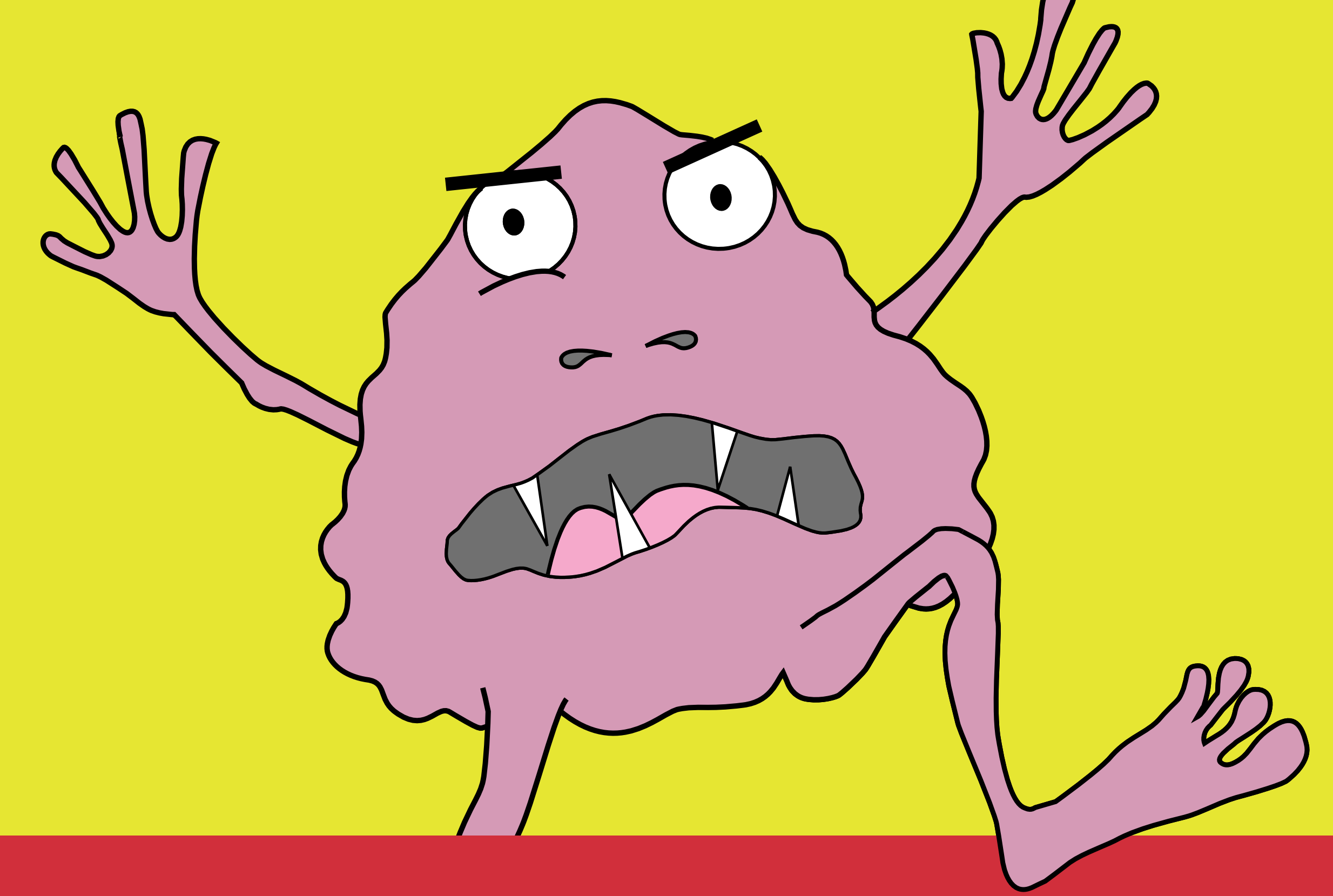


# A Beginners Guide to Boris the Bacterium

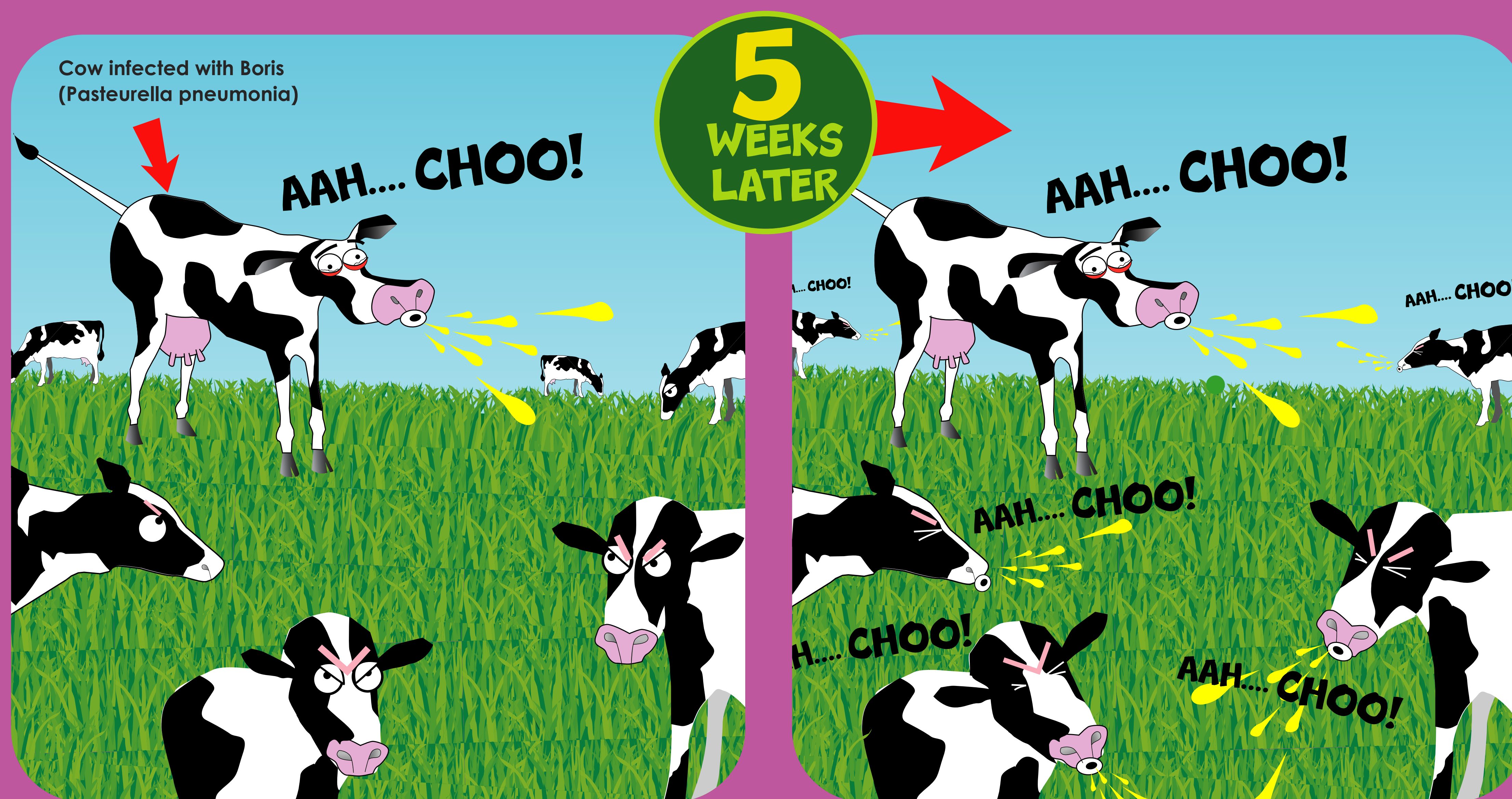


Boris is a **bacterium** that causes Pasteurella pneumonia in calves. He lives quite happily in the nose and throat of calves without making them ill. But when he moves to the lungs, calves can get pneumonia. This normally happens when the calves are upset by being moved or put into crowded conditions. The effects of the disease are a high temperature, a cough, fast breathing and a lot of snot. The pneumonia that Boris causes can kill the calves if they are not treated. Calves that recover from infection with Boris often do not do as well as those that remain uninfected.

## How Do we Fight Boris?

To see whether a calf is infected with Boris, swabs of snot can be taken from the calf's nose and any bacteria that grows can be identified as either Boris or his friends. Calves that are infected with Boris can be treated with antibiotics.

## The Spread of Boris in Cows



## THE FUTURE

- The diagnostic test needs to be improved so that it can tell the difference between the harmful Boris and his less harmful friends, so that antibiotics are only used for those calves most likely to get disease
- Moredun Scientists have developed a vaccine to protect calves and cows from Boris.