

# Quelques actualités 2016 en santé publique

P. FRAISSE  
GREPI de la SPLF et CLAT 67  
Journée des CLATs 13 juin 2017

## LES SUJETS CONTACT

### Le suivi des sujets contact



Morbidity and Mortality Weekly Report

January 1, 2016

#### Tuberculosis Contact Investigations — United States, 2003–2012

Kai H. Yeung, MPH<sup>1</sup>; Mekhni Elmasri, MPH<sup>1</sup>; Randell Flores, MPH<sup>1</sup>; Brenda L. Stevens Maloba, MPH<sup>1</sup>; Awi Khan, PhD<sup>2</sup>; Terence L. Cheeks, MPH<sup>3</sup>; John Jacobs, MPH<sup>4</sup>

- 114,003 TB cases in surveillance
- number of contacts listed per index patient with contacts elicited increased from 14.9 to 21.3 contacts = 1 044 244 contacts
- contacts who were fully examined remained stable at approximately 80%
- 0.11 contacts with TB disease and 3.13 contacts with LTBI per smear-positive index patient and 0.05 contacts with TB disease and 1.30 contacts with LTBI per smear-negative
- treatment completion rate remained stable as well, averaging 46.4% over the 10-year period
- reason for not completing treatment:** died (201; 0.6%), TB disease developed (215; 0.7%), adverse effect of treatment (2,263; 6.5%), health care provider decision (1,859; 5.6%), individual decision (15,173; 46.0%), moved and outcome was unavailable (3,240; 9.8%), or lost to follow-up (10,661; 30.5%).

### Les voyages en avion, pas si grave

#### REVIEW

Systematic review on tuberculosis transmission on aircraft and update of the European Centre for Disease Prevention and Control risk assessment guidelines for tuberculosis transmitted on aircraft (RAGIDA-TB)

SM Kotila<sup>a</sup>, L Payne Hallström<sup>b</sup>, N Jansen<sup>c</sup>, P Helbling<sup>d</sup>, I Abubakar<sup>e</sup>

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Euro Surveill. 2016;21(4):pii=30114. DOI: <http://dx.doi.org/10.2807/1560-7917.EU.2016.21.4.30114>

21 études, 7 transmissions possibles, 1 seule avec une certaine vraisemblance

### LES ITL

### Réévaluation de la charge en ITL mondiale

Table 1. Proportion of population with latent TB infection.

WHO region	All LTBI			Recent infection prevalence (within 2 y)	
	Prevalence (%)	Proportion of infections in children <15 y (%)	(%)	Proportion with INH-R infection (%)	(%)
AFR	22.4 [20.6–24.6]	13.3 [11.8–14.6]	1.5 [1.3–1.7]	7.4 [6.4–8.7]	
AMR	11.0 [7.0–20.0]	2.3 [1.3–3.7]	0.2 [0.1–0.2]	7.0 [6.0–8.8]	
SEA	30.8 [28.3–34.8]	7.4 [6.3–8.2]	1.2 [0.9–1.6]	9.5 [8.6–10.3]	
EMR	16.3 [13.4–20.5]	7.9 [6.0–9.4]	0.7 [0.5–1.0]	13.1 [10.0–15.5]	
WPR	27.9 [19.3–40.1]	2.4 [1.7–3.9]	0.5 [0.4–0.7]	14.7 [13.9–15.6]	
EUR	13.7 [9.8–19.8]	2.0 [1.3–2.7]	0.3 [0.2–0.3]	29.5 [23.8–45.1]	
GLOBAL	23.0 [20.4–26.4]	5.9 [5.1–6.7]	0.8 [0.7–0.9]	10.9 [10.2–11.8]	

Proportion of population by WHO region infected with *Mycobacterium tuberculosis*, 2014 (including proportion of LTBI burden that is in children, proportion recently infected, and proportion of recent infections with isoniazide-resistant (INH-R) *Mycobacterium tuberculosis*). Brackets indicate 95% uncertainty interval. AFR = African Region; AMR = Region of the Americas; EMR = Eastern Mediterranean Region; EUR = European Region; SEA = Southeast Asia Region; WPR = Western Pacific Region

Table 2. Number (thousands) of individuals with latent TB infection

WHO region	All LTBI		Recent infection prevalence (within 2 y)	
	Number (K)	Number (K) of infections in children <15 y	Number (K)	Number (K) with INH-R infection (%)
AFR	216,000 [198,000–237,000]	28,700 [26,700–30,800]	14,300 [12,200–16,800]	1,060 [844–1,310]
AMR	108,000 [68,900–196,000]	24,702 [24.2–27,170]	1,790 [1,440–2,240]	126 [99–162]
SEA	587,000 [540,000–662,000]	43,300 [38,700–48,300]	23,000 [17,100–30,900]	2,210 [1,650–2,950]
EMR	104,000 [85,200–130,000]	8,060 [7,900–9,240]	4,520 [3,160–6,280]	581 [396–847]
WPR	514,000 [356,000–739,000]	12,400 [10,900–13,800]	9,130 [6,800–12,900]	1,340 [1,000–1,940]
EUR	124,000 [89,100–180,000]	2,430 [2,220–2,650]	2,900 [1,869–3,120]	686 [461–1,200]
GLOBAL	1,680,000 [1,480,000–1,910,000]	97,100 [91,700–103,000]	55,600 [48,200–63,800]	6,069 [5,140–7,040]

PLOS Medicine | DOI:10.1371/journal.pmed.1002152 October 25, 2016

### La prévalence des ITL par âge

**EUR**

**AFR**

**HHS Public Access**  
Author manuscript  
*Pathog Immun.* Author manuscript; available in PMC 2017 February 17.  
Published in final edited form as:  
*Pathog Immun.* 2016 ; 1(2): 308–329. doi:10.20411/pai.v1i2.173.

**Clinical Application of Interferon- $\gamma$  Release Assays for the Prevention of Tuberculosis in Countries with Low Incidence**

Christoph Lange<sup>1,2,3,4,5</sup>, Anna M. Mandalakas<sup>6</sup>, Barbara Kalsdorf<sup>1,2,3</sup>, Claudia M. Denklinger<sup>7</sup>, and Martina Seiter<sup>8</sup>

We reviewed the scientific literature and provide recommendations for the use of IGRAs for LTBI diagnosis in low- incidence countries. These recommendations are based on the number of patients needing treatment in order to prevent one case of TB. As the positive predictive value of IGRAs for the development of TB is sub-optimal, research must focus on the identification of alternative biomarkers that offer better predictive ability in order to substantially reduce the number needing treatment while improving the prevention of TB and improving the effectiveness of targeted preventive chemotherapy.

**OPEN**

### Evaluation of QuantiFERON-TB Gold Plus for Detection of *Mycobacterium tuberculosis* infection in Japan

Received: 26 April 2016  
Accepted: 05 July 2016  
Published: 29 July 2016

Lina Yi<sup>1,2,3</sup>, Yuka Sasaki<sup>2</sup>, Hideaki Nagai<sup>4</sup>, Satoru Ishikawa<sup>5</sup>, Mikio Takamori<sup>6</sup>, Kentaro Sakashita<sup>1,6,7</sup>, Takefumi Saito<sup>7</sup>, Kiyoyasu Fukushima<sup>8</sup>, Yuriko Igarashi<sup>1</sup>, Akio Aono<sup>1</sup>, Kinuyo Chikamatsu<sup>1</sup>, Hiroyuki Yamada<sup>1</sup>, Akiko Takagi<sup>1</sup>, Toru Mori<sup>1</sup> & Satoshi Mitarai<sup>1,3</sup>

*Scientific Reports* | 6:30617 | DOI: 10.1038/srep30617

**ORIGINAL ARTICLE**

**Effect of immunosuppressive therapy on interferon  $\gamma$  release assay for latent tuberculosis screening in patients with autoimmune diseases: a systematic review and meta-analysis**

Sunny H Wong,<sup>1,2</sup> Qinyan Gao,<sup>1,3</sup> Kelvin K F Tsoi,<sup>4</sup> William K K Wu,<sup>5</sup> Lai-shan Tam,<sup>1</sup> Nelson Lee,<sup>1</sup> Francis K L Chan,<sup>1,2</sup> Justin C Y Wu,<sup>1,2</sup> Joseph J Y Sung,<sup>1,2</sup> Siew C Ng<sup>1,2</sup>

*Thorax* 2016;71:64–72

### L'impact du traitement des ITL

**Risk of developing tuberculosis disease among persons diagnosed with latent tuberculosis infection in the Netherlands**

Connie G M. Erkens<sup>1</sup>, Erika Stump<sup>2</sup>, Maurits Verhagen<sup>3</sup>, Henrieke Schimmel<sup>2</sup>, Frank Cobelens<sup>1,4,5</sup> and Susan van den Hof<sup>1,4,5</sup>

*Eur Respir J* 2016; 48: 1420–1428

The incidence for those completing, stopping and not receiving preventive treatment was 187, 436 and 355 per 100 000 person-years for contacts of TB patients. The rate ratio for TB development among contacts compared to other target groups was 3.1 (95% CI 2.0–4.9)

Donc : intérêt du traitement des ITL des sujets contact ; moins d'intérêt de traiter les autres groupes à risque (migrants...)

**Le traitement « light »des infections tuberculeuses latentes**

*Clin Infect Dis* 2016; 62(1):53–9

**Treatment for Tuberculosis Infection With 3 Months of Isoniazid and Rifapentine in New York City Health Department Clinics**

Nicole L. Steiner, Joseph N. Bzaryski, Cheryl Herbert, Diana Nilsson, and Michelle Maceng  
New York City Department of Health and Mental Hygiene, Bureau of Tuberculosis Control, Long Island City, New York

*Clin Infect Dis* 2016;62(1):53–9

**Le traitement « high tech »des infections tuberculeuses latentes**

*Chem Biol Drug Des* 2016; 87: 265–274  
Research Letter

**Design and Development of *Mycobacterium tuberculosis* Lysine  $\epsilon$ -Aminotransferase Inhibitors for Latent Tuberculosis Infection**

Moore BMC Medicine (2016) 14:54  
DOI 10.1186/s12916-016-06010-x

 World TB Day

BMC Medicine

OPINION Open Access

What can we offer to 3 million MDRTB household contacts in 2016?

David A. J. Moore

CrossMark

LA SANTÉ PUBLIQUE

La création de l'agence Santé publique France

- JORF n°0101 du 29 avril 2016
- reprenant l'ensemble des missions, compétences et pouvoirs exercés par
  - l'Institut de veille sanitaire (InVS),
  - l'Institut national de prévention et d'éducation pour la santé (INPES) et
  - l'Establishissement de préparation et de réponse aux urgences sanitaires (EPRUS).
- Le présent décret précise l'exercice des missions de l'ANSP et son organisation et ses relations avec les autres services de l'Etat concernés par sa mission.

Les aléas de l'organisation de la lutte antituberculeuse

INT J TUBERC LUNG DIS 20(10):1279  
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<http://dx.doi.org/10.5588/ijtd.16.0573>

EDITORIAL

Shared responsibility: the political will to end TB

La pénurie en BCG

 Haut Conseil de la santé publique

**AVIS**

Actualisation de l'avis du 22 mai 2015 relatif à l'optimisation de l'utilisation du vaccin BCG en situation de pénurie

18 avril 2016

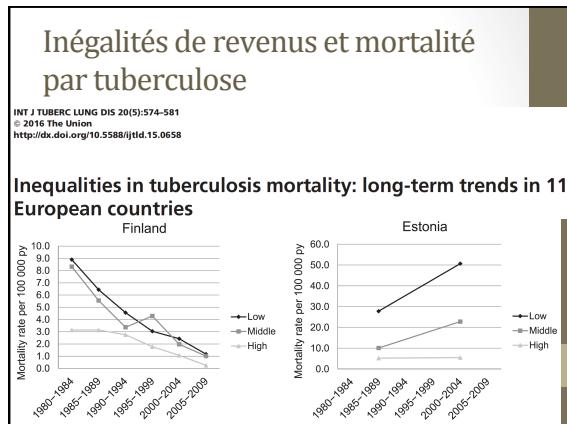
Réactions du HCSP, de l'ANSM, de la DGS, du réseau des CLATs, des PMI

La pénurie en tuberculine

INT J TUBERC LUNG DIS 20(10):1293-1299  
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<http://dx.doi.org/10.5588/ijtd.15.0975>

European shortage of purified protein derivative and its impact on tuberculosis screening practices

M. Tebruegge,<sup>††</sup> D. Buonsenso,<sup>§</sup> F. Brinkmann,<sup>¶</sup> A. Noguera-Julian,<sup>#</sup> I. Pavić,<sup>\*\*</sup> A. Sorete Arbore,<sup>††</sup> Z. Vancíková,<sup>††</sup> S. Velizarova,<sup>§§</sup> S. B. Welch,<sup>¶¶</sup> N. Ritz<sup>†††</sup>; on behalf of the Paediatric Tuberculosis Network European Trials Group (ptbnet)



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<http://dx.doi.org/10.5588/ijtd.16.0224>

**EDITORIAL**

**Can we translate findings on inequality in tuberculosis mortality into policy?**

This is an important finding for public health officials in Europe given the potential effects of recent economic (the 2008 global financial crisis) and social (the current immigration crisis) turmoil on TB mortality.



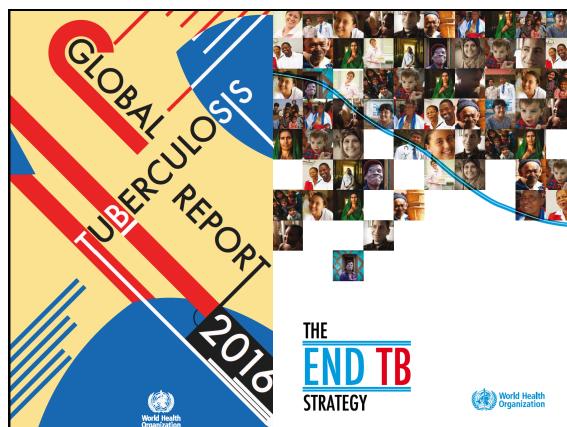
**LA STRATÉGIE**

## FIN À LA TUBERCULOSE

**VISION : UN MONDE SANS TUBERCULOSE**  
Zéro décès, aucune maladie ni souffrance due à la tuberculose

**BUT : METTRE FIN À L'ÉPIDÉMIE MONDIALE DE TUBERCULOSE**

INDICATEURS	JALONS		CIBLES	
	2020	2025	2030	2035
Réduction du nombre de décès par la tuberculose par rapport à 2015	35 %	75 %	90 %	95 %
Réduction du taux d'incidence de la tuberculose par rapport à 2015	20 % (<85/100 000)	50 % (<55/100 000)	80 % (<20/100 000)	90 % (<10/100 000)



**FAUT-IL UTILISER LES NOUVEAUX ANTITUBERCULEUX ?**

## Avoir un nouvel antituberculeux, mais quand l'utiliser ?

RESEARCH ARTICLE

Tradeoffs in Introduction Policies for the Anti-Tuberculosis Drug Bedaquiline: A Model-Based Analysis

PLOS Med 13(10): e1002142.

Amber Kunkel<sup>1,2\*</sup>, Franz G. Cobelens<sup>3,4</sup>, Ted Cohen<sup>2</sup>

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The explored strategies included making bedaquiline available to all patients with MDR TB, restricting bedaquiline usage to patients with MDR plus additional resistance and withholding bedaquiline introduction completely. We compared these strategies according to life expectancy, risks of acquired resistance, and the expected number and health outcomes of secondary cases.

Si bédacavline pour tous les MDR : la meilleure espérance de vie et le moins d'années perdues ; davantage de R à la bédacavline mais moins aux autres antibiotiques ; le moins de cas secondaires  
Mais attention aux effets indésirables et à l'utilisation sur le terrain

## LES GROUPES À RISQUE

## Le tabagisme

### Tabagisme et observance du traitement antituberculeux

Smoking and adherence to anti-tuberculosis treatment

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## La pollution particulaire

Therapeutics and Clinical Risk Management

Dovepress

open access to scientific and medical research

Open Access Full Text Article

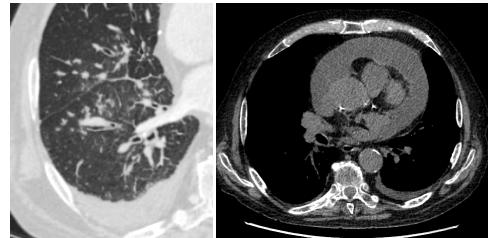
ORIGINAL RESEARCH

Particulate matter is associated with sputum culture conversion in patients with culture-positive tuberculosis

Therapeutics and Clinical Risk management 2016; 12: 41-6

In subjects with TB-positive cultures, annual exposure to  $\geq 50 \mu\text{g}/\text{m}^3 \text{PM10}$  was associated with an increase in the time required for sputum culture conversion (hazard ratio = 1.28, 95% confidence interval: 1.07–1.84,  $P=0.05$ ).

## Les immunothérapies du cancer



## Un nouveau groupe de patients à risque de tuberculose ?

BRIEF REPORT



Anti-PD1 Antibody Treatment and the Development of Acute Pulmonary Tuberculosis

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Available online - 13 July 2016

Journal of Thoracic Oncology Vol. 11 No. 12: 2238-2240

## LE TRAITEMENT DE LA TUBERCULOSE

### Recommandations européennes

#### The ERS-endorsed official ATS/CDC/IDSA clinical practice guidelines on treatment of drug-susceptible tuberculosis

Giovanni Sotgiu , Payam Nahid<sup>2</sup>, Robert Lodenkemper<sup>3</sup>, Ibrahim Abubakar<sup>4</sup>, Marc Miravitles<sup>5</sup> and Giovanni Battista Migliori 

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<sup>2</sup>University of California, San Francisco, CA, USA. <sup>3</sup>German Central Committee against Tuberculosis (DZK), Berlin, Germany. <sup>4</sup>Institute for Global Health, University College London, London, UK. <sup>5</sup>Pneumology Dept, Hospital Universitari Vall d'Hebron, CIBER de Enfermedades Respiratorias (CIBERES), Barcelona, Spain.

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E-mail: giovannibattista.migliori@smi.it

Updated clinical practice guidelines on TB treatment provide clinical and public health management recommendations <http://ow.ly/FDcN302jdmp>

Comment améliorer l'observance (en-dehors de l'éducation thérapeutique) ?

#### Incentives and enablers to improve adherence in tuberculosis (Review)

Lutge EE, Wiysonge CS, Knight SE, Sinclair D, Volmink J

Revue Cochrane

Material incentives and enablers may have some positive short term effects on clinic attendance, particularly for marginal populations such as drug users, recently released prisoners, and the homeless, but there is currently insufficient evidence to know if they can improve long term adherence to TB treatment.

### Observance en direct...

INT J TUBERC LUNG DIS 20(5):588-593  
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<http://dx.doi.org/10.5588/ijtd.15.0738>

#### Enhancing management of tuberculosis treatment with video directly observed therapy in New York City

C. Chuck, E. Robinson, M. Macaraig, M. Alexander, J. Burzynski  
New York City Department of Health and Mental Hygiene, Queens, New York, New York, USA

Treatment completion with VDOT was similar to that with inperson DOT (96% vs. 97%, P . 0.63).  
The primary problems encountered during VDOT sessions were interruption of video and audio connectivity.