## Animal by-products for diagnostic, research and educational purposes: a sparkle of light in a complex regulatory framework?



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Experimental animals: 'animals used or to be used in experiments'







Euthanasia, death, sample collection











**Legal Framework:** 

Animal by-products (ABP): 'entire bodies or parts of animals, products of animal origin or

including oocytes, embryos and semen'

! Complex regulatory framework: not all its requirements apply to all users of ABP, making it sometimes difficult for users to find their way in the ABP regulatory framework E.g. ABP intended for diagnostic, research and/or educational activities

Belgium: Royal Decree of May 4, 2015



## ABP are controlled to protect human health, animal health and environment

## Goals include:

- Prevent inadvertent spread of pathogens
- · Ensure safe and suitable handling, transport and disposal
- Prevent entry into the food-chain

Excluded from ABP are e.g.

- Animal-derived cell cultures (lineage or primo), as they are living organisms
- Cell culture-derived monoclonal antibodies
- Purified antibodies (unless stabilizers containing ABP are present)

ARP are	classified	according	to rick

Category	Category 1 High risk - For disposal only	Category 2 Moderate risk - Not for animal consumption	Category 3 Low risk - Not for human consumption		
Includes	ABP produced from animal experiments <sup>a</sup> presenting a risk for the health of humans / animals	Produced from vertebrate animal experiments <sup>a</sup> contaminated with certain levels of particular chemicals or veterinary drugs	Produced from "untreated" experimental animals <sup>a</sup>		
Examples	Monkeys experimentally infected with HIV b     Animals that die during an experiment     Animals euthanized during an experiment	Animals used in physiology / behavioral studies     Non-contaminated farmed animals that survive experiment     Manure	Non-purified polyclonal antibodies     ABP-derived laboratory reagents     Rabbits to produce antibodies		
Main consequences of the Ro	oyal Decree on ABP intended for diagnostic, resea	rch and educational purposes			
Before using of ABP	Notification of competent authorities (Federal Public Service - Health, Food Chain Safety and Environment (FPS-HFCSE)) → registration of user				
	! No notification and registration when sporadic use of ABP cat. 1 and 2 or less than 20 kg/week of ABP cat. 3 for <u>educational</u> purposes ! No notification and registration for veterinarians who are allowed to practice their profession				
Use of ABP	Maintain a register noting e.g. receipt of ABP, type and origin of samples, disposal methods and dates				
	! After their use, all ABP for diagnostic and research purposes must be destroyed, archived or returned to the place of origin				
Import of ABP from outside the European Union	Notification of competent authorities (Federal Agency for Food Chain Safety (FAVV-AFSCA)) → apply for import permit and apply for health certificate depending on the risk/quantity of material				
	Correct labeling ("For research and diagnostic purposes") Immediate transport to destination (no intermediate operators)				
	! Entry via official border inspection post (BIP), but no veterinary border control				
'Dispatch' (export) of ABP	Different rules may apply depending on the importing country: (http://www.favv-afsca.fgov.be/exportderdelanden/dierlijkeoorsprongnietgeschikt/ or http://www.favv-afsca.fgov.be/exportationpaystiers/origineanimaleimpropres/)				
Transactions within the European Union	No notification or import permit  Health certificate depending on the risk/quantity of material (Federal Agency for Food Chain Safety)				
	! From the perspective of the ABP regulation, registered laboratories are allowed to transport ABP intended for diagnostic, research and educational purposes themselves within the European Union. However, also other regulatory frameworks have to be taken into account to determine final transport requirements (e.g. Dangerous Goods Regulatory framework)				
Processing of ABP (e.g. thermal treatment, chemical treatment,)	Not mandatory from the perspective of the ABP regulation, but when processing ABP, authorization from the competent authorities is required				
	<ol> <li>No authorization for processing is required when ABP are strictly used for educational purposes</li> <li>In case infectious organisms have been used to deliberately infect animals, processing (e.g. waste treatment and inactivation) requirements of the contained use legislation have to be fulfilled <sup>b, c</sup></li> </ol>				
Final disposal of ABP	Mandatory via an approved means of destruction (incineration, co-incineration or pressure sterilisation), unless kept for reference purposes				
		ABP use, an educational institute can be allowed to datory kits or laboratory samples, can be treated by melaves	1 0 0 1		

## **Belgian Biosafety Professionals**

The Belgian Section of EBSA

- a. 2010/63/EC ("Welfare of animal used in scientific research"), classification dependent on decision of competent authorities
- b. 2009/41/EC ("Contained use")
- c. 2000/54/EC ("Contained use" in the sense of exposure to biological agents at work)