



DRAFT
Gaps in the ISO Research Agenda
Identified by the Writing Group
February 20-21, 2009

Background

On February 20-21, 2009, The Keystone Center convened a small writing group to consider key issues and prepare written materials for review by a larger stakeholder group on March 16, 2009. The writing group included individuals and members of groups whose primary interests are focused on vaccine-related issues, state and local public health and immunization officials, pediatricians, federal agency officials, and members of the National Vaccine Advisory Council (NVAC).

This document reflects the writing group's discussions about gaps in the Immunization Safety Office's (ISO) draft Scientific Agenda. Although the group discussed the merits and limitations of some potential research projects, no effort was made to come to agreement about which studies should or should not be done. Hence, this document reflects the full range of research gaps identified by participants in the writing group, ***but it does not reflect consensus on those research gaps***. The draft Scientific Agenda can be downloaded at:
<http://www.cdc.gov/vaccinesafety/agenda.htm>

Note: This draft summary will be reviewed in detail at the March 16 meeting. To the extent that interested stakeholders have questions or would like additional information regarding this draft, please contact Janesse Brewer of The Keystone Center at 970-513-5847 or jbrewer@keystone.org.

Special Populations

- Children who have had a previous adverse event who are scheduled for revaccination
- Persons or families who have had specified previous illnesses that may be related to vaccination more broadly that could be contraindications
- Children with concurrent acute illness with or without fever
- Children with a personal or family history of allergy or autoimmune disease
- Family history of adverse events (siblings, etc)
- Pre-adolescents, adolescents, and young adults
- Generational sequelae

Specific Vaccine Safety Questions

- Are there differences in the rates of vaccine adverse events between ethnic groups?
- Safety net population
 - Simultaneous vaccination for those on a catch-up vaccination schedule while sick
 - Maybe poor nutrition or other health issues
 - No access to prior vaccination records

Vaccines and Vaccination Practices

- Vaccine-environmental exposures (e.g., vaccination and tobacco)
- Vaccine-drug interactions (e.g., vaccination and recently or current antibiotic use)

Based in part on data from the community meetings in AL, OR, and IN as well as the IACC request for collaboration with the National Vaccine Program Office the writing group drafted a consensus recommendation to be considered by stakeholders at the March 16th meeting of the NVAC Safety Working Group. This recommended charge is for an expert panel to evaluate study designs for research on the impact of the standard schedule of vaccination on an array of health outcomes of significant public interest.

Draft Consensus Recommendation from the Writing Group:

Public and stakeholder engagement activities have identified a strong desire to study the health impact of the immunization schedule, potentially through a “vaccinated vs. unvaccinated study”. Additionally, the IACC has requested the NVAC consider the feasibility of such a study. This idea raises a number of methodological, technical and other issues.

The draft ISO scientific agenda includes several elements of this question, including simultaneous vaccination (e.g. the vaccine schedule) as well as specific outcomes that have been discussed regarding the vaccine schedule and simultaneous vaccination. Well designed studies in this area would add substantially to our knowledge.

Given public and stakeholder interest in this topic, we recommend an external expert advisory group with broad expertise assess this issue. This expert panel should be convened under the auspices of a well-respected independent body. Particularly:

- This review should consider strengths and weaknesses, ethical issues and feasibility including timelines and cost of various study designs and report back to the NVAC
- Consideration should be given to broad biomedical research including laboratory studies, and animal studies.
- Consideration should also be given to study designs comparing children vaccinated by the standard immunization schedule with unvaccinated children (by parental intention), and possibly partially vaccinated children or children vaccinated by alternative immunization schedules
- Outcomes to assess include biomarkers of immunity and metabolism, and outcomes including but not limited to neurodevelopmental outcomes, allergies, asthma, immune-mediated diseases, and learning disabilities.
- The inclusion of autism as an outcome is desired. This review should also consider what impact the inclusion of ASD as an outcome would have on study designs and feasibility, as referenced in the IACC letter to NVAC.
- This review should be conducted expeditiously, in a transparent manner, and involving broad public and stakeholder input.
- Specific attention should be paid to the potential roles or synergies with National Children’s Study.