●662 ACETAMINOPHEN PROPHYLAXIS FOR DPT-POLIO IMMUNIZATION
Moshe M. Ipp, Ronald Gold, University of Toronto; Hospital for Sick Children, Division of General Paediatrics, Toronto, Ontario, Canada.

Adverse reactions to the use of adsorbed DPT-Polio immunization are frequent and well documented. In a randomized, double blind, controlled trial, we studied the effect of acetaminophen prophylaxis in an attempt to diminish these reactions. Infants between 2 and 6 months of age immunized with adsorbed DPT-Polio who received acetaminophen prophylactically had significantly less reactions than those who received placebo. Only 27.6% of acetaminophen-treated children developed a fever >38.0°C compared with 43.5% of placebo-treated children. In addition only 3.3% of the acetaminophen-treated children developed a fever >39.0°C compared with 12.7% of the placebo-treated children. The overall severity of reactions rated by parents as none to mild in acetaminophen-treated infants was highly significant: 82.7% compared with 56% in placebo-treated infants. Severe reactions were reported in <1% of infants given acetaminophen compared to 13% of placebo-treated infants. Twice as many parents (38%) in the placebo group switched to acetaminophen because of concern over observed reactions compared with only 18.9% in the acetaminophen group. Finally, both systemic reactions including anorexia, fretfulness, and crying and local reactions including redness and pain were significantly more likely to occur in the placebo-treated group. Infants immunized at 18 months of age demonstrated no significant differences between the acetaminophen-treated group and the placebo-treated group.

We conclude that acetaminophen prophylaxis administered at the time of the primary series of DPT-Polio immunization can significantly diminish most adverse reactions.

663 INFORMATION MANAGEMENT FOR A COMMUNITY-BASED PEDIATRIC RESIDENCY PROGRAM.
Ronald J. Kallen, Case Western Reserve University School of Medicine, Mt. Sinai Medical Center, Department of Pediatrics, Cleveland.

We designed a microcomputer-based information system (IS), using commercially-available relational data base management software, to track the succession of patient management encounters. The IS includes an algorithm for computing the average daily patient load (ADPL) of residents providing either primary care, or in a supervisory role on the general inpatient service. The IS yields a compilation of the patients managed by each resident (a patient "log"), a frequency distribution of diagnoses for the total program, and a computation of the ADPL on the inpatient service. To minimize the data-submission burden on the resident, much of the raw data was culled by secretarial level personnel from daily reports provided by the data processing department. We analyzed 1900 consecutive patient-encounters, both intra- and extramural, and derived the following distribution of the 10 most frequent diagnoses (decreasing frequency): prematurity; unspecified septicemia; noninfectious gastroenteritis; asthma; pneumonia (unspecified); status asthmaticus; convulsions; asthmatic bronchitis; toxic-effect, lead; and transient tachypnea of the newborn. The above distribution reflects the composite experience of a primary-care oriented program and a tertiary children's hospital (where residents spend about one-third of their overall training experience). Separate ICDA codes assigned for asthma-related conditions were aggregated. This yielded a composite of 200 patient-encounters (10.5% of the sample). The asthma-related category was the most frequent diagnostic group encountered.

664 **ETHICS OF DRUG STUDIES IN NEONATES: HOW MANY SAMPLES SHOULD BE PERMITTED FOR PHARMACOKINETIC ANALYSIS?**
Gideon Koren, Judy Litwack, The Hospital for Sick Children, Div. of Clin. Pharmacology, Toronto, Ontario

Limitation of the number of blood samples obtained from infants is a major problem in clinical research, especially when repeated samples have to be obtained and when the specific patient does not have a direct benefit from these studies. Ethical committees often have to approve or disapprove such studies. In the present study we investigated the views of Canadian health professionals and lawyers participating in ethical committees and the principles that govern their decisions. Fifty individuals from 11 centers in Canada answered a questionnaire addressing this issue. There were 25 physicians, 5 PhD scientists, 5 lawyers and 15 others (nurses, clergy ect.). There were 20 women and the mean age was 42 years. The majority(75%) felt that blood sampling should be permitted whereas 25% indicated that blood pricking should not be allowed because no proxy (including parents) can approve it, or because of lack of direct benefit (20%) or because other ways of research can be found (10%). Of those permitting blood sampling, the majority (86%) stated that the total number of permitted samples depends upon the evidence presented by the researcher at the committee. However, the majority of participants did not have a clear idea on the actual number of samples that should be permitted for meaningful pharmacokinetic interpretation and felt that an ad hoc committee should decide on this issue. No correlation could be found between age, sex, number of children of participants and their views. There was, however, a clear tendency of the lawyers (4/5) not to permit extra blood sampling for research, when compared to health professionals (10/45).

This study indicates that there does not exist a consensus of ethicists on this important issue. Most participants indicated the need for a knowledgable decision on how many samples should be allowed, based on scientific evidence.

†665 SEASONAL DISTRIBUTION OF INFANTS WITH APPARENT LIFE THREATENING EPISODES (ALTE).
Ehud Krongrad and N.Y. State Apnea Committee, Columbia University, College of Physicians and Surgeons, Department of Pediatrics 3959 Broadway, New York, N.Y. 10032

The seasonal distribution of SIDS occurrences with an increase in winter months is an epidemiologic marker, typical of SIDS populations. We therefore studied the seasonal distribution of apparent life threatening episodes (ALTE), with the hypothesis that if ALTE cases are closely related to SIDS, their seasonal distribution should follow closely the seasonal distribution of SIDS. Infants with ALTE, admitted to 14 apnea centers throughout the state of New York, were entered into a state-wide collaborative study. A total of 759 infants in whom birth date and date of ALTE were provided were included. All patients were between 2 weeks and 12 months of age. The mean age of the infants was 2.7±2.1 months, 509 cases were under 3 months of age and 250 cases were over 3 months of age. The monthly distribution of ALTE in our study and of SIDS cases previously reported in the literature were as follows:

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NY ALTE	81	63	85	53	74	59	52	66	49	55	52	70
SIDS	279	230	252	233	212	172	167	166	193	222	262	326

Our results show that ALTE infants do not show the seasonal distribution typical of SIDS cases. When compared to the seasonal distribution of SIDS cases available in the literature, the seasonal distribution of the two groups was different (p=.0082). Our data show that although ALTE was reported in infants similar in age to SIDS cases, infants with ALTE do not have a similar seasonal distribution to infants with SIDS.

666 COMMUNICATION SCREENING OF PEDIATRIC POPULATIONS.
Mary D. Laney, Elliott Goldberg, (Sponsored by Lawrence Taft). UMDNJ-Robert Wood Johnson Medical School, Department of Pediatrics, New Brunswick, NJ.

Communication Screening Stamps were developed to be "stamped" in the child's medical chart and administered by a nurse or pediatrician. The STAMPS consists of 5 to 7 items to be administered or queried at each of 9 chronologic age intervals coinciding with pediatric immunization schedules from 2-24 months.

In contrast to the ELM, a marketed screening instrument for children 0-36 months of age, the STAMP is less time-consuming to administer and less complex to score. Results of data analysis for a sample of 236 children revealed that the STAMPS yield high sensitivity and specificity in relation to the ELM (93% and 91% respectively). When both screening instruments were used with populations at high risk for communication deviance (N=33), the STAMPS showed increased sensitivity over the ELM (100% vs. 83%) in relation to the presence of communication deviance (as revealed thorugh formal speech/language assessment). Specificity for the STAMPS (80%) in high-risk populations was based on a small number of children who either passed or failed the STAMPS and passed the follow-up speech-language assessment. Interjudge reliability computed for the STAMPs for three judges over six trials was 100%. Results of ongoing studies specificity with children of varied handicapping conditions will be reported.

667 ROLE OF ROUTINE CHEST ROENTEGENOGRAM IN CLINICAL EVALUATION OF ACUTE ASTHMA IN CHILDREN.
Haesoon Lee, Francis Lafontant, Mary Bastawros.(Spon by Ramesh Jhaveri) SUNY/Health Science Center and Interfaith Medical Center, Department of Pediatrics, Brooklyn,NY

We prospectively studied the role of routine chest roentgenogram(CXR) in the clinical assessment of the child presenting to the emergency room(ER) for acute asthma and it's effect on the decision to start antibiotic therapy(AT). One hundred seventy seven(177) consecutive acute asthma patients (age 3-14 years) evaluated in our ER were included. History, physical examination, CBC, urinalysis, and peak expiratory flow rate were first obtained. Based on these findings the pediatric house officer in the ER made a clinical diagnosis and a decision concerning AT use. The CXR was evaluated and result recorded. This was followed by reevaluation of AT. CXR was read as positive in 23 patients by ER physician (17 pneumonia, 5 atelectasis, 1 mucus plug). CXRs were subsequently examined independently by 2 pediatric radiologists. They confirmed 5 pneumonias, 3 atelectasis. They also found 4 additional pneumonia in CXR's read as negative by the housestaff. Prior to CXR, ER physicians planned to start AT in 4 patients because of clinical pneumonia but after CXR, 8 additional patients were given AT because of CXR findings (7 pneumonia, 1 atelectasis) and 1 patient with clinical pneumonia was not given AT because of negative CXR.

In conclusion, 8/12 (67%) of abnormal CXR confirmed by radiologists, (5 pneumonia, 3 atelectasis) were correctly interpreted in ER. CXR was often misinterpreted and led to overtreatment with AT in ER setting.