

Disease Detectives - Div C – Hints about Statistics

- Changes in the rules for 2014 Disease Detectives include adding basic statistics and stratified analysis as potential material for questions. **This should be limited to not more than 20% of the competition.**
- Although this change is appropriate and fills an important gap in the event, it probably caught many teams off guard.
- These changes will undoubtedly settle into the event but it may some time for this to take place.
- It is hoped that event supervisors for this event would keep in mind that events should include many concepts and aspects of epidemiology and not focus on statistics.
- Programmable calculators are not allowed and students should not be expected to spend much of their event time entering data.
- Calculations should be able to be completed within 1 minute from start to finish, 2 minutes at very most.
- At this stage in the process of introducing this into the event, asking students which test they would use, providing intermediates (e.g., means and variances) and expecting them to calculate test statistics from those intermediates, asking them to interpret actual or mock print-outs and asking them to interpret the results of statistical tests are all appropriate lines of questioning.
- The goal is to interest young people in these areas and show how they can be used to solve real problems – not to terrorize them.
- There is a statistics handout for students posted on the Science Olympiad website http://www.soinc.org/disease_detectives_c