The National Collection of Type Cultures (NCTC) curates over 6,000 reference bacterial strains of medical and veterinary importance, preserved and supplied as freeze-dried ampoules. The freeze-drying process requires a highly knowledgeable and skilled workforce, whereby high titre liquid cultures are manually dispensed into glass ampoules and flame-sealed for long-term preservation. Therefore, a suitable and sufficient training programme is essential to deliver and instil the skills, knowledge, and experience required to perform tasks safely and effectively. Laboratory training programmes are a requirement by the Health and Safety Executive (HSE), ISO15189:2012 in clinical, or ISO17025:2017 in testing laboratories. The standards are not prescriptive, allowing for individual interpretation and potential omission of safety-critical tasks. In addition to performing testing and day-to-day tasks, laboratory staff must develop the skills to train others in the process. Most learn these skills on the job and often, multiple approaches to training are used within a laboratory. The purpose of this project was to assess how safety is conveyed during the competency assessment process in NCTC, and to identify good practice and areas for improvement.

The average time for a trainee to be signed off as competent is 35 days. No correlation between length of training and grade of staff as observed. The majority (34%, 41/120) of records employ two training methods. The most common combination being assessment with observation, accounting for 30% (36/120) records.

The competency records were compared against a checklist to determine compliance to:
- The departmental training manual
- HSE competence assessment guidance
- Organisational Health and Safety policies for training
- The training statement in the standard operating procedure (SOP)

The following information was extracted:
- Type of training (practical assessment, witness statements, self-assessment)
- Method of risk awareness training
- Nature of comments on form

The competency records were compared against a checklist to determine compliance to:
- The departmental training manual
- HSE competence assessment guidance
- Organisational Health and Safety policies for training
- The training statement in the standard operating procedure (SOP)

The nature of ongoing assessment was assessed and recorded.

The laboratory has kept thorough competency records. The nature of ongoing assessment was assessed and recorded. This was not reflected in the information captured in the training records.

To determine if training provided is consistent across time, trainers, and grades of staff.

Methodologies

To review what information is captured in the competency process

To evaluate how well the training follows training policies, manuals, and guidance

The competency was reviewed in the form of a new version of the SOP being issued (27%).

The training statements in SOPs were inconsistent with five early versions of SOPs not containing a training statement. Two SOPs stated *all NCTC staff must be trained and be competent in this procedure* without describing what method the training should take.

Figure 3. Number of records that comply to each statement found in training policies and guidance. Orange = departmental training manual; Pink = HSE guidance; Blue = organisational health and safety policies.