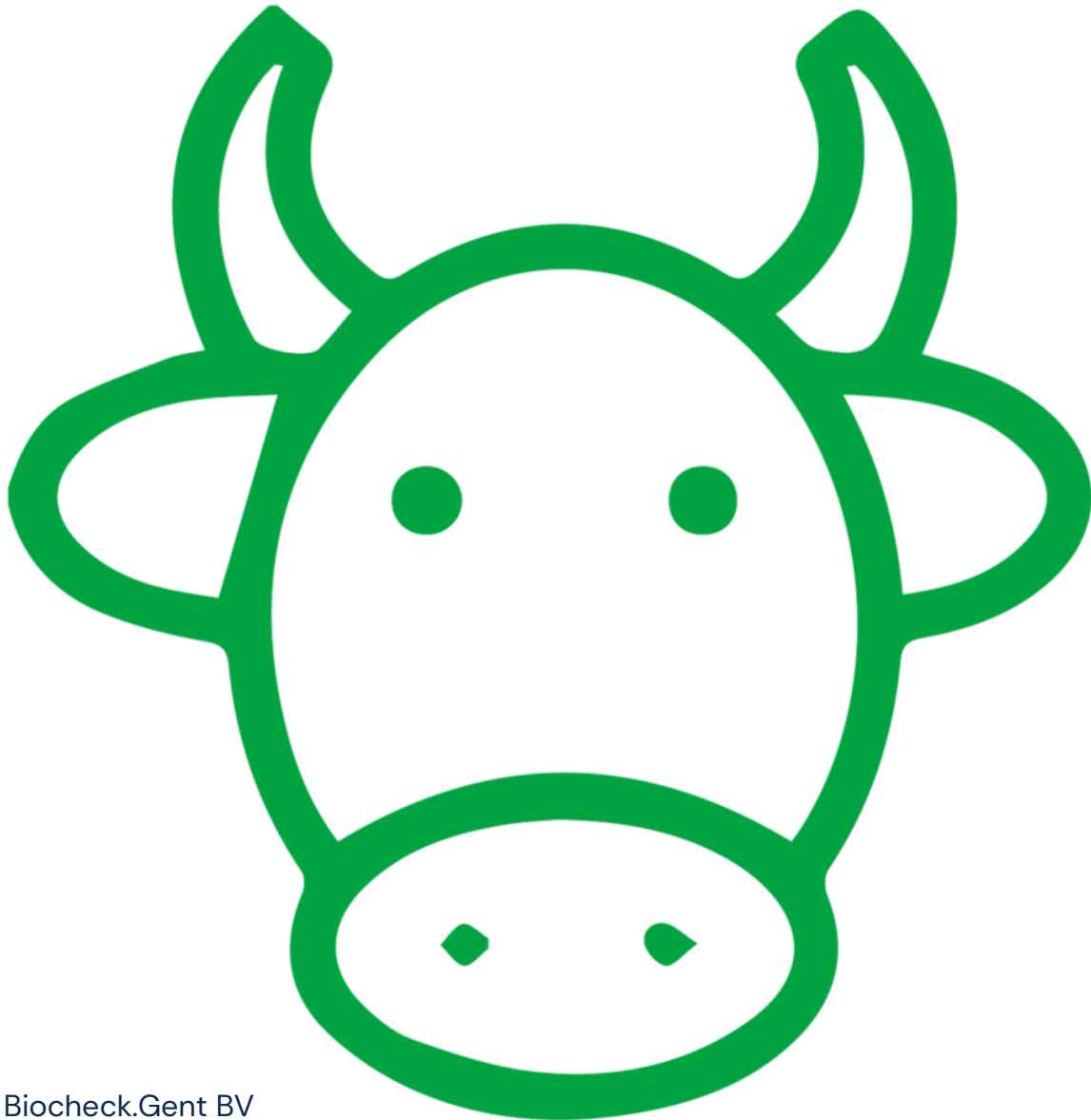


# BIOCHECK.UGENT CATTLE

## Dairy cattle



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## Glossary

**Calving pen:** a dedicated area where only the heifers/cows are housed before calving.

**Cleaning:** the physical removal of all foreign material (manure).

**Disinfection:** cleaning with chemical agents that inactivate organisms.

**Heifer:** a young female animal from the moment it gets pregnant with its first calf.

**Health advisor:** any person who comes to the farm to help improve the health of the animals.

**Quarantine:** a period and place in which animals are isolated/separated from other animals already part of the farm herd/flock.

**SCC:** somatic cell count. The number of somatic cells per ml of milk. This gives an indication for the quality of the milk.

## ~. Farm characteristics

I. What type of livestock production is conducted on the farm?  
(required)

Select one option.

- Dairy cattle only
- Mixed farm (dairy + beef)
- Mixed farm (dairy + other livestock)

If "Mixed farm (dairy + beef)" is chosen, please fill in the remainder of the checklist for the dairy cattle production. A mixed production checklist will be available soon.

II. How many years of experience in keeping cattle does the person in charge have?

.....

III. Who performs the farm work with the cattle?

Employees are part of the permanent staff, whereas the contractors are temporary staff.

Check any that apply.

- The herd owner
- The family member(s)
- The employee(s)
- The contractor(s)

IV. What is the number of people (full-time or part-time) who are taking care of the cattle?

.....

V. How many bulls are there on the farm?

The number of male animals present on the farm for **reproduction**. Please provide the average figures during a yearly productive cycle.

.....

VI. How big is the lactating herd size?

Please provide the average figures during a yearly productive cycle.

.....

VII. How many dry cows are there on the farm?

*Please provide the average figures during a yearly productive cycle.*

.....

VIII. How many calves younger than 3 months are there on the farm?

*Please provide the average figures during a yearly productive cycle.*

.....

IX. How many calves aged between 3 and 12 months are there on the farm?

*Please provide the average figures during a yearly productive cycle.*

.....

X. How many animals aged between 12 and 24 months are there on the farm?

*Please provide the average figures during a yearly productive cycle.*

.....

## A. Purchase and reproduction

1. Have cattle been purchased within the last 2 years? *(required)*

*Check any that apply.*

- Yes, non-pregnant replacement heifers, incl. young calves
- Yes, pregnant heifers
- Yes, lactating cows
- Yes, bulls for reproduction
- No

*If "Yes, non-pregnant replacement heifers, incl. young calves" is checked, go to the next question.*

*If "Yes, pregnant heifers" is checked, go to question 4.*

*If "Yes, lactating cows" is checked, go to question 5.*

*If "Yes, bulls for reproduction" is checked, go to question 3.*

*If "No" is checked, go to question 17.*

2. How many times (number of purchases) in the past year were non-pregnant replacement heifers or young calves purchased? *(required)*

*If less than once a year, use decimals, e.g., 0.5 for once every two years.*

.....

3. How many times (number of purchases) in the past year were bulls for reproduction purchased? *(required)*

*If less than once a year, use decimals, e.g., 0.5 for once every two years.*

.....

4. How many times (number of purchases) in the past year were pregnant heifers purchased? *(required)*

*If less than once a year, use decimals, e.g., 0.5 for once every two years.*

.....

5. How many times (number of purchases) in the past year were lactating cows purchased? *(required)*

*If less than once a year, use decimals, e.g., 0.5 for once every two years.*

.....

## 6. Where were cattle purchased in the last 2 years? (required)

Check any that apply.

- A single supplier who houses animals from the same origin
- A single supplier who houses animals from different origins
- From a salesperson or through markets
- From multiple sources

If "A single supplier who houses animals from different origins" or "From a salesperson or through markets" is chosen, go to question 8.

## 7. Before the cattle arrive on the farm, is contact between them and animals from other farms possible (e.g., during transportation or holding)? (required)

Select one option.

- Yes
- No
- I don't know

## 8. When cattle are bought from another farm, is the supplier's health status known before purchase? (required)

*A herd/flock with a known health status is a herd from which it is known if it is free from specific diseases or not. If the herd/flock is free from specific diseases, it therefore also guarantees that the delivered products (animals) originating from this herd are also free of these diseases.*

Select one option.

- Yes, the supplier's status is higher than my own status
- Yes, the supplier's status is equal to my own status
- Yes, the supplier's status is lower than my own, but I take precautionary measures
- Yes, the supplier's status is lower than my own and no precautionary measures are taken
- No
- I don't know

9. Are cattle tested for specific diseases before being added to the herd (i.e., entry protocol or other tests)? (required)

*I.e., tests before purchase or during the quarantine period.*

Select one option.

- Only tests required by law/regulation are performed
- Required tests plus additional voluntary screening tests are performed
- No disease testing is performed

10. Are all new cattle put into quarantine when arriving on the farm? (required)

*Quarantine: a period and place in which you isolate/separate animals in an area physically separated from other animals already part of the farm herd/flock. A separate pasture can also function as a quarantine area.*

Select one option.

- Always
- Sometimes
- Never/no quarantine available

*If "Never/no quarantine available" is chosen, go to question 17.*

11. What is the minimum duration (in days) of the quarantine period that was applied in the last year? (required)

.....

12. Before entering the quarantine area, are workers required to do the following? (required)

	Always	Sometimes	Never
Wear compartment-specific clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wear compartment-specific footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wash hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Is the quarantine area fully empty before the introduction of new cattle? (required)

Select one option.

- Always
- Sometimes
- Never

*If "Never" is chosen, go to question 15.*

#### 14. Is the quarantine area ... before the introduction of new cattle? (required)

*Cleaning: the physical removal of all manure, including a wet cleaning step.*

*Disinfection: applying a chemical agent that inactivate organisms.*

*If the quarantine area is a separate pasture, select "Never" for all options below.*

	Always	Sometimes	Never
cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disinfected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### 15. How are newly introduced lactating cows milked during their quarantine period? (required)

*Select one option.*

- Milked at the end of the milking order
- Milked at the beginning of the milking order
- Milked in a separate milking session
- Milked with the main herd
- Milked with a separate milking machine

#### 16. Is a milk sample (e.g., to test for mastitis) from the newly introduced heifers/cows taken and tested before they are introduced or at the start of lactation in the quarantine area? (required)

*Select one option.*

- Always
- Sometimes
- Never

#### 17. Are there any cattle that leave the farm and return afterwards? (required)

*E.g., for shows, competitions, or stock market. This does **not** include going on pasture.*

*Select one option.*

- Yes
- No

*If "No" is chosen, go to question 19.*

18. Are these returning cattle put into quarantine? *(required)*

Select one option.

- Always
- Sometimes
- Never/no quarantine available

19. How are cattle on the farm bred? *(required)*

Select one option.

- Artificial insemination/embryo transplantation
- Natural service
- Both artificial insemination/embryo transplantation and natural service

*If "Artificial insemination/embryo transplantation" is chosen, go to question 21.*

20. Has the bull been tested for sexually transmitted diseases (e.g., Trichomonas, IBR, ...)? *(required)*

Select one option.

- Always
- Sometimes
- Never

*If "Natural service" was chosen in question 19, go to question 22.*

21. When semen is purchased from a farm/institution, is the supplier's health status known before purchase? *(required)*

*A herd/flock with a known health status is a herd from which it is known if it is free from specific diseases or not. If the herd/flock is free from specific diseases, it therefore also guarantees that the delivered products (animals) originating from this herd are also free of these diseases.*

Select one option.

- Yes, the supplier's status is higher than my own status
- Yes, the supplier's status is equal to my own status
- Yes, the supplier's status is lower than my own, but I take precautionary measures
- No
- Not applicable, semen is not purchased
- I don't know (information not readily available)

## B. Transport of animals and removal of deadstock

22. Is the farm site physically divided into a clean and dirty area? (required)

*The clean area is the area of the production site with restricted access, i.e., where only animals from the farm, persons after they have applied the hygienic measures in the hygiene lock, and farm-specific materials and vehicles are allowed. The dirty area comprises all other parts of the farm to which visitors, external vehicles, ... have access. The dirty area also includes the carcass storage facility.*

Select one option.

- Yes
- No
- I don't know

23. How are animals transported to and from the farm? (required)

Select one option.

- Internal (farm-owned) transport vehicles
- External transport vehicles
- A combination of internal and external transport vehicles

*If "Internal (farm-owned) transport vehicles" is chosen, go to question 27.*

24. Do external transport vehicles have to be sanitized before entering the farm? (required)

Select one option.

- The outside of the vehicle and the tyres
- Only the tyres (e.g., passing through clean transport baths)
- Sometimes/Only when there is a disease outbreak
- No

25. Do transporters (e.g., farm to slaughter hauliers) have access to the animal holding area and is direct contact with the animals possible when loading the animals? (required)

Select one option.

- Yes
- No

26. Does the transporter receive and wear farm-specific clothing and footwear? (*required*)

*Select one option.*

- Always
- Sometimes
- The driver brings his/her own cleaned and disinfected clothing and footwear/disposable overshoes
- The driver stays inside the transport vehicle
- Never

27. When cattle are delivered to the farm, are only the animals that are supposed to be delivered to the herd in the transport vehicle? (*required*)

*Select one option.*

- Always
- Sometimes
- Never

28. When cattle are transported from the farm, is the transport vehicle empty on arrival at the farm? (*required*)

*Select one option.*

- Always
- Sometimes
- Never
- I don't know

*If an option **different** from "Always" is chosen, go to question 30.*

29. Is the transport vehicle on the inside always cleaned and disinfected before loading animals? (*required*)

*Select one option.*

- It's cleaned and disinfected
- It's only cleaned
- No
- I don't know

30. Is there a dedicated deadstock storage space, separated from the animal facilities? *(required)*

*Select one option.*

- Yes
- Yes, but it is not physically separated from the live animals
- No
- Not relevant, deadstock is immediately processed

*If "No" or "Not relevant, deadstock is immediately processed" is chosen, go to question 34.*

31. Is the deadstock storage space located in the dirty area of the farm? *(required)*

*Select one option.*

- Yes
- No

32. Is the deadstock storage space enclosed and well-maintained to prevent vermin, pets or wild animals from accessing the deadstock? *(required)*

*Select one option.*

- Yes
- Sometimes/partially
- No

33. Is the deadstock storage space cleaned and/or disinfected after each use? *(required)*

*Select one option.*

- It's cleaned and disinfected
- It's only cleaned
- It's only disinfected
- Not cleaned nor disinfected

### 34. What happens with the deadstock? (required)

*Composting is a natural decomposition process for organic wastes. Burying might be prohibited in your country. Please be aware that these checklists are used around the world.*

*Select one option.*

- Deadstock is composted
- Deadstock is buried/ burned
- Deadstock is stored and collected by a rendering company

*If "Deadstock is buried/ burned" is chosen, go to question 36.*

*If "Deadstock is stored and collected by a rendering company" is chosen, go to question 37.*

### 35. How is deadstock composted? (required)

*Check any that apply.*

- In a fully contained system (e.g., vessels, bins)
- In an environment physically separated from the live animals
- Deadstock is placed above an impervious base
- Deadstock is fully covered
- None of these apply

*Go to question 38.*

### 36. How are dead animals buried/burned? (required)

*Buried in appropriate soil: deep burial in pits away from a groundwater source.*

*Select one option.*

- Dead animals are burned in an approved incinerator on the farm
- Dead animals are burned in an open fire
- Dead animals are buried in the appropriate soil on the farm
- Dead animals are buried on an external site
- Other

*Go to question 38.*

### 37. Can deadstock be collected by the rendering company without them entering the premises of the farm (e.g., from the public road)? (required)

*Select one option.*

- Yes
- No

38. Are all materials and equipment used for the manipulation of deadstock cleaned and/or disinfected? (*required*)

*Select one option.*

- It's cleaned and disinfected
- It's only cleaned
- It's only disinfected
- Not cleaned nor disinfected

## C. Feed and water supply

### 39. Are feed storage facilities enclosed? *(required)*

*Excluding ensilaged feed.*

*Select one option.*

- Always
- Sometimes/partially
- Never

*If "Never" is chosen, go to question 41.*

### 40. Can animals have access to any of the feed storage facilities? *(required)*

	Yes	Partially	No	I don't know
Rodents/pests (e.g., insects)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Birds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domestic animals (e.g., cats, dogs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 41. Are feeding utensils used for animal feed purposes only (i.e., there's no double use, e.g., for manure)? *(required)*

*Select one option.*

- Always
- Sometimes
- Never

### 42. How often are the drinking troughs cleaned? *(required)*

*Select one option.*

- Weekly or more
- Multiple times a month
- Monthly
- Multiple times per year
- Annually
- Never

43. How frequently is a bacteriological analysis of the animal drinking water performed? (*required*)

*Select one option.*

- Yearly or more frequent
- Every two years
- Less frequent than every two years
- Never
- Never, I have a municipal water supply

*If "Never" or "Never, I have a municipal water supply" is chosen, go to question 45.*

44. At which location are the water samples for the bacteriological analyses taken? (*required*)

*Select one option.*

- At the source
- At the last drinker (farthest away from the source)
- Both at the source/storage tank and the last drinker
- Other (e.g., drinker at the beginning of the line)

## D. Visitors and farmworkers

### 45. Does the farm follow a written biosecurity plan? *(required)*

*A biosecurity plan should at least contain the following elements: the critical aspects/risks associated with the farm, and prioritization of farm-specific biosecurity implementation with regular (at least annual) revisions for improvement.*

*Select one option.*

- Yes
- No

### 46. Did the farmer and/or farmworkers receive training on biosecurity in the last five years? *(required)*

*Training can be a diploma, e-learning courses, workshops, or webinars. The training can also be given by internal personnel if they have received certified training on their end. If there are no farmworkers, select answer option "Yes, both have received training on biosecurity" when the farmer has received training or select answer option "Neither of them has received training on biosecurity" when the farmer has not received training.*

*Select one option.*

- Both have received training on biosecurity
- Only one of them has received training on biosecurity
- Neither of them has received training on biosecurity

### 47. Are visitors obliged to notify and record their presence before entering the animal facilities? *(required)*

*I.e., a closed gate so a visitor needs to call someone/ring a bell to get access, the obligation to sign a register book, ...*

*Select one option.*

- Yes
- No

### 48. Is there a separate space (e.g., hygiene lock) available for changing clothes/footwear and washing hands/putting on gloves? *(required)*

*Select one option.*

- Yes
- There is a space available, but it is not always used
- No

49. Are there farmworkers who have contact with cattle other than those on the establishment? *(required)*

*Cattle at home, working on other farms, agricultural shows, ...*

Select one option.

- Yes
- No
- I don't know

50. Before being allowed to enter the farm, do farmworkers have to...? *(required)*

	Always	Sometimes	Never
wear farm-specific clothes/bring clean clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wear farm-specific footwear/bring clean and disinfected footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wash and disinfect hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. Before being allowed to enter the farm, do work-related professionals (e.g., veterinarian, hoof trimmer, milk collector) have to...? *(required)*

	Always	Sometimes	Never
wear farm-specific clothes/bring clean clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wear farm-specific footwear/bring clean and disinfected footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wash and disinfect hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
clean and disinfect their materials (select always if not applicable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

52. Are there any other (non-professional) visitors that can enter the farm and come into contact with the animals? *(required)*

Select one option.

- Yes
- No

*If "No" is chosen, go to question 54.*

53. Before being allowed to enter the farm, do non-professional visitors (e.g., school visits, clients) have to...? *(required)*

	Always	Sometimes	Never
wear farm-specific clothes/bring clean clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wear farm-specific footwear/bring clean and disinfected footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wash and disinfect hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## E. Infrastructure, location and housing

54. Are insect repellents or insect control measures applied on the farm? *(required)*

*Select one option.*

- Insect control is applied routinely across the farm
- Insect control is applied only in high-risk areas or periods
- No insect repellent or insect control measures are applied

55. Is a rodent control programme in place on the farm? *(required)*

*Control programme: a regular protocol containing the control measures.*

*Select one option.*

- A professional rodent control company is hired periodically
- The farm has its own periodical rodent control programme
- Rodent control is performed only if an infestation/overpopulation is noticed (e.g., via rodent traps)
- There is currently no rodent control programme

56. Is a bird control programme present on the farm (netting, air inlets covered)? *(required)*

*Select one option.*

- Yes
- Partially
- No

57. Do the cattle, including the youngstock, have access to an outdoor area (incl. a restricted outside area) during their lifetime? *(required)*

*Select one option.*

- Yes
- Sometimes
- No

*If "No" is chosen, go to question 59.*

58. When the cattle are outside, do they have access to natural water bodies (e.g., brooks and ponds)? *(required)*

*Select one option.*

- Yes
- No

59. Is the farm enclosed (fenced) to prevent contact between the farm's animals and other animals, wildlife, or people? *(required)*

*Select one option.*

- Yes
- Partially
- No

60. Is there manure that originated from other farms being spread on the surrounding farmlands that are within less than 300 metres of the farm or pastures? *(required)*

*Select one option.*

- Yes
- No
- I don't know

## F. Disease management

### 61. Is an animal health register kept? (required)

*Register: a book or computer programme in which detailed information on health status, past illnesses and the treatments of the cattle are stored in an accessible way so that it can be used in decision-making for the sick cattle.*

*Select one option.*

- Yes
- No

### 62. Is there a treatment plan on the farm that is evaluated on an annual basis by a veterinarian/health advisor? (required)

*Health advisor: any person who comes to the farm to help improve the health of the animals (e.g., nutritionist, consultant, ...).*

*Check any that apply.*

- Yes, for vaccination
- Yes, for deworming
- Yes, for additives/pre- or probiotics/...
- No

### 63. Is a regular (i.e., at least once a year) evaluation made of the disease status of the farm (e.g., serology, trends in slaughterhouse findings, bulk milk) in consultation with a veterinarian/health advisor? (required)

*Select one option.*

- Yes, for regulated and non-regulated diseases
- Yes, for regulated diseases
- No

### 64. Are animal deaths investigated to identify the cause of death? (required)

*Select one option.*

- Always
- Sometimes
- Never

65. Are equipment and materials (e.g., buckets, thermometer, cleaning and feeding utensils, gastric tubes, ...) available specifically for sick cattle? *(required)*

Select one option.

- Yes
- No

If "No" is chosen, go to question 67.

66. Is this specific equipment cleaned and disinfected before used for another animal? *(required)*

Select one option.

- It's cleaned and disinfected
- It's only cleaned
- No

67. Are sick cattle isolated in a hospital pen, physically separated from the healthy animals? *(required)*

*Isolated: physically separated with no possible contact with healthy animals.*

Select one option.

- Yes
- Partially
- No/no hospital pen available

If "No/no hospital pen available" is chosen, go to question 71.

68. Before entering the hospital pen, do workers have to take the following measures? *(required)*

	Always	Sometimes	Never
Change into compartment-specific clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change into compartment-specific footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wash hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

69. Is the hospital pen empty of bedding material after each use? *(required)*

Select one option.

- Yes
- No

If "No" is chosen, go to question 71.

70. Is the hospital pen ... before each new introduction of sick cattle? (*required*)

	Always	Sometimes	Never
cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disinfected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

71. Concerning the use of injection needles/syringes for treatments, by the farmer/farmworkers, what is the strategy followed? (*required*)

*Select one option.*

- Single-use syringes and needles
- Reusable syringes (separate per age group) and single-use needles
- Reusable syringes (no separation per age group) and single-use needles
- Reusable syringes and needles (separate per age group)
- Reusable syringes and needles (no separation per age group)
- Reusable syringes and needles that are disinfected between groups

72. Do the cows have to regularly pass through a hoof disinfection footbath? (*required*)

*Select one option.*

- Yes
- Only when problems appear
- No

73. Are the claws regularly trimmed? (*required*)

*Select one option.*

- Yes
- Only when problems appear
- No

74. Which type of bedding material is used in cow laying areas?  
(*required*)

*Check any that apply.*

- Sand
- Chalk
- Straw
- Sawdust or wood shavings
- Recycled manure solids
- Mats or mattresses
- Pasture
- Other

## G. Calving management

75. Which type of calving pens are available on the farm? (required)

*A calving pen is different from a dry cow pen. A calving pen is a dedicated area where only the heifers/cows are housed before calving.*

*Check any that apply.*

- Individual calving pens
- Group calving pens
- No dedicated calving pens available

*If "No dedicated calving pens available" is chosen, go to question 79.*

76. Is the area where calving takes place ever used to house the sick cattle, or is the area adjacent to the sick cattle? (required)

*Select one option.*

- Always
- Sometimes
- Never

77. Are people assisting in calving entering the area where calving takes place required to take the following measures? (required)

	Always	Sometimes	Never
Wear compartment-specific clothes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wear compartment-specific footwear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wash hands/use gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

78. Is the area where calving takes place ... before each new introduction of cattle? (required)

	Always	Sometimes	Never
cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disinfected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

79. Are the hands cleaned and disinfected before/after each calving/abortion? *(required)*

	Cleaned & disinfected	Only cleaned	Only disinfected	No
Hands before calving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands after calving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands before abortion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands after abortion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

80. In the case of (several) abortions, is the cow tested afterwards (i.e., abortion protocol)? *(required)*

*Select one option.*

- Always
- Sometimes
- Never

81. Are the cow's hindquarters (incl. the udder) cleaned and disinfected before each calving? *(required)*

*Select one option.*

- They're cleaned and disinfected
- They're only cleaned
- No

82. Where are the foetal membranes and fluids disposed of after a calving/abortion? *(required)*

*Check any that apply.*

- They're left in the calving area or where the abortion took place
- They're eaten by cow/dog/wild animal/other
- They're put on the manure pile/slurry pit
- They're put in the deadstock storage place/waste container
- Buried
- Other

## H. Calf management

83. How many litres of colostrum are administered to the calf within the first six hours of birth? (*required*)

*Select one option.*

- Between 0 and 2 litres
- Between 2 and 5 litres
- The calf stays with the mother
- I don't know

84. Which colostrum is given to the calves? (*required*)

*Check any that apply.*

- Pasteurised colostrum
- Unpasteurized colostrum
- None
- Not applicable, the calf stays with the mother

*If "Not applicable, the calf stays with the mother" is chosen, go to question 87.*

85. Is there a frozen or commercial (dried powder) reserve of colostrum present, in case the mother does not provide enough milk or the colostrum is of insufficient quality? (*required*)

*Select one option.*

- Yes, there's a frozen reserve originating from other cows on the farm
- Yes, there's a commercial reserve
- No

86. Is the equipment used for colostrum administration (e.g., tubes, bottles) cleaned and disinfected after each use? (*required*)

*Select one option.*

- Cleaned and disinfected
- Only cleaned
- I make use of single-use materials
- No
- Not applicable, the calf stays with the mother

87. Are calves housed in individual or pair calf boxes/hutches, or in separate pens in the first few weeks prior to weaning? *(required)*

Select one option.

- Yes
- No

If "No" is chosen, go to question 91.

88. Are individual or pair calf boxes/hutches or separate pens empty after each use? *(required)*

Select one option.

- Yes
- No

If "No" is chosen, go to question 90.

89. Are the individual or pair calf boxes/hutches or separate pens ... before each new introduction of calves? *(required)*

	Always	Sometimes	Never
cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disinfected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

90. Is contact possible between calves in different hutches/boxes or separate pens? *(required)*

Select one option.

- Yes
- No

91. Are the calves ever fed waste milk (i.e., milk that is not suitable for the milk tank)? *(required)*

Select one option.

- Yes, pasteurized waste milk
- Yes, unpasteurized waste milk
- No
- Not applicable, the calf stays with the mother

92. How often are the milk feeding buckets (incl. the teats) cleaned? (required)

Select one option.

- Daily or more
- Multiple times a week
- Weekly
- Less than weekly
- Not applicable, the calf stays with the mother

93. Is the post-weaning group housing empty after each use? (required)

Select one option.

- Yes
- No
- Not applicable

If "No" or "Not applicable" is chosen, go to question 95.

94. Is the post-weaning group housing ... before each new introduction of calves? (required)

	Always	Sometimes	Never
dry cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
wet cleaned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
disinfected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
dried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## I. Dairy management

95. Which milking method is followed? *(required)*

*If both systems are used, choose the principal one.*

*Select one option.*

- Robotic milking
- Milking parlour

96. How many times per year is maintenance (check-up) of the milking equipment performed by technicians? *(required)*

*If this is done on a continuous/daily basis, enter 365.*

.....

97. Which type of test of the milking parlour is performed? *(required)*

*Select one option.*

- Static
- Dynamic
- Both

98. Are rubber or silicone teat cup liners used? *(required)*

*Select one option.*

- Rubber teat cup liner
- Silicone teat cup liner

99. How many milkings are done with a set of cup liners? *(required)*

.....

100. Are milking clusters being disinfected between cows? *(required)*

*Select one option.*

- Yes, after each cow
- Yes, after cows with mastitis
- Yes, after cows with a high somatic cell count (SCC)
- No

*If "No" is chosen, go to question 102.*

101. How are the milking clusters between cows disinfected? *(required)*

*Select one option.*

- With hot water (more than 75°C (167°F))
- With steam
- Other

102. Are the teats cleaned before milking? If yes, how? *(required)*

*Check any that apply.*

- Yes, prefoaming
- Yes, dry cleaning with separate towels
- Yes, wet cleaning and dried afterwards with separate towels
- Yes, wet cleaning, but not dried afterwards
- Only if visually dirty
- No

103. Is the foremilk examined (visual inspection) during forestripping? *(required)*

*Select one option.*

- Always
- Sometimes
- Never
- Not applicable (no forestripping)

104. Are the teats disinfected after the teat cups are removed? *(required)*

*Select one option.*

- Yes, with a dip
- Yes, with a spray
- No
- Not applicable, I do not use teat cups (i.e., manual milking)

105. Are cows kept upright for a period after milking? *(required)*

*Select one option.*

- Yes, for 30 minutes to an hour
- Yes, for longer than an hour
- No

106. Are the cows milked in a specific order? *(required)*

*Select one option.*

- Yes, cows with mastitis and/or a high SCC are milked last
- Yes, cows with mastitis and/or a high SCC are milked first
- Yes, another order
- No

107. Are the udders of the lactating cows clipped/shaved or flamed? *(required)*

*Select one option.*

- Yes, twice or more per year
- Yes, once per year
- No

108. Are the tails of the lactating cows clipped/shaved? *(required)*

*Select one option.*

- Yes, twice or more per year
- Yes, once per year
- No

109. Is bacteriological testing of cows' udders conducted at least once per year? *(required)*

*Select one option.*

- Yes, for all cows
- Yes, for a subset of cows
- No

## J. Working organisation and equipment

110. Are the animals grouped by category in the barn? *(required)*

Select one option.

- Yes
- Partially (e.g., only the calves)
- No

If "No" is chosen, go to question 113.

111. Are ... between groups? *(required)*

If separated people are responsible for the different groups, indicate "Always" for all questions below.

	Always	Sometimes	Never
compartment-specific clothes worn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
compartment-specific footwear worn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hands washed/gloves worn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

112. Which working sequence is used by the farmworkers in normal circumstances? *(required)*

Select one option.

- From youngest to oldest animals
- From oldest to youngest
- Another working sequence
- Dedicated personnel for separate groups
- There is no working sequence

113. Is there any equipment being shared with other farms that enter the barns and/or has contact with the cattle? *(required)*

Equipment can be hoof trimming equipment, dehorning devices, ...

Select one option.

- Yes
- No

If "No" is chosen, go to the end of this checklist.

114. Are measures taken before this shared material enters the barns or comes into contact with the cattle? (*required*)

*Select one option.*

- Cleaning and disinfection of the equipment
- Cleaning of the equipment
- No