

Assuring Competence in Practical Tasks



All those working under the Directive 2010/63/EU are required to be trained and supervised until they are competent to carry out procedures alone.

But how do we know if someone is truly competent?

What is the standard for competence and do we all agree about it?

If we agree, then why do we insist on re-training and re-assessing competence of staff every time that they move to a new institute? Doing so potentially wastes time and resource for both the researcher and the unit staff. But of course we do need to be certain that they are indeed competent!

What would we need to know in order to trust the assessment that's already been done?

- **Validity:** The assessment was appropriate for the task
- **Transparency:** The standard that was required for competence is clear to everyone
- **Consistency:** The standard set for competence in the task remains the same between different assessors and at different times.

Using DOPS to make practical assessment more effective.

DOPS: Directly Observed Practical Skills assessment

- Well validated assessment method for practical tasks
- Used in healthcare setting for many years
- Trainee is assessed against pre-determined competence criteria
- A permanent record of trainee's performance

Ask yourself "what does this procedure look like when done competently?"

Set out the criteria that determine competence. These should be:

- relevant to the task
- easy to measure
- available to the trainer, trainee & assessor so everyone is clear about what is the standard required for competence.

ETPLAS working group is developing a 'library' of DOPS for assessment of commonly-used practical techniques

Example DOPS for assessing competence in the task: Oral Gavage in mouse

Assessment criteria/ Components of the task:

"Below expectations" [BE] e.g.

- Failure to check legal authorities, animal details, or dose material identity
- Failure to choose suitable PPE/ operate flow hood
- Poor animal handling, or risk of injury; animal showing signs of distress
- Unsuitable or damaged equipment, volume, or preparation for dosing
- Not able to state scientific reason for dosing animal with the material
- Lack of professional behaviour and/or effective communication during procedure

Requirements for "borderline" [B] e.g.

- Able to catch and handle mouse but perhaps hesitantly;
- Poor choice/preparation of suitable equipment; volume
- More than 2 attempts needed to perform dosing

Requirements for "meets expectations" [ME]

- Correctly checks licence authorities and animal's identity
- Checks study protocol and identity of dose material
- Correct size 'cannula' & syringe used; explains reason for choice; dose volume ≤10ml/kg
- Correctly removes animal from cage without using the tail to capture it
- Restrains animal with head, neck and body in straight line
- Checks that cannula is correctly sited before administering dose
- Administers dose before withdrawing tube; checks animal's condition on release
- Handles animal empathetically; feet allowed to touch floor of cage before release
- Knows clinical signs that would indicate mis-dosing (e.g. respiratory distress, collapse)
- Knows procedure to be followed in the case of mis-dosing (e.g. humane killing)
- Updates cage label and/or records in timely manner
- Demonstrates respect for animals and staff throughout
- Leaves workplace clean and tidy

Requirements for "exceeds expectations" [EE] As "meets" and e.g.:

- Confident, capable and empathetic animal handling
- Explains reasons for choice of equipment/dose volume with respect to 3Rs
- Excellent manual dexterity in handling and dose administration

DOPS marking sheet for oral gavage in the mouse or rat

	Level (e.g. ME)	Comments/ Feedback
Legal & compliance: Check Legal authorities Correct PPE/flow hood operation		
Confirm animal's id Update cage label/ records		
Animal Welfare: Empathetic, safe animal handling Correct restraint for gavage		
Checks site/size of cannula before dosing Knows procedure if mis-dosed		
Procedural: Choice and use of suitable size syringe, cannula Confirm dose identity Appropriate handling of dose material Correct volume for animal in syringe		
Dose administered <2 attempts Professionalism: Dose administered in timely manner Workspace left tidy		
Communicates/ knows own limits 3Rs: Demonstrates understanding of refinements (e.g. frequency, volumes, nature of dose material)		

GLOBAL RATING: COMPETENT CONTINUE SUPERVISION

Meets Expectations: The standard required for competence is clearly set out

Includes elements of knowledge, skills & attitude

Space to enter feedback to promote trainee's learning

Overall rating 'competent' or 'continue supervision'

Better assessment = Reduced study variability Improved animal welfare Increased public reassurance