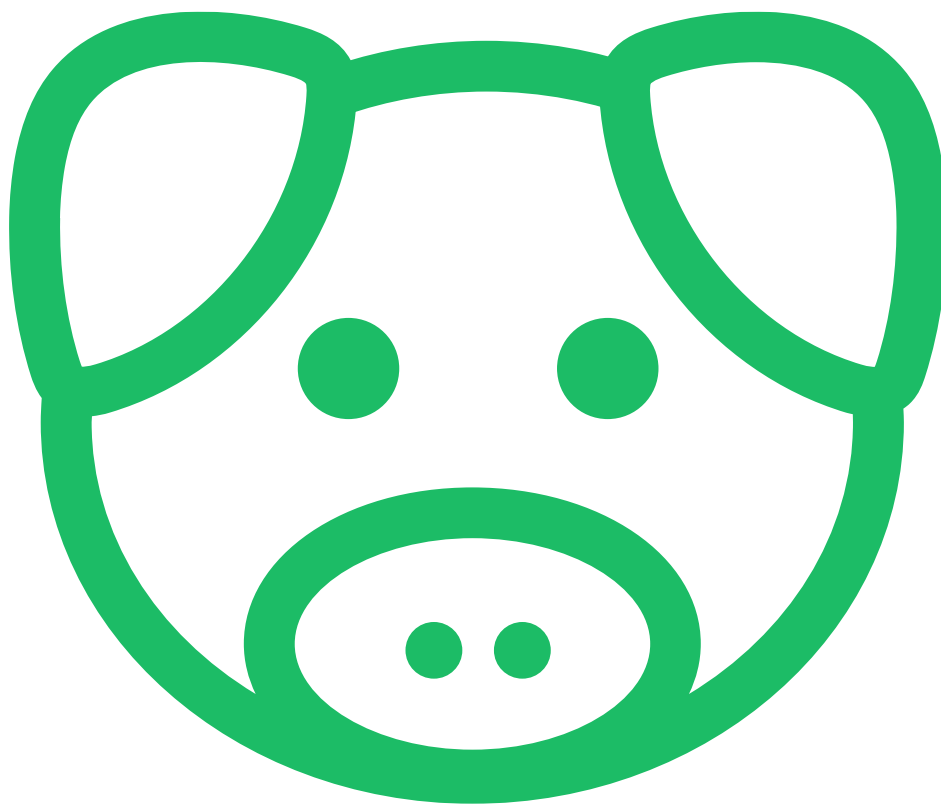


BIOCHECK.UGENT PIG

Commercial outdoor pig production



Biocheck.Gent BV

info@biocheckgent.com

biocheckgent.com

Glossary

Commercial:

Any farm that is raising animals intended to make a profit, irrespective of its size (number of animals present).

Compartment:

A physically defined unit or area where one group of pigs is being kept (i.e. you can have multiple compartments of the same animal category). Often, physical contact is possible between the animals of different pens within this compartment.

Deadstock or carcasses:

Deceased animals on the establishment.

Establishment:

The entire farm premises, including all buildings (if present) and the entire outdoor area. It includes premises with any number of pigs.

Outdoor farm:

Holding in which animals are kept temporarily or permanently outdoors. The outdoor area can be on the farm premises (adjacent to the farm buildings) or in forests, woodlands, agricultural land, or pastures (ref: EFSA Journal 2021;19(6):6639).

Pen:

The smallest unit in which pigs are being kept.

Working lines/working routine route:

A specific order in which the work on the establishment is conducted.

The survey is written from the perspective of the farmer. However, we welcome veterinarians, advisors, and other healthcare professionals to use the survey as well.

~. Farm characteristics

I. Which of the following animal categories are present in the establishment? *(required)*

Check any that apply.

- ☐ Sows/boars
- ☐ Suckling piglets
- ☐ Weaned piglets
- ☐ Slaughter pigs

If "Sows/boars" is chosen, go to question II.

If "Suckling piglets" is chosen, go to question III.

If "Weaned piglets" is chosen, go to question IV.

If "Slaughter pigs" is chosen, go to question V.

II. Where are the sows/boars kept? *(required)*

Even small huts or open pens/houses are considered indoor holding areas.

Select one option.

- ☐ Always indoors
- ☐ Combination of in- and outdoors
- ☐ Always outdoors

III. Where are the suckling piglets kept? *(required)*

Even small huts or open pens/houses are considered indoor holding areas.

Select one option.

- ☐ Always indoors
- ☐ Combination of in- and outdoors
- ☐ Always outdoors

IV. Where are the weaned piglets kept? *(required)*

Even small huts or open pens/houses are considered indoor holding areas.

Select one option.

- ☐ Always indoors
- ☐ Combination of in- and outdoors
- ☐ Always outdoors

V. Where are the slaughter pigs kept? (*required*)

Even small huts or open pens/houses are considered indoor holding areas.

Select one option.

- Always indoors
- Combination of in- and outdoors
- Always outdoors

VI. How many years of experience in keeping pigs does the person in charge have?

.....

VII. What is the number of people (full-time or part-time) that are taking care of the pigs?

.....

VIII. How old (in years) is the oldest building/hut in which pigs are being kept?

If the building was renovated, give the age before the renovation.

.....

IX. How old (in years) is the newest building/hut in which pigs are being kept?

If the building was renovated, give the age before the renovation.

.....

A. Location and housing

1. Is the outdoor surface made of concrete? (required)

If the answer to this question differs between age groups, select answer option "Partially".

Select one option.

- ☐ Yes
- ☐ Partially
- ☐ No

2. Is the establishment located in an area with a high or a low density of pigs? (required)

A region with a high density of pigs has an average density of >300 pigs/km² at the municipality level. If there are multiple pig establishments (incl. indoor, small scale, backyard) within a 3 km radius of your establishment, you are most likely located in a high-density area.

Select one option.

- ☐ Low density
- ☐ High density
- ☐ I don't know

3. Are there any other pigs kept within a 500-metre radius (0.3 miles) of your establishment? (required)

Select one option.

- ☐ Yes
- ☐ No

4a. Are you aware of wild/stray animals (excl. wild pigs) in close proximity to your establishment? (required)

Select one option.

- ☐ Yes
- ☐ No
- ☐ I don't know

If "No" or "I don't know" is chosen, go to question 5.

4b. Which wild animals have you seen in close proximity to your establishment?

.....

5. Have wild boars (or their traces) been spotted within a 10-kilometre radius (6.2 miles) of your establishment? *(required)*

Establishment: the entire farm premises, including all buildings (if present) and the entire outdoor area. It includes premises with any number of pigs.

Select one option.

- ☐ Yes
- ☐ No
- ☐ I don't know

6. Are the **indoor** housing areas (incl. the storage of feed and bedding material) enclosed by fences? *(required)*

Select one option.

- ☐ Yes
- ☐ No

7. Is the **outdoor area** enclosed by wild-boar-proof fences? *(required)*

A wild-boar-proof fence is a double row of fencing made from metal net or wire with a minimum height of 1.5m or a single solid fence made from metal, masonry, or other solid material with a minimum height of 1.5m.

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 9.

8. Are the fences inspected on a regular basis (i.e. at least monthly) to identify breaches? *(required)*

Select one option.

- ☐ Yes
- ☐ No

9. Are there, besides pigs, any other farm animals kept on your establishment for farming purposes? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 11.

10. Do the pigs share the same outdoor area with these other farm animals at the same time? *(required)*

Select one option.

- ☐ Yes
- ☐ No

11. Do consecutive batches of pigs have access to the same outdoor area? *(required)*

Select one option.

- ☐ Yes
- ☐ Yes, the outdoor area gets cleaned and disinfected in between
- ☐ Sometimes
- ☐ No

B. Purchase of breeding pigs, weaned piglets and semen

12. Are breeding pigs (sows/gilts/boars) purchased? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 21.

13. Are the breeding pigs (during the past 2 years) always bought from the same supplier? *(required)*

Select one option.

- ☐ Always the same supplier
- ☐ Sometimes a different supplier

14. Whenever breeding pigs are bought from another establishment, is the supplier's health status known before purchase? *(required)*

A herd with a known health status is a herd from which it is known if it is free from specific diseases (e.g. scabies, PRRS, ...) or not. If the herd 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 health status is higher than my own
- ☐ Yes, the supplier's health status is equal to my own
- ☐ Yes, the supplier's health status is lower than my own, but I take precautionary measures
- ☐ No
- ☐ I don't know

15. Is it verified (e.g. written document or other statements) whether the transport vehicle that brings the breeding pigs to the establishment is cleaned and disinfected before loading? *(required)*

Select one option.

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

16. How many times per year are breeding pigs delivered to your establishment? (required)

Select one option.

- ☐ Twice or less
- ☐ Between 3 and 6 times
- ☐ Between 7 and 12 times
- ☐ More than 12 times

17. Are all new breeding pigs quarantined in an area separate from the rest of the herd? (required)

The quarantine area can be a building or outdoor area but it should be completely separate from the rest of the animals.

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 21.

18. Is strict all-in management practised in the quarantine area? (required)

All-in: all the animals that have to be quarantined are put into the quarantine area at the same moment. It's crucial that no new animals (coming from another establishment) are introduced into the quarantine area before it is emptied.

Select one option.

- ☐ Yes
- ☐ No

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

.....

20. Is there a separate hygiene lock for the quarantine area? (required)

A hygiene lock is a facility, where among others, you can change into specific clothes/boots and clean/disinfect your hands.

Select one option.

- ☐ Yes
- ☐ No

21. Are piglets purchased? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 26.

22. Are the piglets (during the past 2 years) always bought from the same supplier? *(required)*

Select one option.

- ☐ Always the same supplier
- ☐ Sometimes a different supplier

23. Whenever piglets are bought from another establishment, is the supplier's health status known before purchase? *(required)*

A herd with a known health status is a herd from which it is known if it is free from specific diseases (e.g. scabies, PRRS, ...) or not. If the herd 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 health status is higher than my own
- ☐ Yes, the supplier's health status is equal to my own
- ☐ Yes, the supplier's health status is lower than my own but I take precautions measures
- ☐ No
- ☐ I don't know

24. Is it verified (e.g. written document or other statements) whether the transport vehicle that brings the piglets to the establishment is cleaned and disinfected before loading? *(required)*

Select one option.

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

25. How many times per year are piglets delivered to your establishment? (required)

Select one option.

- ☐ Three times or less
- ☐ Between 4 to 6 times
- ☐ Between 7 to 12 times
- ☐ More than 12 times

26. Does breeding occur naturally or artificially? (required)

Select one option.

- ☐ Natural breeding
- ☐ Artificial insemination
- ☐ Both

If "Artificial insemination" is chosen, go to question 28.

27. Which boars are used for natural breeding? (required)

Check any that apply.

- ☐ Own boars that remain on the establishment
- ☐ Own boars that are housed on a different establishment
- ☐ Breeding boars that are used on different establishments

If "Natural breeding" was chosen in question 26, go to question 29.

28. Whenever semen is purchased from a farm/boar station, is the supplier's health status known before purchase? (required)

A herd with a known health status is a herd from which it is known if it is free from specific diseases (e.g. scabies, PRRS, ...) or not. If the herd 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 health status is higher than my own
- ☐ Yes, the supplier's health status is equal to my own
- ☐ Yes, the supplier's health status is lower than my own but I take precautions
- ☐ No
- ☐ I don't know

C. Transport of animals, removal of deadstock and manure

29. Is the establishment 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 establishment, 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 establishment to which visitors, external vehicles, ... have access.

Select one option.

- ☐ Yes
- ☐ No
- ☐ I don't know

30. Are **slaughter pigs** transported from your establishment to the slaughterhouse? (required)

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 33 if sows are present, question 36 if piglets are present, or otherwise go to question 39.

31. Is the transport vehicle for the **slaughter pigs** empty before loading? (required)

Select one option.

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

*If an option **different** from "Always" is chosen, go to question 33 if sows are present, question 36 if piglets are present, or otherwise go to question 39.*

32. Is it verified (e.g. written document or other statements) whether the transport vehicle for the **slaughter pigs** is cleaned and disinfected before loading? *(required)*

Select one option.

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

33. Are **sows** transported from your establishment either to other locations or to the slaughterhouse? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 36 if piglets are present, or question 39.

34. Is the transport vehicle for the **sows** empty before loading? *(required)*

Select one option.

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

*If an option **different** from "Always" is chosen, go to question 36 if piglets are present, or otherwise go to question 39.*

35. Is it verified (e.g. written document or other statements) whether the transport vehicle for the **sows** is cleaned and disinfected before loading? *(required)*

Select one option.

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

36. Are **piglets** transported from your establishment to another establishment (e.g. to a finisher site)? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 39.

37. Is the transport vehicle for the **piglets** empty before loading? *(required)*

Select one option.

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

*If an option **different** from "Always" is chosen, go to question 39.*

38. Is it verified (e.g. written document or other statements) whether the transport vehicle for the **piglets** is cleaned and disinfected before loading? *(required)*

Select one option.

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

39. Does the driver have access to the animal holding area and is direct contact with your animals possible when loading the animals (slaughter pigs, sows, piglets)? *(required)*

Select one option.

- ☐ Yes
- ☐ No
- ☐ Farmer and/or farm personnel is the driver; i.e. own transport

If "No" or "Farmer and/or farm personnel is the driver; i.e. own transport" is chosen, go to question 41.

40. Does the driver receive and wear clothing and shoes specific to the establishment? *(required)*

Select one option.

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

41. Are the pigs loaded from a separate loading area or directly from the indoor or outdoor area? *(required)*

The separate loading area (or loading bay) is a physically separated location where the animals are brought before/during loading.

Select one option.

- ☐ Separate loading area
- ☐ Pen or house/central corridor/outdoor area

If "Separate loading area" is chosen, go to question 43.

42. Are pigs ever returned to the indoor or outdoor area (e.g. by walking back or by being placed back) after they were in the transport vehicle? *(required)*

Select one option.

- ☐ Yes
- ☐ No

43. Is manure transported from the establishment? *(required)*

Establishment: the entire farm premises, including all buildings (if present) and the entire outdoor area. It includes premises with any number of pigs.

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 45.

44. Is the manure transported and disposed of through the dirty access area? *(required)*

Select one option.

- ☐ Yes
- ☐ No

45. Is there a dedicated deadstock storage space? *(required)*

Select one option.

- ☐ Yes
- ☐ No
- ☐ Not relevant, deadstock is immediately processed

If "No" or "Not relevant, deadstock is immediately processed" is chosen, go to question 50.

46. Is the deadstock storage space physically separated from where the live animals are kept? *(required)*

Select one option.

- ☐ Yes
- ☐ No

47. 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
- ☐ No

If "No" or "Sometimes" is chosen, go to question 49.

48. Is the deadstock storage cooled? *(required)*

Select one option.

- ☐ Yes
- ☐ No

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

Select one option.

- ☐ Cleaned and disinfected
- ☐ Only cleaned
- ☐ Nor cleaned nor disinfected

50. What happens with deadstock? (required)

Composting is a natural decomposition process for organic wastes.

Burying might be prohibited in your country. Please be aware that these surveys 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 52;

if "Deadstock is stored and collected by a rendering company" is chosen, go to question 53.

51. Is deadstock composted in a closed system? (required)

Select one option.

- ☐ Yes, dead animals are composted inside a building that can be completely closed
- ☐ Yes, dead animals are composted outside, enclosed with plastic
- ☐ No

Go to question 54.

52. 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 establishment
- ☐ Dead animals are buried in the appropriate soil on the establishment
- ☐ Other

Go to question 54.

53. Can deadstock be collected by the rendering company without them entering the establishment (e.g. from the public road)? (required)

Select one option.

- ☐ Yes
- ☐ No

54. Is deadstock manipulated with gloves, or are hands cleaned and disinfected after the manipulation of deadstock? (*required*)

Select one option.

- ☐ Always
- ☐ Sometimes
- ☐ Never

D. Feed, water and equipment supply

55. What type of feed is used on the establishment? *(required)*

**Swill feeding might be prohibited in your country. Please be aware that these surveys are used around the world.*

Check any that apply.

- ☐ Commercial feed
- ☐ Own produced or natural crops (e.g. acorn)
- ☐ Swill feed uncooked*
- ☐ Swill feed cooked*

If "Commercial feed" is checked, proceed to question 56. Otherwise, go to question 59.

56. Does the feed originate from a feeding company where it meets certain hygienic requirements (e.g. *Salmonella*-free, heat treatment such as pelletizing)? *(required)*

Select one option.

- ☐ Yes
- ☐ No
- ☐ I don't know

57. Can the feeding company fill up the feed silos/storage without entering the clean area? *(required)*

The clean area is the area of the production site with restricted access, i.e., where only animals from the establishment, 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 establishment to which visitors, external vehicles, ... have access. The dirty area also includes the carcass storage facility.

Select one option.

- ☐ Yes
- ☐ No

58. Does the feed supplier access the establishment where direct contact with the pigs is possible? *(required)*

Select one option.

- ☐ Yes
- ☐ No

59. Is the water delivery system (incl. a water header tank) covered at all times? *(required)*

Select one option.

- ☐ Yes
- ☐ Partially
- ☐ No

60. How frequently is a bacteriological analysis of the 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 62.

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

Select one option.

- ☐ Both at the source and the last drinker (farthest away from the source)
- ☐ At the last drinker
- ☐ At the source
- ☐ Other (e.g. drinker at the beginning of the line)
- ☐ I don't know

62. Is a specific and well-functioning pass-through for materials entering the buildings of the establishment (e.g. a UV cabinet for utensils and tools) used? *(required)*

Materials can be mobile phones, documents, pens, diagnostic tools, etc.

Select one option.

- ☐ Yes
- ☐ No

63. Is there any equipment shared with other establishments that enter your establishment and/or has contact with your pigs? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 65.

64. Are specific measures taken for the introduction of equipment from other establishments? *(required)*

E.g. cleaning and disinfection, quarantine period at a specific location.

Select one option.

- ☐ Yes
- ☐ No

E. Visitors and workers

65. Does the establishment follow a written biosecurity plan? (required)

Select one option.

- ☐ Yes
- ☐ No

66. Did the farmer and farmworkers receive training on biosecurity in pig production 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 as long as they have received certified training on their end.

If you do not have any 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

67. Are visitors obliged to notify their presence before entering the establishment (e.g. visitor's register)? (required)

Select one option.

- ☐ Yes
- ☐ No

68. Is there a hygiene lock available and is it always used by visitors when they enter the animal facilities (in- and outdoor)? (required)

The hygiene lock is a room or area where, among others, you can change into farm-specific clothes/footwear and where you can wash/disinfect your hands.

Select one option.

- ☐ Yes
- ☐ No

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

69. Are all animal facilities only accessible for visitors through a hygiene lock? (required)

I.e. there are no alternative ways to enter the animal facilities. One must always go through the hygiene lock.

Select one option.

- ☐ Yes
- ☐ No

70. Is there a strict separation between the clean and the dirty area of the hygiene lock (e.g. by a physical barrier or a walkthrough shower)? (required)

*The **dirty area** of the hygiene lock is where the farmworkers/visitors enter, store their clothes/footwear, and clean/disinfect their hands. In the **clean area** of the hygiene lock, they can put on farm-specific clothing and footwear.*

Physical barrier: e.g. wooden plank/bench.

Select one option.

- ☐ Yes
- ☐ No

71. Is there a shower facility and is it always used by visitors/personnel before they enter the animal facilities? (required)

Select one option.

- ☐ Yes
- ☐ Only for visitors, not for personnel
- ☐ There is a shower facility but it is not always used
- ☐ There is no shower facility

72. Before being allowed to enter the establishment, do visitors and farmworkers have to ...? (required)

	Always	Sometimes	Never
wear farm-specific clothes/bring clean clothes	☐	☐	☐
wear farm-specific footwear/bring clean and disinfected footwear	☐	☐	☐
wash and disinfect hands/use gloves	☐	☐	☐

73. Are there farm workers who have contact with pigs other than those on the establishment? *(required)*

Pigs at home, on other establishments, wild boars, hunting, agricultural shows...

Select one option.

- ☐ Yes
- ☐ No

F. Vermin, bird and wildlife control

74. Is an effective pest control programme in place on the establishment? *(required)*

Select one option.

- ☐ A professional pest control company is hired periodically
- ☐ The establishment has its own periodical pest control programme
- ☐ Pest control is performed only if an infestation is noticed (e.g. via rodent traps)
- ☐ There is no pest control programme

75. Do pets or wild animals have access to indoor animal facilities (incl. the storage for feed and bedding material)? *(required)*

Select one option.

- ☐ Only pets have access
- ☐ Only wild animals and/or birds have access
- ☐ Both have access
- ☐ No

76. Are any of the groups of pigs fed/provided with drinking water outdoors? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 79.

77. Are feeders used in the outdoor area? *(required)*

Closed feeders: there is a lid on the feeder that can only be opened by pigs at the moment of feeding.

Select one option.

- ☐ Open feeders are used
- ☐ Closed feeders are used
- ☐ No

78. Are drinkers used in the outdoor area? *(required)*

Closed drinkers: there is a lid on the drinker that can only be opened by pigs at the moment of drinking.

Select one option.

- ☐ Open drinkers are used
- ☐ Closed drinkers are used
- ☐ No

G. Disease management

79. Is there a plan for strategic treatments (e.g. vaccines, deworming, additives, pre- or probiotics) and is this evaluated on an annual basis by a veterinarian/health advisor? *(required)*

Select one option.

- ☐ Yes
- ☐ No

80. Is a regular (i.e. at least once a year) evaluation made of the disease status of the establishment (e.g. serology, trends in slaughterhouse findings, etc.) in consultation with a veterinarian/health advisor? *(required)*

Select one option.

- ☐ Yes
- ☐ No

81. Are the pigs checked on a daily basis to control their health status and remove deadstock? *(required)*

Select one option.

- ☐ Yes
- ☐ No

82. Are runt pigs (stay-behinds e.g. due to unclear causes) and/or diseased pigs isolated from the healthy ones or is a strict euthanasia policy used? *(required)*

Select one option.

- ☐ Runt pigs are always isolated from the healthy animals
- ☐ Runt pigs are sometimes isolated from the healthy animals
- ☐ Runt pigs always remain within their group
- ☐ There is a strict euthanasia policy, so there are no/barely any runt pigs

If "Runt pigs remain within their group" or "There is a strict euthanasia policy, so there are no/barely any runt pigs" is chosen, go to question 85.

83. What happens with the runt pigs after recovery? *(required)*

Select one option.

- ☐ They are put back into their original group
- ☐ They are put in a younger age group
- ☐ They are kept isolated from the other animals

84. Are diseased pigs consistently handled/visited after the healthy ones? *(required)*

Select one option.

- ☐ Yes
- ☐ No

H. Farrowing and suckling period

Where sows and after farrowing their suckling piglets are housed together.

85. Are the sows washed **before** they are moved into the farrowing area? *(required)*

Select one option.

- ☐ Always
- ☐ Sometimes
- ☐ Never

86. Are suckling piglets systematically transferred between sows (i.e. cross-fostering)? *(required)*

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 89.

87. Does cross-fostering of suckling piglets between different sows occur once or multiple times per lactation? *(required)*

Select one option.

- ☐ Once
- ☐ More than once

88. When does cross-fostering occur? *(required)*

Check any that apply.

- ☐ Within 24 hours after farrowing
- ☐ Between 24 and 72 hours after farrowing
- ☐ More than 72 hours after farrowing

89. How many times are the piglets routinely taken by hand (e.g. vaccination, castration, grinding of the teeth, tail docking, ear tagging, ...) between birth and weaning? *(required)*

Some of the manipulations mentioned in this question might be prohibited in your country. Please be aware that these surveys are used around the world. If multiple manipulations occur at the same moment, you can count this as one occasion.

.....

90. Are materials/tools for treatment (e.g. castration blade, tail-docker, ear-tagger, injection needles) cleaned and disinfected or replaced between each litter? *(required)*

Select one option.

- ☐ Yes
- ☐ Only some of the materials/tools are cleaned and disinfected or replaced
- ☐ No

91. When castrating, are the castration blades/needles disinfected or replaced between different piglets? *(required)*

Select one option.

- ☐ The blades/needles are disinfected or replaced after each piglet
- ☐ The blades/needles are disinfected/replaced after several piglets or different blades/needles per pen are used
- ☐ The blades/needles are not disinfected or replaced until blunt
- ☐ Castration is not performed

I. Nursery area

Where all weaned piglets are housed together

92. Is strict all-in management practised in each compartment of the nursery area? *(required)*

All-in: the animals that move to the same nursery area are moved there all at once and no new animals are introduced in the nursery area before it is emptied.

Select one option.

- ☐ Yes
- ☐ No

93. Are older piglets (from a different farrowing group) sometimes mixed with younger piglets? *(required)*

Select one option.

- ☐ Yes
- ☐ No

94. What is the maximal stocking density in the nursery area? *(required)*

Select one option.

- ☐ 0.33 m² per animal or more
- ☐ Between 0.32 and 0.26 m² per animal
- ☐ Between 0.25 and 0.16 m² per animal
- ☐ 0.15 m² per animal or less

95. Is the nursery area physically separated (i.e. no direct contact possible) from the other pig areas? *(required)*

Select one option.

- ☐ Yes
- ☐ No

96. Is there a separate hygiene lock for the nursery area? *(required)*

A hygiene lock is a facility, where among others, you can change into specific clothes/boots and clean/disinfect your hands.

Select one option.

- ☐ Yes
- ☐ No

J. Finishing area

Where all slaughter pigs are housed together

97. Is strict all-in management practiced in each compartment of the finishing area? (required)

All-in: animals that move to the same finishing area are moved there all at once and no new animals are introduced in the finishing area before it is emptied.

Select one option.

- ☐ Yes
- ☐ No

98. Are different age groups strictly separated into different (i.e. physically separated) compartments/ areas? (required)

Select one option.

- ☐ Yes
- ☐ No

If "No" is chosen, go to question 100.

99. Are older slaughter pigs sometimes mixed with younger pigs? (required)

Select one option.

- ☐ Yes
- ☐ No

100. What is the maximal pig density of the finishing area? (required)

"Regular" slaughter pigs are kept until they are between 90 and 115 kilograms live weight (between 200 and 250 pounds). Heavy slaughter pigs are those that weigh more than 115 kilograms live weight (more than 250 pounds).

Select one option.

- ☐ 1 or more m² per slaughter pig (1.50 m² or more per heavy slaughter pig)
- ☐ Between 0.70 and 0.99 m² per slaughter pig (between 1.10 and 1.49 m² per heavy slaughter pig)
- ☐ Between 0.60 and 0.69 m² per slaughter pig (between 0.80 and 1.09 m² per heavy slaughter pig)
- ☐ Less than 0.60 m² per slaughter pig (less than 0.80 m² per heavy slaughter pig)

K. Measures between compartments, working lines, and use of equipment

101. Between different compartments/age groups, are the following actions performed? *(required)*

Compartment: a physically defined unit or area where one group of pigs is being kept (i.e. you can have multiple compartments of the same animal category). Often, physical contact is possible between the animals of different pens within this compartment.

	Always	Sometimes	Never
Change into specific clothes per compartment/age group	☐	☐	☐
Change into specific footwear per compartment/age group	☐	☐	☐
Wash hands/change gloves per compartment/age group	☐	☐	☐

102. Are either disinfection baths and/or boot washers used between different compartments/areas? *(required)*

Select one option.

- ☐ Yes
- ☐ Only for some compartments/areas
- ☐ No

103. Which working sequence is used in normal circumstances? *(required)*

Select one option.

- ☐ From young to old animals
- ☐ From old to young animals
- ☐ Another working sequence
- ☐ There is no working sequence

104. Is the equipment that is needed for a specific animal category placed according to the working lines (work routine route) to avoid the equipment being used in any other age category? *(required)*

Select one option.

- ☐ Yes
- ☐ No

105. Is there a protocol (written or well communicated) for cleaning and disinfection of equipment (e.g. sorting/driving panels, spades) after their use, and is this protocol abided by? *(required)*

Select one option.

- ☐ Yes
- ☐ No

106. Are clearly recognizable (e.g. by colors) and separate materials/tools used for each area or age group? *(required)*

Select one option.

- ☐ Yes
- ☐ No

107. Are the pig sorting/driving panels easy to clean (e.g. plastic) and are they regularly (i.e. after every use or at least after every production cycle during the sanitary break) cleaned and disinfected? *(required)*

Select one option.

- ☐ Yes
- ☐ No

108. Are specific injection syringes and needles used for each age group? *(required)*

Select one option.

- ☐ Both syringes and needles are specific for each age group
- ☐ Only the needles are specific to the age group
- ☐ No

109. After how many pigs are injection needles changed? *(required)*

If this differs per compartment/age category, please fill in the worst-case scenario.

.....

L. Cleaning and disinfection

110. Is the **outdoor** area (incl. animal housing) cleaned after each production cycle? *(required)*

- Always
- Sometimes
- Never

If "Never" or "Sometimes" is chosen, go to question 115.

111. Is the **outdoor** area (incl. animal housing) soaked with water before the start of the cleaning? *(required)*

Select one option.

- Always
- Sometimes
- Never, I only practice dry cleaning

If "Never, I only practice dry cleaning" is chosen, go to question 113.

112. Is detergent/soap added to the water during cleaning? *(required)*

Select one option.

- Always
- Sometimes
- Never

113. Is the **outdoor** area (incl. animal housing) disinfected after each production cycle? *(required)*

Select one option.

- Always
- Sometimes
- Never

114. Is the **outdoor** area (incl. animal housing) fully dried before new pigs enter? *(required)*

Select one option.

- Always
- Sometimes
- Never

115. Are the **indoor** areas cleaned after each production cycle?
(required)

This question concerns all areas: farrowing crates, nursery area, and finishing area.

- All pens/houses are cleaned after each production cycle
- Only some of the pens/houses are cleaned after each production cycle
- The pens/houses are cleaned after every couple of production cycles
- None of the pens/houses are cleaned after each production cycle

If "None of the pens/houses are cleaned after each production cycle" is chosen, go to question 121.

116. Are the **indoor** areas soaked with water before the start of the cleaning? (required)

Select one option.

- Always
- Sometimes
- Never, I only practice dry cleaning

If "Never, I only practice dry cleaning" is chosen, go to question 118.

117. Is detergent/soap added to the water during cleaning?
(required)

Select one option.

- Always
- Sometimes
- Never

118. Are the **indoor** areas disinfected after each production cycle?
(required)

This question concerns all areas: farrowing crates, nursery area, and finishing area.

Select one option.

- All pens/houses are disinfected after each production cycle
- Only some of the pens/houses are disinfected after each production cycle
- The pens/houses are disinfected after every couple of production cycles
- None of the pens/houses are disinfected after each production cycle

119. Is the **indoor** area fully dried before new pigs enter? *(required)*

Select one option.

- ☐ Always
- ☐ Sometimes
- ☐ Never

120. Is the efficacy of cleaning and disinfection checked (e.g. hygienogram, ATP-metry, swabs,...)? *(required)*

A hygienogram is a quantification of the bacterial status of the environment with a contact plate.

Select one option.

- ☐ Always
- ☐ Sometimes
- ☐ Never

121. Is the animal moving area cleaned and disinfected after the pigs are moved? *(required)*

Select one option.

- ☐ It is cleaned and disinfected after use
- ☐ It is cleaned after use
- ☐ Not cleaned nor disinfected after use
- ☐ Not applicable, the animals are directly loaded from the outdoor area

122. Are the feeding systems (feed lines, troughs) cleaned and disinfected after each production cycle? *(required)*

Select one option.

- ☐ Cleaned and disinfected after each production cycle
- ☐ Only cleaned after each production cycle
- ☐ Cleaned but not after each production cycle (only occasionally)
- ☐ Never cleaned nor disinfected
- ☐ Not applicable, scatter feeding is performed

123. Is there a feed silo/storage and is it cleaned (and disinfected) on the inside? *(required)*

Select one option.

- ☐ Multiple times a year
- ☐ Once a year
- ☐ Once every two years
- ☐ Never
- ☐ There is no feed silo/storage

124. Is the drinking water system cleaned and disinfected on the inside? (*required*)

Select one option.

- ☐ Multiple times a year
- ☐ Once a year
- ☐ Once every two years
- ☐ Never