

VOLKSGEZONDHEID INSTITUT SCIENTIFIQUE DE SANTÉ PUBLIQUE

### Homogeneity in EQA bacteriology & parasitology

EQALM, WG Microbiology, September 2011, Szeged





- 1. IPH Belgium
- Control at IPH (3 samples): identification, count, purity,
- Control by (9) expert labs: identification, purity: acceptance of samples (NB min. nb. exp.labs = 5)

Homogeneity = based on results expert labs (80%)



#### 2. CMPT Canada

Random sample of production lot is tested either by 15% sample with requirement of 95% homogeneity with group and reference value or application of Mil-Std 105E with 99% acceptance.



#### 3. FVSOK Russia

Clinical microbiology

Total number of participants — up to 900, two surveys per year, a set of three vials with lyophilized bacterial suspensions of different strains or mix of suspensions of different strains. Homogeneity of samples in a lot (content of bacteria specific to a particular lot) results from the way of their preparation: each lot is prepared from one pool of a bacterial suspension prepared from well-characterized strains from the Federal collection). Lots' homogeneity is evaluated by the laboratory-manufacturer and are confirmed by 10 expert laboratories.

Mycobacteriology
See word document



#### 4. CSCQ Switzerland

We do not produce our samples. We demand to all our providers a lot-specific certificate of homogeneity for every sample we order.



#### 5. INSA Portugal

The Mycobacteriology microscopy smears are analysed by the team of mycobacteriology laboratory before they are send to the participants. In case of disagreement the participants send the samples to be revaluated.

The rubella, toxoplasmosis, brucella, syphilis, hidatidose samples and the faecal samples are also analysed before they are send to the participants.

The other programs are sent by Labquality.



#### 6. UK Neqas

- 1. Pre and post distribution testing in house 10% sample of bulk material.
- 2. Additional samples sent for confirmatory testing in relevant expert reference laboratories for preand post distribution.
- 3. Review of participants' results and analysis of concordance with the intended result.



#### 7. QualiCont (Hungary)

Before the surveys the expert of the bacteriology scheme evaluate the samples with examines minimum 2 sets of them with the same way as the other participants of the schemes.



#### 1. IPH Belgium

Control at IPH: presence of parasite (10 samples; L. loa, M. perstans,...: all samples)

Control by (9) expert labs: identification, presence: acceptance of samples (NB min. nb. exp.labs = 3)

Homogeneity = based on results expert labs (66%)



#### 2. CMPT Canada

We look at group results. Pathogens seen by less than 5% of participants challenged. Absence of pathogens seen by more than 80%

of participants challenged..



#### 3. FVSOK Russia

Virtual smears are used for EQA

#### 4. CSCQ Switzerland

We do not produce our samples. We demand to all our providers a lot-specific certificate of homogeneity for every sample we order.

#### 5. INSA Portugal

The toxoplasmosis, hidatidose samples and the faecal and blood samples are also analysed before they are send to the participants.



#### 6. UK Neqas

Blood and faecal smears are fixed and stained, and faecal samples are preserved in formalin.

Blood and Faecal samples – pre and post distribution in house testing.

**Faecal samples** - 10 samples are selected and the number of parasite stages are counted in 50µL of deposit. Descriptive statistics are then applied to ensure that each sample contains the number of parasites within 3 standard deviations from the mean.

**Blood Parasites** - 10 samples are selected and the numbers of parasite stages are counted in 40 fields. Descriptive statistics are then applied to ensure that each slide contains the number of parasites within 3 standard deviations from the mean.



#### 7. QualiCont (Hungary)

Before the surveys the expert of the bacteriology scheme evaluate the samples with examines minimum 2 sets of them with the same way as the other participants of the schemes.