# Implementation of selective dry cow therapy in Irish dairy herds

Milk Quality Workshop 2023
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### Dry cow therapy

REGULATION (EU) 2019/6 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

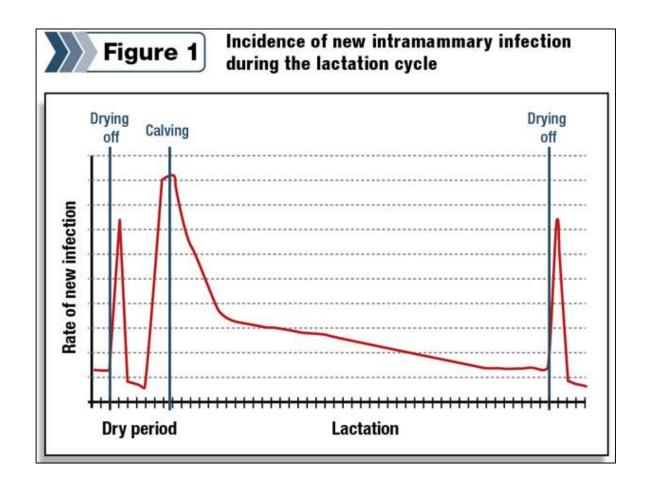
of 11 December 2018

on veterinary medicinal products and repealing Directive 2001/82/EC

Selective dry cow therapy



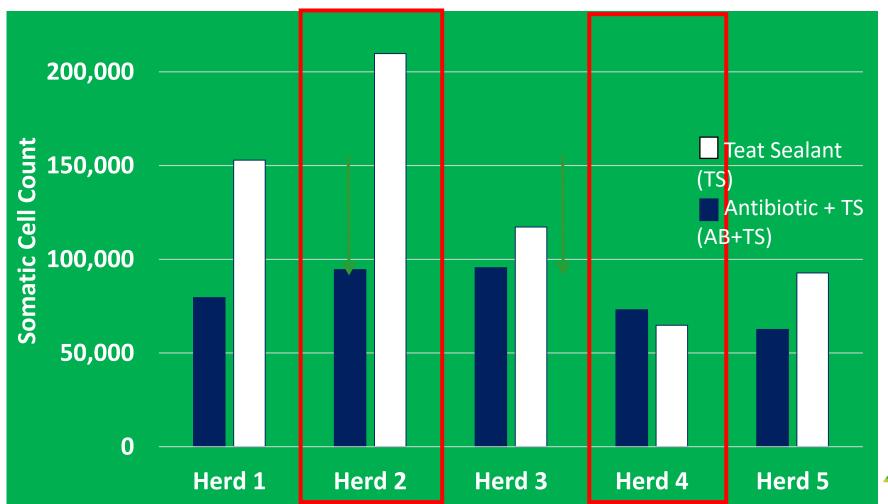
### Dry cow therapy





#### Impact of dry off treatment on SCC in 5 commercial herds





Teat sealant alone TS

Antibiotic + teat sealant AB+TS



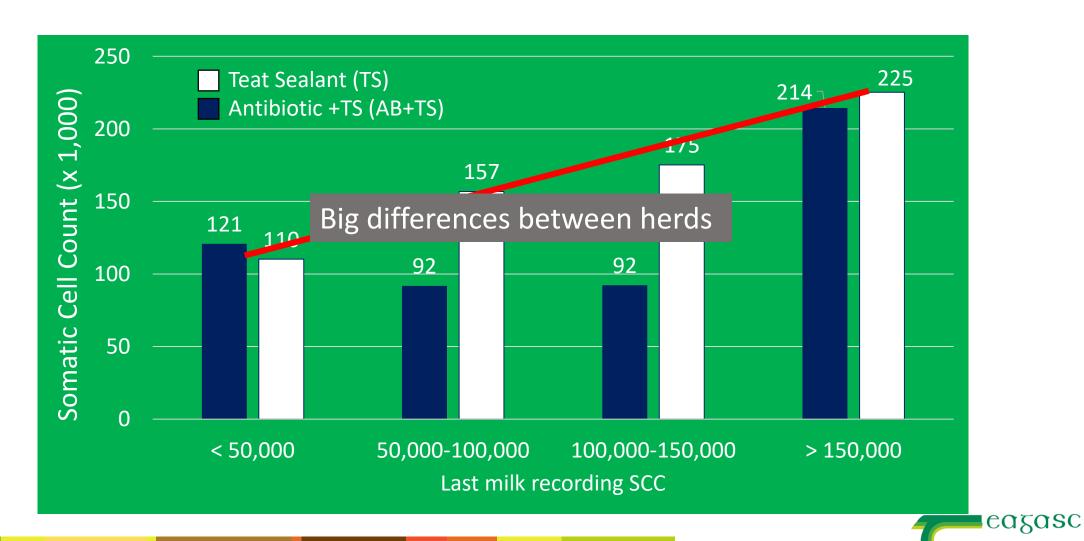
## Herds practicing selective dry cow therapy

|       | Avg last<br>SCC | % of cows<br>treated |
|-------|-----------------|----------------------|
| AB+TS | 195,000         | 53%                  |
| TS    | 54,000          | 47%                  |

AB+TS = Antibiotic + teat sealant TS = Teat sealant



#### **Factors associated with SCC**



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

#### Factors associated with SCC

#### **Lactation factors associated with low SCC:**

- Use of CMT
- Mastitis records
- Strip cows milk





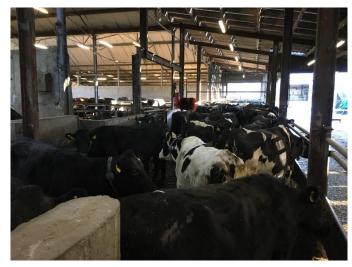
Source: 7 habits of highly successful milking routines



#### Factors associated with SCC

**Dry period factors associated with low SCC:** 

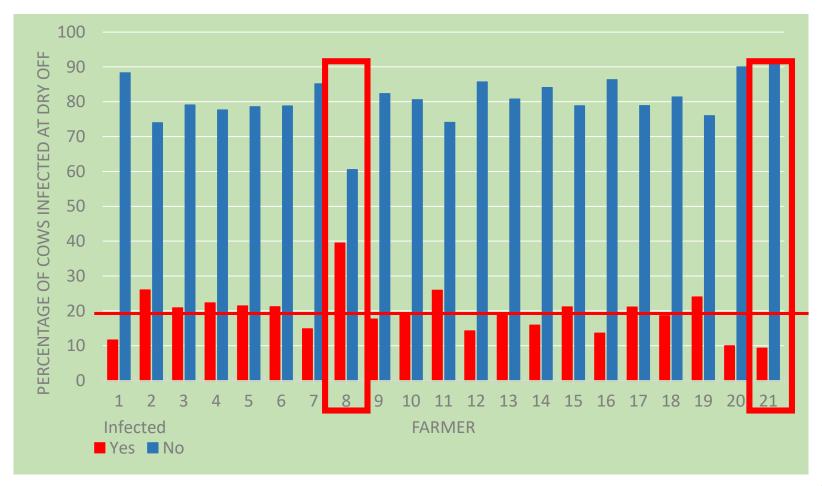
- Cubicles per cow (> 1 → 31,000 less SCC vs 1 or <1)
- Frequency cleaning/disinfecting cubicles (twice per day → 38,800 less SCC vs once)







### Infection status in late lactation per farm





#### Infection detection in late lactation

• ~29% of heifers (1st lactation) had infections

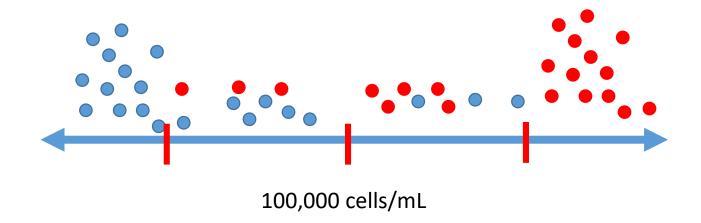
Last milk recording SCC (~30d before dry-off) → good

predictor

| Group            | Quarter samples | Optimal cut-point |
|------------------|-----------------|-------------------|
| Heifers          | 1,832           | 61,000            |
| 2+<br>lactations | 6,609           | 101,000           |



#### Infection detection in late lactation





## Considerations for use of selective dry cow therapy

- Cows to treat with teat seal alone → <100,000 cells/mL (lower for 1<sup>st</sup> lactation cows)
- Milk recording is key for mastitis control
- Heifers -> special attention
- Housing: >1 cubicle/cow, clean twice/day
- In lactation: strip cows, use CMT and keep records







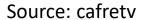


## Considerations for use of selective dry cow therapy

- Deal with S. aureus infections:
  - Correctly apply post milking disinfection
  - Keep hands as clean and dry as possible during milking
  - Cull repeated high SCC cows
- Improve dry-off procedure









### Thank You!

