

Coding of samples within EFFORT

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Coding of samples

Every sample taken within the EFFORT study will be labeled with a specific code. This code is unique and consists of 9 numbers. The following section sets out how to build and use the code.

Explanation of the code

	1. Location number	2. Sample type number	3. Serial number
		xxxx	xx
Ex. 1	100102003	1001	02
Ex. 2	190007001	1900	07

1. Location number

Every farm participating in the study gets a unique number. This number represents the farm and the country. When no location is applicable a general number is chosen, only representing a country, for example in the case of wild life, companion animals or retail meat. The range for these numbers will be given to the countries in advance. This location code will be written on the questionnaire.

2. Sample type number

This number represents the type of sample, such as pig feces or poultry dust. This applies in the same way for all countries.

3. Serial number

The last number is the serial number of the sample within its type and location.

Example 1: 100102003. Farm 1001 is the **pig farm** visited during the pilot in the Netherlands. 02 means it is a pig feces sample and number 003 means it is the third sample we took during that visit.

Example 2: 190007001. 1900 means **no specific location** in the Netherlands. 07 means cat feces and number 001 means it is the first cat sampled in the Netherlands.

All location numbers can be chosen by the country themselves within the given range. When no location is used the last numbers of the location range can be used.

Table 1. Coding numbers used within EFFORT *descriptive* study

Location number range		No location
NL	1000-1999	1900
DE	2000-2999	2900
FR	3000-3999	3900
ES	4000-4999	4900
BE	5000-5999	5900
IT	6000-6999	6900
PL	7000-7999	7900
DK	8000-8999	8900
BG	9000-9999	9900
Sample types		
<i>Wild life feces</i>	01	
<i>Pig feces</i>	02	
<i>Poultry feces</i>	03	
<i>Veal feces</i>	04	
<i>Turkey feces</i>	05	
<i>Farm Fish</i>	06	
<i>Cat feces</i>	07	
<i>Dog feces</i>	08	
<i>Pig meat</i>	09	
<i>Poultry meat</i>	10	
<i>Veal meat</i>	11	
<i>Turkey meat</i>	12	
<i>Fish meat</i>	13	
<i>Pig dust (EDC)</i>	14	
<i>Poultry dust (EDC)</i>	15	
<i>Pooled wildlife feces</i>	16	
<i>Pooled pig feces</i>	17	
<i>Pooled poultry feces</i>	18	
<i>Pooled veal feces</i>	19	
<i>Pooled turkey feces</i>	20	
<i>Pooled farm fish</i>	21	
<i>Pooled Pig meat</i>	22	
<i>Pooled Poultry meat</i>	23	
<i>Pooled Veal meat</i>	24	
<i>Pooled Turkey meat</i>	25	
<i>Pooled Fish meat</i>	26	
Serial number	1-999	

Use of labels/stickers

Preferably, every country should print their own stickers. Stickers contain the name of the study (EFFORT), the ID number and a barcode (and when desirable the type of sample and/or other information).



Photo 1: example of a label for feces cups used in the field.

Photo 2: example of a label for a 2ml cryotube used in the lab. Barcode is placed vertically in order to fit on a small cryotube. The barcode also needs to be as flat (and in this case vertically) as possible so the reader will be able to read it.



Photo 3: example of a label on a EDC. The sticker is placed on the outside of the plastic folder. Please do so when you place the EDC in the farm.



Stickers should be **cryogenic** (in order for it to stick at -80°C storage temperatures).

Stickers should be put on all sample materials during fieldwork, as well as on the cryotubes used and stored in the labs.

Suggestion – usage of the code in the lab

To distinguish different sub samples of one original sample in the lab, labs can add a letter to all codes written on labels when used in the lab. After the last digit a letter is placed to make clear what type of laboratory analysis is applicable to this specific tube. When the content of a tube is **pooled feces** we use another ‘sample type number’ (see table 1 page 3). We will use this letter only in the lab. When results of this sample are entered in a data file, we will use the unique code without a letter.

It is also recommended to print table 1 (page 3) and hang on the wall of the lab or other workplaces. This will help with easy and quick recognition of the code.

Table 2. Letters for lab coding

Laboratory analysis	Letter
<i>Metagenomic analysis</i>	M
<i>qPCR</i>	Q
<i>E.coli/ Aeromonas isolation</i>	E
<i>or</i>	
<i>DNA</i>	D
<i>Feces (without any preservations)</i>	F
<i>Feces + glycerol buffer</i>	G

Barcode – barcode reader

When samples are being processed in de lab the barcode can be scanned with a barcode-reader. For example: Datalogic Gryphon (www.datalogic.com). The code will be filled in a file and all other information about this sample can be included in the file.

Questionnaires

The location code will be written on the general questionnaire.

Companion animals and wild life

The same code used for the fecal sample of companion animals and wild life must be placed on the accompanying questionnaire. This will ensure us that the correct sample is linked to the correct information from the questionnaire.

Epidata file

The Netherlands will create an *Epidata* file that will be used to store all necessary information (questionnaire, lab results etc.) regarding the samples. The sample ID and barcode will allow easy use of this system.

Distinction of animal species in the data file is possible as the second column of the file will contain the animal species which is sampled.

Contact details

For questions about the coding system or labels please contact the following persons. *Please do not change the coding system without consulting these persons.*

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