

**San Joaquin County Science Olympiad
Regional Tournament
DISEASE DETECTIVES B/C 2009-2010**

Event Manager: Janwyn Funamura, M.D.
Pediatrician and Medical Director of Children's Medical Services, Stanislaus County
E-mail: janwyn.funamura@gmail.com

EVENT DESCRIPTION:

A TEAM OF UP TO: 2

APPROXIMATE TIME: 60 minutes

EVENT PARAMETERS: ~~Each team will be supplied one 8.5" x 11" two-sided page of notes by the event manager as the only allowable reference.~~ Calculators supplied by the event manager are the only calculators allowed. (Note that these parameters differ from those in the Rules Manual.) **See Event Clarification emailed on 1/04/10.**

THE COMPETITION: Rules as described in the *Division B and C Rules Manual* apply. The San Joaquin County regional competition will be conducted as follows:

1. Teams will rotate through stations. A station consists of a binder with test questions about a picture, a table, a graph, a diagram, or narrative information.
2. The students will be asked multiple-choice questions.
3. Answers must be recorded on the Scantron form provided. There is only one correct answer. Note, however, that in contrast to previous years, *one or more choices* may be included in the correct answer.
4. Calculators will be provided.
5. Pencils will be provided.
6. After a specified time period, teams will rotate to the next station. They will not be allowed to return to a previous station.

SCORING (differs from the manual): Each answer is worth one point. The highest number of correct answers determines the winner. There is no penalty for wrong answers. Pre-selected questions are used as tiebreakers. If there is a tie after the first tiebreaking question, those teams progress to the second tiebreaker, etc.

STUDY AREAS

1. **Influenza pandemics from the past and present, with an emphasis on the present 2009 H1N1 pandemic**
2. **Infectious disease epidemiology and control:** Disease identification, agent, occurrence, reservoir, mode of transmission, incubation period, period of communicability, susceptibility and resistance, and methods of control. Students should understand general principles and be able to apply them to the influenza virus. Recommended reference: *Control of Communicable Diseases Manual*, 19th edition, ISBN 978-0-87553-189-2.
3. **Outbreak investigation:** The focus is on the 2009 H1N1 pandemic influenza virus.

In this year's event, as it was last year, the focus is on the effects of population growth on public health outcomes. This focus is reflected in questions about the virus's rapid global spread and efforts aimed at controlling person-to-person spread.