

Overview of different replies in how contact is performed in the domain of serology

1. IPH (Belgium)

Contact is again based on the same principle of what is considered to be clinically important.

False negative replies are considered to be of greater importance as false positive. The idea at the basis of this strategy is that any positive results will induce further investigation and eventually the false positive results will be disclosed; whereas a negative result will lead to the interpretation that the disease for which antigen and/or antibody (depending on the parameter which of both are searched for) are negative, is not present and therefore no further investigations in this field are continued.

Furthermore, since the IPH always procures clinical information (based on “real” situation since the samples are always single donor samples), we always ask for a clinical interpretation of the results. Any laboratory giving an interpretation which may lead to inappropriate treatment, is contacted (at each survey possible interpretations are presented to the participants in a tick box; however they are free to reply another interpretation than the ones suggested; the committee of experts decides on the acceptability of these proposals).

The present scope of parameters investigated by the IPH are: *Borrelia* serology (total Ig, IgG, IgM), *Brucella* serology (total Ig, IgG, IgM), CMV serology (total Ig, IgG, IgM, avidity), EBV serology (EBNA and VCA AB), HAV serology (total Ig, IgG, IgM), HBV serology (HBsAg, HBsAb, HBcAb, HBcIgM, HBeAg, HBeAb), HCV serology (total Ig), HIV serology (total Ig), *Mycoplasma pneumoniae* serology (total AB, IgG, IgM), Rubella serology (total Ig, IgG, IgM), Syphilis serology (VDRL/RPR, TPHA/TPPA, ELISA and blot techniques), *Toxoplasma* serology (total Ig, IgA, IgG, IgM, avidity).

Other parameters can be investigated in the future, however the availability of samples is a problem (keeping in mind the “single donor” principle).

2. INSA (Portugal)

General comments are made regarding the clinical interpretation. Laboratories are advised in ways to answer correctly and how to avoid future errors. We try if exists and it's possible to confirm the result in our laboratory with the adequate method – ex: *Western Blot* if applicable. In this case, the labs received with the final relatory the copy of this result.

Sometimes if they ask and we have they receive a new sample to test again.

Sometimes in the comments written and envied just with the final report, we call the attention of labs nº X., Y or Z for this or that. Never a direct call for the laboratory is done. If they contact us, OK.

We have also some Experts for this area outside our Institution (Hospitals and Universities) and the answers are sometimes analysed with them.

3. UK Neqas (GB)

Incorrect results are highlighted. Comments are provided for common errors. Participants are responsible for monitoring own performance and acting on any incorrect results and errors. This activity is monitored by the National Quality Assurance Panel for microbiology and/or the accreditation body.

6. NICD (South Africa)

The participants return their results which are entered into an Access database. Each participant will receive an individual report.

The regional manager will receive a sub-regional report with results from the labs in his/her region as well as a sub-regional non-return report.

The QA controllers and Executive regional managers (3 in total) receive full regional reports, a complete list of non-returns.

The regional managers, QA controllers and sometimes personal from the EQA/QA unit do follow-up site visits and contact the labs who are poor performers.

Interim results are sent out to all participants within 5 days of closure of the programme.

Any results received after the interim report has been sent are not evaluated.

9. AFSSAPS (France)

The interface between Afssaps and the Ministry of Health is performed by the “commission du contrôle national de qualité” (CCQ) (Commission of National Quality Control). The CCQ defines the errors that systematically need to be transferred to it. If this commission considers errors to be severe, Afssaps transfers the names of the laboratories to the MoH, who performs an inspection; there exists therefore a systematic statutory action. These inspections can lead to different actions: going from no action at all over an action by the “Conseil de l’ordre’ to even temporary (or definitive) closure of the laboratory.

In serology the anomalies that need to be transferred to the CCQ concern false negative results in HCV and HIV serology, false negative and false positive results in Toxoplasma serology, not respecting the prescribed technical precautions for HIV serology.

Afssaps itself can decide, from an educational point of view, to contact the laboratories for complementary information on the performance of their analyses and/or send a repeat sample for re-analysis. These informations, if they clearly explain the origin of the encountered error, can be distributed to the biologists in the reports of the surveys or by specific mail (e.g. HCV serology).