Analysts' estimates of the uncertainty of their results are often somewhat low. How do we know? By looking at the results of interlaboratory studies such as collaborative trials and proficiency tests. These studies are designed to make explicit any latent contributions to uncertainty. The results can be helpful in assessing the validity of our uncertainty estimates.

Š

Š

Interlaboratory studies

 $\sigma_r \qquad \sigma_R$

Š

Š

How large are these additional effects?

 $\sigma_r \approx \sigma_R$