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for a healthy world



INTERNATIONAL PEDIATRIC ASSOCIATION

International Pediatric Association Newsletter

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Edition summary

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Message from the President

Dear colleagues,

Greetings from the International Pediatric Association (IPA) and welcome to this new issue of our newsletter!



The IPA Leadership recently met in London, UK last February, for a very comprehensive meeting where we had the chance to exchange our views and ideas on how we envision the future of IPA, as well as prepare for the next International Pediatric Association congress, where the IPA Council of Delegates, with representatives of Pediatric Societies all around the world will meet.

I would like to focus the content of this message, to the upcoming **28th International Pediatric Association Congress**, scheduled to take place in **Vancouver-Canada, on 17-22 August 2016**. I am happy to say that the preparations for our triennial event are continuously progressing. The Scientific Committee under the guidance of its President, Dr. Jean Yves Frappier, has come up with a remarkable program composed by an exciting mix of 9 plenaries, 57 concurrent symposia and 25 Meet-the-Expert sessions. The program features more than 160 prominent guest speakers, among which representatives of UNICEF, the World Health Organization (WHO), and the World Bank. Among the topics to be discussed are, "Immunization – Eradication, What's New", "Nutrition and Micronutrient", "Simulation in Pediatric Teaching", "Best Care For The Newborn", "Children in Conflict and Violence Against Children", "Pharmaceuticals for Children - Availability, Effectiveness and Safety", "Prevention of HIV", "Parent/Patient Partners of Family-Integrated Care", "Adverse Events, Toxic Stress and the Brain", "Equity and Health", "Communication Technologies and health", "Editors' Choice: Influential Articles that May Change Your Practice" and so much more. Anthony Lake, UNICEF's Executive Director, will

be our Keynote Speaker at the Congress Opening Ceremony. The congress also features a series of very important pre-congress workshops, scheduled to take place on August 16-17, so do not miss the opportunity to pre-register and secure your position, as participation to pre-congress workshops is limited. Congress [registration](#) and housing are open, so I encourage all of you to visit the [official congress website](#) and register for this landmark event. Apart from the congress scientific value, Vancouver is a remarkable city, offering an exciting blend of cosmopolitan amenities, natural beauty and cultural attractions. Consistently rated among the most beautiful cities in the world, Vancouver offers a rich cultural and ethnic diversity that permeates in everything from cuisine and entertainment, to neighbourhoods and traditions. We expect that all of you will join us in Vancouver this August, so as to make the IPA 2016 Congress the meeting point of all Pediatricians all around the world!

With my warmest regards and wishes for peace and prosperity all around the world,

Warmest regards!

Prof. Andreas Konstantopoulos
IPA President

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Message from the Chief Editor



In the present issue the Newsletter life goes on with the habitual sections. The messages from the high officers continue to inform precisely about the IPA activities in favor of child health and about the running of this wide society

that is the International Pediatric Association. As has occurred since the birth of IPA (Paris 1910) the triennial congresses initiated in 1912 have had a relevant importance that has been maintained to the present and I am certain into the future times. In this issue the stamp of Vancouver congress is widely prevailing as cannot otherwise be. These few words are dedicated those who in IPA with their silent activities have made this event so valuable.

In the ad hoc headings you will see how the contact with international health institutions and organizations and their daughter sections is getting closer and a similar trend appears in the News section. Do not miss the Global Clinical Practice because the dedication to infectious diseases deals in this issue with bronchiolitis and moreover in this case the article has been written by a real expert. Hot points in pediatric care approach some new aspects of the important problem of acute diarrhea prevention in infants. The section dedicated to the next August Congress in Vancouver has in addition a special interest because in a few lines you can discover how much you can get from its scientific program.

This Newsletter is a matter of many contributors who make up the real base which is by far more important than the editorial or administrative teams. The forthcoming congress in Vancouver apart from the scientific offer will imply an almost general turnover of

people. Newsletter will not escape to this normal change of era, new teams will be involved in the day to day running of this regular vehicle of information perhaps unique in determined areas. Certainly any fresh ideas and new directions will improve the present level of our publication which is received by more than 16000 colleagues.

Manuel Moya

IPA Newsletter Chief Editor

JOIN THE IPA NEWSLETTER DISTRIBUTION LIST!

In IPA we are putting all our efforts in keeping the pediatrician up to date, not only with information related to clinical practice, but also with news and updates of the Pediatric community from all around the world. Among our tools for reaching pediatricians is the IPA newsletter.

To this end, many IPA societies, are receiving a copy of the newsletter, which, in their turn, will be redistributed to all their members. Please feel free to contact the IPA Newsletter Editorial Team (newsletter@ipa-world.org), so as to make sure that your email is being added to our database in order to receive our news and updates.

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IPA Ongoing Activities

IPAF REPORT

This April, we heard the alarming news that the last Pediatrician in Aleppo, Syria was killed in a hospital airstrike that also took the lives of many patients and other medical personnel. We have also been reminded of the powerful forces of nature as earthquakes have recently rocked communities in both Japan and Ecuador. These sad events serve as stark reminders of some of the many difficult challenges that lay before the global pediatric community. We have much to overcome in our efforts to attain a safe and healthy world for all children everywhere. Such disastrous situations and their impact on children are part of the very reason we at the International Pediatric Association Foundation need your help.

The International Pediatric Association Foundation reaches out to those in need and seeks new and innovative ways of serving the global pediatric community. The sheer scope and magnitude of ongoing humanitarian crisis such as the one we see in Syria stand as testaments to the fact there is a dire need for international pediatric collaboration in confronting the challenge of helping millions of displaced youth. Your donations of support in confronting these challenges are an investment in our future. If children are immunized, treated for malnutrition, mental illnesses, and other emerging conditions in this time of crisis; even small efforts can have major impacts on overall child survival rates. We never really know where the next disaster will strike, natural or manmade. However, with your support, no matter how large or small, we can make a difference in addressing humanitarian crises.

The IPAF would like to thank those individuals, organizations, and governments who are doing their part to alleviate the traumatic effects of these crises for an entire generation of youth. Everyone who has

contributed to the IPAF should be extremely proud of our past efforts in supporting the Pediatric Societies in Turkey, Lebanon, and Jordan in their struggle to care for refugees.

We are also continue to be amazed with the wonderful progress we have seen through our grant programs. Last year, the Ihsan Dogramaci Research Award (IDRA) grant was awarded to Dr. Prateek Bhatia at the Pediatric Hematology Lab of the Advanced Pediatric Centre in Chandigarh, India. The \$20,000 grant supports a project to establish, phenotypic and genotypic screening to identify children with iron refractory iron deficiency anemia (IRIDA). Non-iron deficiency anemia is a relatively common problem in developing countries and this work will find ways to identify those individuals early in life so they won't be overloaded with iron. Dr. Bhatia has made excellent progress and will present the ongoing results of his project at the IPA Congress in Vancouver later this summer.

The success we have seen from our smaller grants also continues to be a source of pride. Last year, we wrapped up the last of our 14 small grant projects from around the world. The projects have been amazingly productive. Please see the accompanying list of small grants. Projects such as these truly show what even a small donation can help accomplish. We look forward to announcing our next round of small grant awards.

This August, IPA Member Societies from across the globe will gather in Vancouver, Canada to meet and discuss the most pressing issues in our pediatric world. I invite you to join us and take part in that discussion. With every new voice, you help our message get louder and clearer. We look forward to seeing you there!

I also encourage you all to visit our website, <http://www.ipaf-world.org>. We welcome financial support from member societies and pediatricians so that we can to continue to fund projects that make a difference in children's lives. In addition, the IPAF website is a place where interested partners and

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individuals can learn about our efforts and donate funds to help advance the IPA's goals. We also use this site as a portal to introduce our grants and provide financial disclosures to donors.

Help continue the legacy and ask your pediatric society to contribute at <http://www.ipaf-world.org/donate>. Thank you for all you do! Together, the International Pediatric Association and its Foundation stand ready to help.

The International Pediatric Association Foundation, Inc. (IPAF) works with national pediatric societies to promote the physical, mental and social health of children in order to achieve the highest standards of health for newborns, children and adolescents in all countries of the world. Incorporated over 10 years ago, the IPAF is the fundraising arm of the International Pediatric Association and provides seed money for research and education projects developed in collaboration with national pediatric societies. The IPAF also provides funding during humanitarian emergencies. Dr. Errol Alden currently serves as the IPAF President.

Dr. Errol Alden, MD, FAAP
IPAF President

Contact Name	Country	Grant Name
Akiani, Nwadiuto	Nigeria	Quality School Health Programme in a Primary School in Obio Akpor Local Government Area, Rivers State
Albers, Gary and Colimon-Adrien, Jessy	Haiti	The Pediatric Subspecialty Educational Initiative at l' Hopital de l' Universite d' Etat d' Haiti (HUEH)
Ali, Salima	Pakistan	Capacity Building of School teachers for Adolescent Mental Health
Buresh, Chris and Kompare, Michelle	Haiti	Community Health Initiative
Haleem, Azad	Iraq	Antibiotics Utilization in Duhok City: Parmaca – epidemiological Study
Hassan, Seema and Farrukh, Naghamana	Pakistan	SHINE Humanity
Kandasamy, Sasidaran	India	Pediatric Acute Care Nursing Education and Training Program (PACNET)
Kandelaki, Nino	Georgia	2014 Immunization Children in Georgia
Namazova-Baranova, Leyla	Russia	Creation educational cartoons regarding the smoking damage for using in middle school for pupils 12-17 years old
Padankatti, Swathi	India	Managing Common Illnesses and Emergencies in Schools: A Program to train and empower school teachers
Pam, Sunday	Australia	Late Preterm Infants Post-birth rehospitalization Morbidity Study (LPREMS)
Rajendran, Aruna	India	Awareness Program Regarding Inherited Bleeding Disorders, Childhood Cancers and Blood Donations (ABCD)
Russell, Fiona	Ethiopia	Investigation of foot length, chest circumference, mid upper arm circumference as screening tools for predicting neonatal mortality in Ethiopia
Tuibega, Ilisapeci	Fiji	Surfactant Pilot Study

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TREASURER'S REPORT

This is an important year for the IPA with the forthcoming Congress in Vancouver in August. Apart from the scientific program which promises to be an exciting and stimulating one, elections for the next president-elect and other office-bearers for the IPA will take place as well as a decision made regarding the venue for the IPA Congress after that of 2019.



Currently the administrative functions of the IPA are carried out under the auspices of the American Academy of Pediatrics (AAP) in Chicago, USA. However, this is not regarded as a permanent arrangement and we are still looking to set up a permanent office with a secretariat in the future, but this depends on adequate funding which is not available at present.

The expenses that the IPA needs to meet each year include the administrative costs, those enabling the President, Executive Director and other office bearers to fulfil their functions e.g. representing the IPA at international fora such as the World Health Assembly as well as national and regional meetings, and meetings of the Executive and Standing Committees in between congress years. The finances of the IPA are carefully monitored. All expenses have to be approved by the Executive Director, the President and the Treasurer and the finances are audited annually as required by law.

Annual Dues

Annual dues are based on the number of members of the national paediatric organization and provide one of the essential sources of funding for the the IPA. Member countries and organizations need to have paid their dues in order to vote at the Council of Delegates meeting, so please ensure that your country or organization is paid up by the time of the Congress!

The Vancouver Congress

Congresses have been an important source of income for the IPA over many years resulting in the accumulation of important financial reserves. The main source of income for the congress is from those who register and attend the congress – the more delegates who attend the congress, the more your IPA will benefit financially resulting in greater influence and effectiveness of our organization. Please therefore encourage as many of your members as possible to register and attend the Vancouver Congress in August. I look forward to meeting many of you in Vancouver.

Best regards
Peter Cooper
Treasurer, IPA



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69TH WORLD HEALTH ASSEMBLY, MAY 23-28 2016

President Professor Andreas Konstantopoulos and Executive Director Professor William Keenan will attend this Assembly held at the WHO Headquarters in Geneva. In the next issue a thorough report will appear with the main issues and directions approved in this top summit for global health.

IPA ADVOCACY FOR BREASTFEEDING

On January 29th 2016 the Global Launch of The Lancet Breastfeeding Series took place at Washington DC at the Kaiser Family Foundation Conference Center with the participation of authors and speakers. This important initiative aimed at eliminating barriers to breastfeeding in high- and low-income countries. The Executive Director prompted the IPA sectors more related to breastfeeding to participate in this action through the Every Woman Every Child which is a global movement endorsed by UN. But also in our own direction in order to use our resources in support of this idea: 28th IPA Congress (Vancouver), Webpage, Newsletter and even at personal level was also required (Dr. C Victora, The Lancet vol 387, issue 10017 and Dr. Z Bhutta, The Lancet vol 382 issue 9890). TAG-Nutrition at the Geneva meeting on 'Clarification and Guidelines on Inappropriate Promotion of Foods for Infants and Young Children' led by the Department of Nutrition of WHO, made a presentation which can be summed up into two message points: 1) Industry is using new methods based on bogus science (temporary lactase deficiency, anti-constipation formulas, low protein content...) to erode breastfeeding practice. 2) Long-term benefits newly known (improved learning capacity, obesity prevention...) associated to a minimum time of breastfeeding.

WHO COMMISSION ON ENDING CHILDHOOD OBESITY

In the past issues (vol 10, #3 and vol 11, #1) ample information on this action has been given, in the present one we will refer to the ending activity of IPA because the Presentation of the Report of the Commission on Ending Childhood Obesity (ECHO) under the presidency of Dr. Margaret Chan and Sir Peter Gluckman signaled the end of the Commission works and the final document will be presented to the Executive Board for further dissemination through WHO. Now it is satisfactory to report that this spirit has been recovered by the European Union Action Plan. The fact of Sir Peter Gluckman being co-chair of Tackling Childhood Obesity in Europe international symposium, Brussels 18th May 2016, made possible a convenient convergence of actions.

IPA- FAO ACTIVITIES

IPA through the membership to FAO Food Security and Nutrition Global Forum (FSN) has participated in 9 online discussions or webinars in which the health of children and adolescents were related to food and agriculture actions. Among them it is worth mentioning Nutrition and Food Systems eConsultation, after the previous contribution, we acceded to the CFS High Level Panel of Experts (HLPE). Full proceedings are available (<http://www.fao.org/cfs/cfs-hlpe/en/>). Also a second contribution is planned to the Rural Transformation Technical Conference in Rome September 2016.



News

1. GLOBAL STRATEGY FOR WOMEN'S, CHILDREN'S AND ADOLESCENT'S HEALTH 2016-2030

This is an initiative launched by the United Nations Secretary-General, mobilizing governments, multilaterals, the private sector and civil society in order to attain the three overarching objectives: Survive, Thrive and Transform. Despite the wideness of them when looking at chapter 5, Action Areas, it can be seen how they can impact in Sustainable Development Goals (UN). This is a favorable frame to improve the quality of lives as the Millennium Development Goals in some basic aspects in some countries as the 2015 evaluation showed.

2. WORLD HEALTH ASSEMBLY (WHA)

Next May 23-28 2016 will take place in Geneva the Health Assembly. 'This is the decision- making body of WHO. It is attended by the delegations from all WHO Member States and focuses on a specific agenda prepared by the Executive Board. The main functions of WHA are to determine the policies of the Organization, appoint the Director- General, supervise financial policies and review and approve the proposed program budget. WHA is held annually in Geneva Switzerland'. Decisions and issues of this Assembly can have global impact in the health panorama. As this has a term ending in 2030, through the Sustainable Development Goals. Children and adolescents' health is fully considered at different goals. Traditionally IPA has been present in this body and so will be in a few days, IPA Executive Direction has identified for interaction the following issues:

- Maternal, infant and young child nutrition plus Report on the Commission on Ending Child Obesity (ECHO). Also in NCD agenda.
- Prevention and Control of NCDs.
- Road safety

- Operational plan for Global Strategy on Woman's Children's and Adolescents' Health
- Global Vaccine Action plan
- CURhE aimed at the elimination of death and disability due to neonatal isoimmune hemolytic disease.
- Health Workforce.
- Sustaining the elimination of iodine deficiency disorders (under NCDs)

IPA representatives will present the pertinent position papers.

3. INEQUITY AND CHILD MORTALITY RATE

Dr. Malqvist published last year an interesting and documented paper (Malqvist M. Arch Dis Child 2015; 100 (Supp 1) S5-9) in which appears the relationship between poverty and child mortality increased rates. It is astonishing how 27 countries have neither achieved MDG 1 (poverty) nor MDG 4 (mortality), but more surprising eve is the log-scale relationship between the under-5 mortality and gross domestic product per capita after World Bank analysis of 186 countries. This should make us aware that our own efforts to improve child health require an economical change.

4. BREASTFEEDING

In high income countries more than 80% of mothers begin breastfeeding, many do not continue as long as they should. CDC has made an Early Release about how to improve the support in US maternities. Although this Release recognizes the effort of WHO/ UNICEF specific activities they conclude that policies and practices in **each maternity** should improve due to the positive effect in breastfeeding duration. Pediatricians also should advise pregnant women (already mothers' or not) about the benefits and give the Steps for successful breastfeeding.

www.who.int/nutrition/topics/exclusive_breastfeeding/en/.



5. UNIVERSAL HEARING SCREENING

Every year about 1 in 1000 live born suffer from hearing impairment sufficiently severe to compromise speech and language development and communication. Therefore this universal screening should increase to cover the global newborn population. The difficulties to detect hearing impairment before the first year of life are greater enough to prevent such condition which implies long lasting consequences. Dr. H Pimperton and colleagues (Arch Dis Child 2016; 101: 9-15) after evaluating a cohort of 100,000 of newborns in UK concluded that the diagnosis of permanent hearing impairment before 9 months benefits the reading comprehension in the second decade of life.

6. WORLD'S CHILDREN 2015 COUNTRY STATISTICAL INFORMATION

Finally and from the IPA Executive Direction we had in the pipeline a link (www.unicef.org/statistics) which gives updated information of every country in the world on the following items: Basic indicators; Nutrition; Health; HIV/ AIDS; Education; Demographic indicators; Economic indicators; Women; Child protection; The rate of progress; Adolescents; Disparities by residence; Disparities by household wealth and Early childhood development. Please choose a country from the dropdown menu and you'll get this wide information on children and their milieu.



Global Clinical Practice

DIAGNOSIS AND MANAGEMENT OF VIRAL BRONCHIOLITIS IN CHILDREN

H. Cody Meissner, M.D.

Introduction

Few diseases have a greater impact on the health of young children than viral lower respiratory tract illness. Globally, RSV alone was estimated to cause 66,000 to 199,000 deaths in 2005 among children less than 5 years of age with a disproportionate burden occurring in resource-limited countries (1). This review presents an overview of the clinical features, the risk factors and current recommendations from the American Academy of Pediatrics for management of a young child with bronchiolitis (2,3).

Clinical Features

A young child with bronchiolitis typically presents after 2 to 4 days of low grade fever, nasal congestion and rhinorrhea with symptoms of lower respiratory tract illness including cough, tachypnea and increased respiratory effort as manifested by grunting, nasal flaring and intercostal, subcostal or supraclavicular retractions. Inspiratory crackles and expiratory wheezing may be heard during auscultation. Various definitions have been proposed, but generally the term bronchiolitis is limited to infants less than 12 months of age with a first episode of wheezing. Apnea, especially among preterm infants in the first two months of life, may be an early manifestation of viral bronchiolitis (2).

The variable course of bronchiolitis and the inability to predict a requirement for supportive care often drives hospital admission. A variety of potential clinical markers have been proposed for identifying infants at risk of severe disease. Unfortunately, proposed scoring systems have low power to predict progression of illness to severe complications such as need for intensive care or mechanical ventilation.

A number of different viruses are capable of causing bronchiolitis including RSV, rhinoviruses, parainfluenza viruses, human metapneumovirus, coronaviruses, adenoviruses, influenza viruses and enteroviruses. RSV accounts for 50% to 80% of all hospitalizations for bronchiolitis during seasonal epidemics in North America and in other areas. The clinical features of bronchiolitis due to different viruses are generally indistinguishable. Differences in response to medical intervention have not been identified consistently among children with different viral etiologies. Viral coinfection rates among children with bronchiolitis vary widely among studies and range from 6% to greater than 30% (4).

Risk Factors

Most infants hospitalized with RSV bronchiolitis are full term with no known risk factors (2). Chronologic age is the single most important determinant for severe bronchiolitis based on the observation that approximately two thirds of pediatric RSV hospitalizations occur in the first 5 months of life. Hospitalization rates are highest between 30 and 90 days after birth.

Children with certain co-morbidities including prematurity (<29 weeks' gestation), chronic lung disease of prematurity and hemodynamically significant congenital heart disease may experience more severe RSV disease relative to children without such co-morbidities. Some, but not all studies suggest an increased risk of severe RSV disease among preterm infants born before 29 weeks' gestation relative to infants born at or after 29 weeks' gestation. In contrast, available data do not demonstrate a statistically significant increase in RSV hospitalization rates among preterm infants (without chronic lung disease of prematurity) born between 29 weeks' through 36 weeks' gestation relative to term infants (≥ 37 weeks' gestation). Chronic lung disease of prematurity increases the risk of severe bronchiolitis to a greater extent than prematurity alone. Infants born with certain types of hemodynamically significant



congenital heart disease, particularly those with pulmonary hypertension or congestive heart failure are at risk of more severe bronchiolitis due to a limited ability to increase cardiac output in response to a respiratory infection.

Possible increased risk of bronchiolitis attributable to other conditions has been difficult to quantify because of low rates of occurrence and inconsistent study results. Most reported host and environmental factors are associated with only a small increase in the risk for RSV hospitalization and thus have a limited contribution to overall RSV disease burden. Other factors that generally have a limited impact on hospitalization rates include Trisomy 21, male gender, exposure to maternal smoke, history of atopy, child care attendance and crowding (2).

In temperate climates in countries in the northern hemispheres, outbreaks of bronchiolitis typically begin in November, peak in January or February and end by early spring. In tropical countries peak RSV activity often correlates with the rainy season. Global surveillance indicates that distinct annual epidemics of bronchiolitis occur in all countries, but peak season and duration vary.

Environmental as well as meteorologic factors influence the timing of the respiratory virus season by affecting viral stability, patterns of human behavior and host defenses. Rainy seasons and colder weather prompt indoor crowding that may facilitate viral transmission especially in areas with high population density. A complex interaction has been demonstrated between latitude, temperature, wind, humidity, rainfall, ultraviolet B radiance, cloud cover and RSV activity. Human susceptibility to viral infections may be altered by certain weather conditions, such as inhalation of cold dry air that desiccates airway passages and alters ciliary function or by inhibition of temperature-dependent host antiviral responses. Other risk factors that may be associated with higher RSV hospitalization rates include household crowding, indoor air pollution,

lack of running water and a lower threshold for hospital admission because of residence in a remote village distant from health care facilities (4).

Severe bronchiolitis early in life may be associated with an increased risk of asthma, especially following rhinovirus or RSV bronchiolitis and an increased prevalence of asthma may persist into early adulthood. An unresolved question is whether bronchiolitis early in life results in injury that alters normal lung development in a way that predisposes to subsequent wheezing or whether certain infants have a pre-existing aberration of the immune response or of airway function that predisposes to both severe bronchiolitis and recurrent wheezing (4).

Supportive Management

Despite the high disease burden, optimal care for a young child with bronchiolitis has been difficult to establish because of the absence of curative therapy. No available treatment shortens the course of bronchiolitis or hastens the resolution of symptoms. Therapy is supportive and the vast majority of children with bronchiolitis do well irrespective of management. The intensity of therapy among hospitalized children has been shown to hold little relationship to illness severity.

To improve standardization of the diagnosis and management of children with bronchiolitis, the American Academy of Pediatrics published a Clinical Practice Guideline using a Grading of Recommendation, Assessment, Development and Evaluation (GRADE) analysis to provide level of evidence, benefit-harm relationship and level of recommendation regarding various aspects of diagnosis, treatment and prevention of bronchiolitis (3). This evidence-based guidance emphasizes that a diagnosis of bronchiolitis should be based on the history and physical examination and that radiography and laboratory studies should not be obtained routinely (Table).



Table. Summary of guidance from the American Academy of Pediatrics regarding the diagnosis, management and prevention of bronchiolitis (2,3)

Diagnosis

- Clinicians should diagnose bronchiolitis and assess disease severity on the basis of history and physical examination.
- Clinicians should assess risk factors for severe disease such as age <12 weeks, history of prematurity, underlying cardiopulmonary disease or immunodeficiency when making decisions about management of children with bronchiolitis
- When clinicians diagnose bronchiolitis on the basis of history and examination, radiography or laboratory studies should not be obtained routinely

Management

- Clinicians should not administer albuterol or salbutamol to infants with a diagnosis of bronchiolitis
- Clinicians should not administer epinephrine to infants with a diagnosis of bronchiolitis
- Clinicians may administer nebulized hypertonic saline to infants and children hospitalized for bronchiolitis
- Clinicians should not administer systemic corticosteroids to infants with a diagnosis of bronchiolitis in any setting
- Clinicians may choose not to administer supplemental oxygen if the oxyhemoglobin saturation exceeds 90% in infants and children with bronchiolitis
- Clinicians may choose not to use continuous pulse oximetry for infants and children with a diagnosis of bronchiolitis
- Clinicians should not use chest physiotherapy for infants and children with a diagnosis of bronchiolitis
- Clinicians should not administer antibacterial medications to infants and children with a diagnosis of bronchiolitis unless there is a

concomitant bacterial infection or a strong suspicion of one

- Clinicians should administer nasogastric or intravenous fluids for infants with a diagnosis of bronchiolitis who cannot maintain hydration orally

Prevention

- Palivizumab should not be administered to otherwise healthy infants with a gestational age of 29 weeks, 0 days or greater
- Clinicians should administer palivizumab during the first 12 months of life to infants with hemodynamically significant heart disease or chronic lung disease of prematurity defined as <32 weeks gestation who require >21% oxygen for at least the first 28 days of life
- Clinicians should administer a maximum 5 monthly doses (15 mg/kg/dose) of palivizumab during the respiratory syncytial virus season to infants who qualify for prophylaxis in the first year of life
- All people should disinfect hands before and after direct contact with patients, after contact with inanimate objects in the direct vicinity of the patient and after removing gloves
- All people should use alcohol-based rubs for hand decontamination when caring for children with bronchiolitis. When alcohol-based rubs are not available, individuals should wash their hands with soap and water
- Clinicians should inquire about the exposure of the infant or children to tobacco smoke when assessing infants and children for bronchiolitis
- Clinicians should counsel caregivers about exposing the infant or children to environmental tobacco smoke and smoking cessation when assessing a child for bronchiolitis
- Clinicians should encourage exclusive breast feeding for at least 6 months to decrease the morbidity of respiratory infections



Future

RSV remains one of the last viruses to cause worldwide outbreaks of disease and for which no safe and effective vaccine is available. Several approaches to vaccine development are being investigated. Until safe and effective vaccines are available, reduction of the disease burden due to bronchiolitis must focus on education regarding the importance of decreasing exposure to and transmission of respiratory viruses.

H. Cody Meissner, M.D., Tufts University School of Medicine, Department of Pediatrics, Tufts Medical Center, Boston, MA

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Hot Points in Pediatric Care & Prevention

TO WHAT EXTENT IS ACUTE DIARRHEA CAUSED BY CONTAMINATION OF INFANT FORMULA? CLUES FOR PREVENTION.

Recently the Center for Disease Control and Prevention (CDC) has warned about the Cronobacter contamination of powdered infant formula and the development of acute diarrhea (1). Acute diarrhea or gastroenteritis is an infection of the gastrointestinal tract by bacteria, virus or parasites, many of these are foodborne diseases, and some could be linked to the use of classical formulas. According to the WHO/UNICEF report of 2004 (2) there are 2.5 billion episodes of acute diarrhea per year in under-fives all over the world although with a significant concentration in low- and middle-income countries. These figures are probably still present (3) but mortality due to acute diarrhea has globally decreased in the last 15 years. The aim of the present hot point is focused on prevention of this wide health problem.

It is opportune to refer briefly to the Cronobacter germ (figure), first because of the setting up of elementary actions for prevention of acute diarrhea caused by it, the preventive action would cover a wider causal spectrum. Secondly because of the nature of this gram negative bacteria, that was formerly known as Enterobacter cloacae, later on as Enterobacter sakazakii and in 2007 after genomic studies as Cronobacter genus with different species. Cronobacter is a ubiquitous organism, able to survive in very dry conditions, present in plant materials, meats, cheese, milk powder and powdered infant formula (4).

In the clinical grounds it can be said that adults do not often get sick from Cronobacter, conversely it can be deadly in newborns and infants. In preterm babies it can cause NEC, septicemia and meningitis with a

fatality rate of 50% and neurological damage in survivors. In infants the sickness normally starts with fever, feeding poorly, general poor condition and diarrhea. These may be followed by other localization of the germ such as UTI, wounds and in the most unfavorable cases septicemia, meningitis, brain abscess and death. Cultures can confirm the diagnosis

In general the powdered infant formula can be contaminated during the manufacturing procedure, which seldom occurs nowadays, but it should be taken into account that powdered infant formula is not sterile and added raw material can be contaminated. At home contamination can occur once the container is opened, through the lids, scoops or if mixed with contaminated water.

The main and simple preventive actions to decrease bacterial contamination according to CDC (5) are:

1. **Breastfeeding.** No cases of Cronobacter sickness have been reported in infants being exclusively breastfed.
2. **Liquid formula.** If formula is going to be used, choose the liquid form, this type is sterile.
3. **Powered formula.** If this type is going to be used the keys to prevent bacterial growth are
 - 3.1 Clean up before preparation
 - Wash your hands and wrists with soap and water
 - Clean bottles in a dishwasher with hot water and heated drying cycle; or scrub bottles in hot soapy water and then sterilize them (bottles, teats and covers)
 - Clean work surfaces: countertops and sinks.
 - 3.2 Prepare safely
 - Keep container, lids and scoops clean (be careful of what they touch)
 - Close formula containers or bottled water asap
 - Use hot water (70° C) to make the formula
 - Shake it, do not stir formula in the bottle
 - Cool formula under cool water (not touching the nipple)

- Before giving it to the baby test the temperature (few drops on your wrist).
- 3.3 Use up quickly or store safely
 - Use formula within 2 hours of preparation. Throw away unfed formula
 - If prepared bottles are going to be used throughout the day (max 24 hr) refrigerate them immediately (Cronobacter multiplication starts at 6-8° C)
 - When in doubt about the storage throw away the filled bottles

4. Practice proper hygiene

- 4.1 Wash your hands carefully with soap and water after using the toilet or changing diapers.
 - Wash your hands before preparing the bottle as said
 - Wash your hands before touching infant mouth
 - Wash your hands before touching pacifiers
- 4.2 If soap and water are not available use alcohol-based hand sanitizer, although they are efficient they are not a substitute for hand washing.
- 4.3 All safe objects that enter infant's mouth must be clean.



Figure. Cronobacter rod-shaped aspect. Cell division appears in lower left corner

REFERENCES

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Healthy children
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28th International Pediatric Association Congress

Education is not Enough

The IPA 2016 Congress in Vancouver, British Columbia, Canada August 17 to 22, 2016 is a great opportunity for those who contribute to the health and well-being of children and youth. Twelve Pre-Congress workshops will provide interactive sessions to learn and improve one's abilities in a variety of areas. The address by Anthony Lake (Executive Director, UNICEF) about "The experience of the innocents: Shaping children's brains – and their futures" during the Opening Ceremony should provide inspiration to those in attendance who will also enjoy a brief cultural taste of Canada.



Nine plenary and 54 concurrent symposia will give pediatricians and others from around the world an opportunity to hear the latest developments from speakers selected for their expertise. A presentation by Prateek Bhatia (winner of the IPA Doğramacı Award), oral presentations of 52 abstracts and poster presentations of another 900 abstracts should offer something educational for everyone. There are 25 "Meet the Expert" morning sessions and at least three

industry supported co-developed workshops which will provide 10 hours of scheduled scientific sessions each day. Add the opening reception, dining, sightseeing and various entertainment events, as well as the opportunity for pre- and post-Congress excursions, and you will have the ideal conference content and venue.

As Congress President, there have been (and will continue to be) challenges which I hope are addressed to benefit those who attend the 28th IPA Congress and the people whom we serve. I am grateful for the assistance of many and especially to Jean-Yves Frappier who has worked tirelessly on the scientific program to make it informative and interesting to all who attend.

Do not come to the Congress only to listen but come to learn. It has taken me too many years to distinguish between teaching and facilitating learning. Effective learning implies not only knowledge and skills but knowing how to use them in a context (which we can influence) to allow them to be used most effectively and efficiently. Knowledge must be combined with effective utilization. Pediatricians should use their diversified talents to recognize many barriers to (and enablers of) translating knowledge into effective actions.



This Congress provides opportunity to continue and initiate new contacts as we work together on issues vital to children and youth throughout the world. While a few may work effectively as individuals (The Power of



One), we are increasingly aware of the benefits of a team (The Power of Many). I once heard one of the IPA 2016 Congress speakers, Lewis First, speak about “Leadiatrics”. As Pediatricians we have the opportunity to “lead”, organize, and advocate as well as providing care.

Whether you are attending the scientific sessions or enjoying the sights of Vancouver, remember the needs of others (many of whom are much less fortunate than we). It will not be enough just to listen; each of us should use the opportunity to consider how we can make the world a better place for our future generations when we return to our usual workplaces.

As Congress President, I am thankful for the opportunities to contribute to the IPA 2016 Congress. I hope each participant feels the Congress has prepared them to meet the challenges of their work while also providing opportunity for rest and relaxation. My enjoyment will not end when the Congress is over but will continue for the future as we each (and collectively) use the opportunities the Congress will provide to benefit our children and youth.

Doug McMillan
 IPA 2016 Congress President

August 17 - 22, 2016

Community, Diversity, Vitality

28th International Congress of Pediatrics
 17-22 August 2016, Vancouver, Canada




www.IPA2016.com

Calendar of Events

34th Annual Meeting of the European Society for Pediatric Infectious Diseases (ESPID)

May 10-14, 2016
Brighton – United Kingdom
<http://espid2016.kenes.com/>

Annual International Conference of the Association of Psychology and Psychiatry for Adults and Children (A.P.P.A.C.)

May 17-20, 2016
Athens – Greece
www.appac.gr

64th Congress of the Spanish Pediatric Association

June 2-4, 2016
Valencia, Spain
<http://www.congresoap.org/aep2016>

The 2nd International Neonatology Association Conference (INAC 2016)

July 15-17, 2016
Vienna - Austria
www.worldneonatology.com

28th International Pediatric Association Congress (IPA 2016)

August 17-22, 2016
Vancouver – Canada
www.ipa2016.com

17th Congress of the International Pediatric Nephrology Association (IPNA)

September 20-24, 2016
Uguaçu – Brazil
<http://www.ipna2016.com/>

8th Asian Congress of Pediatric Infectious Diseases (ACPID)

November 7-10, 2016
Bangkok – Thailand
<http://www.acpid2016.com/>

The 12th Asian Society for Pediatric Research (ASPR) and Faculty of Medicine Ramathibodi Hospital Joint Meeting 2016

November 9-11, 2016
Bangkok, Thailand
<http://www.aspr2016.com>

August 17 - 22, 2016



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