

## Significant Event Audit Case Example: Bulk tank failure

### Section A: Case example on the six stages of a significant event audit

A Significant Event Audit (SEA) is a retrospective audit, which looks at one case in detail from beginning to end to either increase the likelihood of repeating outcomes that went well or to decrease the likelihood of repeating outcomes that went badly. SEAs may result in further development of guidelines, protocols or checklists and may result in the need for additional clinical audits (process/ structure or outcome). SEAs are conducted by bringing your team and the relevant case notes together to discuss the event. It is important that the event is discussed without any blame – allowing team members to provide honest and constructive feedback on how they contributed to the care process. An SEA is completed in 6 stages. The following points will take you through the steps that this practice took to put an SEA into practise.

#### 1. Identify the significant event

**Create a brief description of the event, context and outcome to be discussed in the meeting.**

Two tanks of milk had been lost due to antibiotic failure after the treatment of a cow with mastitis.

#### 2. Collect all the relevant information

**Gather all relevant information, such as case files and staff accounts etc., which contribute to the case.**

A significant event audit was completed. Information was collected from the team members involved with the incident and other members of the practice team; the clinical records and the veterinary surgeon directly involved.

#### 3. The meeting and analysis

**In a team discussion regarding the event, analyse the event and its causes to suggest where changes can be made. Indicate changes that could aid in achieving the desired outcome. It is important to ensure this meeting provides an environment where all staff members are encouraged to speak freely and honestly.**

A meeting was led by the veterinary surgeon involved. The results of the meeting were split into factors that affected the overall results. These were system, human, patient, owner, communication and other. This helps to create a blame-free meeting, looking at all contributions and getting input from all members of the team.

#### 4. Decide what changes need to be made

**Confirm which changes should be made, and make a prediction on the effect this will have. It may be that no change is required or there is only a need to disseminate the findings. Where changes are made, they could be in the form of checklists, guidelines or protocols. Following the meeting, a final report detailing the key points raised in stages 1-4 should be written.**

All vets that were on the farm visit rota required further training on drug protocols. This was to include the inclusion that batch numbers and milk withdrawal should be supplied to the farmer, in writing at the time of use.

## **5. Implement the changes**

**Develop an action plan. What needs to be done by whom, when and how? Ensure the whole practice team is aware of the changes and what role they play in implementing them. Monitor the changes once implemented and set a time to review them. The length of time required for monitoring will be dependent on the event.**

The incident was discussed with all team members, as well as the new protocols that were to be introduced.

## **6. Review the changes**

**The team should sit down together to review the changes and discuss what went well and what didn't. You could also share what you have found with clients and the profession. Further audit may be required to monitor the change.**

Further audits will be required to measure compliance with the newer protocols.

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### Section B: Significant event audit after bulk tank failure



<b>Title:</b>	Significant event audit for a bulk tank failure
<b>Date of significant event:</b>	03/02/2020
<b>Date of meeting:</b>	02/03/2020
<b>Meeting lead:</b>	Beth
<b>Team members present</b>	The whole practice team; Vets, RVNs, ACAs & Receptionists

#### What happened?

Beth works in mixed practice doing mostly small animal work with some farm calls where she has backup from two dedicated farm vets. One weekend she is on rota for farm animal emergencies when she is called out to a dairy farm for a case of suspected mastitis.

On arrival to the farm, Mr Firth sensing an opportunity with an unfamiliar face, immediately requests an antibiotic with zero milk withhold. Beth informs Mr Firth that the first course of action is to get a milk sample for a culture and sensitively before using any critically important antibiotics. The practice protocol of obtaining a sample, starting a course of broad-spectrum antibiotics and non-steroidal anti-inflammatories (NSAIDs) as necessary and rechecking regularly is explained. Mr Firth guides Beth towards the crush where “258” is waiting and a clinical exam is started.

Beth confirms mastitis in the back left quarter and starts to collect a sample by using a liberal amount of surgical spirit, cotton wool and determination to avoid the sh\*\*ty end of 258’s tail!

Whilst retrieving the sample, Beth frantically thinks of what suitable antibiotics she has in the visit box. Deciding on a “back to basics” approach, she chooses good old penicillin / streptomycin and after googling the dose rate injects 1ml/25kg intramuscularly, to be repeated once daily for three days. During the examination Mr Firth continuously engages in conversation about his son and ongoing tractor repairs taking place on the farm.

Once the exam is over Beth reminds Mr Firth that the milk withhold must be adhered to for the antibiotics. Mr Firth waves away her concerns about writing it down, as he says that he has a system of writing on the whiteboard for the relief milker. Mr Firth had also recently treated a cow with mastitis with the same medication. Beth, relieved to hear that another colleague had recommended the same treatment, returns to the practice to continue with her small animal in-patients.

A few weeks later another colleague returns from a visit to Mr Firth’s farm and reports that two tanks of milk have been lost due to antibiotic failure. The pharmaceutical company will not accept responsibility for the bulk tank failure due to improper administration of the drug.

## **At the SEA meeting we found out the following**

Beth is mainly responsible for the small animals in the practice, and her other colleagues are responsible for the farm work. She is on rota for farm animal emergencies, however she is not up to date on all the drug protocols when it comes to large animal, and not up to date with the SPCs for all the medicines used. Beth felt pressured from Mr Firth immediately on arrival to dispense the antibiotic with zero milk withhold, however she remembered the discussion that the last vets meeting about the treatment protocol in regards to critically important antibiotics.

Although Mr Firth agreed with the treatment protocol, Beth felt she had to continuously convince him to take the samples that were required.

Throughout the visit Mr Firth was preoccupied with other matters on the farm, and was trying to get Beth's opinion on them. Beth did remind Mr Firth of the milk withhold and suggest that he write the information down, however he informed her that he had a good system in place with the relief milker and a treatment whiteboard.

When asked at a later date Mr Firth advised he did not receive any milk withhold advice, or instructions about administering the antibiotic. The PMS system showed that no batch numbers had been recorded.

Although Mr Firth had stated that a previous cow had been treated for mastitis, the PMS system showed that this wasn't the case.

## **Why did it happen?**

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|-------------------------------|--|
| <b>System factors:</b>        | <ul style="list-style-type: none"><li>· Due to the rota, a predominately small animal veterinary surgeon was covering emergency visits for large animals.</li></ul>  |
| <b>Human factors:</b>         | <ul style="list-style-type: none"><li>· Beth was not confident or up to date with large animal drug protocols.</li><li>· Beth was distracted by Mr Firth's conversation about his other commitments.</li><li>· Clinical notes were not recorded correctly at the time as Beth had other priorities.</li><li>· Beth was keen to return to the practice and her small animal patients.</li></ul> |
| <b>Patient factors:</b>       | <ul style="list-style-type: none"><li>· None.</li></ul>  |
| <b>Owner factors:</b>         | <ul style="list-style-type: none"><li>· Mr Firth was preoccupied with other matters taking place on the farm.</li><li>· A zero milk withhold antibiotic was immediately requested to avoid any loss for the farm. Mr Firth assumed that Beth would dispense this due to his unfamiliarity with her.</li><li>· Mr Firth was not keen on the treatment protocol that was suggested.</li></ul>    |
| <b>Communication factors:</b> | <ul style="list-style-type: none"><li>· Beth and Mr Firth were both pre-occupied with other matters and were not carefully listening to each other.</li><li>· Written instructions and advice were not given at the time or recorded in the farmer's medicines book.</li></ul>   |
| <b>Other:</b>                 | <ul style="list-style-type: none"><li>· The dose rate given to 258 was correct, however the maximum volume to be injected at one site, which was stated on the data sheet, was not observed, so the pharmaceutical company would not accept responsibility for the bulk tank failure.</li></ul>  |

## What has been learned?

Beth was frustrated that she had not given the information to Mr Firth in writing. She felt she should have at least insisted that Mr Firth write the information down in his medicines book, however it did not occur to her at the time, as she was keen to return to the practice. A datasheet compendium or app should be available in all farm vets cars. All farm vets should have written paperwork to hand to farmers with batch numbers & withdrawal times and critically important antibiotic advice sheets detailing the practice policy available in their cars. Beth was praised for holding her ground with the critically important antibiotic protocol with a difficult client.

## What has been changed?

- CPD/training required:**
- All vets on the farm out of hours rota to receive further training on drug protocols for large animals.
  - Reminder to all farm vets that batch numbers & milk withdrawal must be supplied in writing to farmers at time of supply or use.
- New or updated protocols/checklists/guidelines:**
- Critically Important Antibiotic protocol to be re-distributed to team members to re-iterate importance.
  - Visit protocols to be introduced.
- Further audit required?**
- Process audit to measure compliance of the visit protocols
- Other:**
- None

## Follow-up date

**Today's date:** 02/03/2020

**Review date:** 03/08/2020

**Signature:**



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