

## Los Mosquitos del Género Aedes y los agentes patógenos que transmiten

Plan Estatal de Vigilancia.

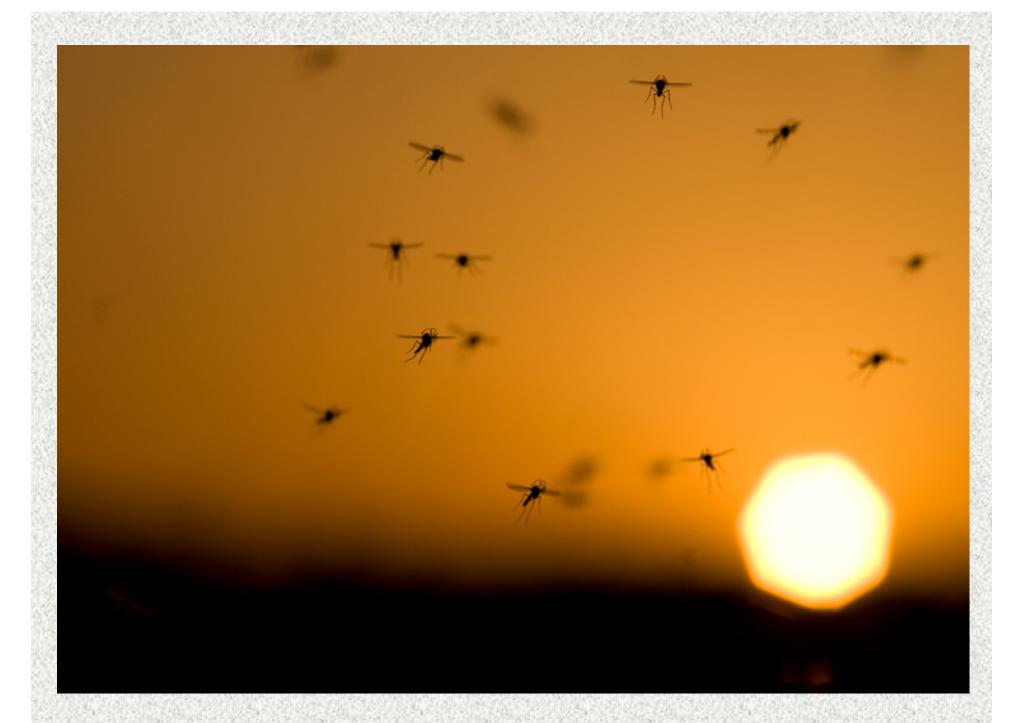
Protocolos de actuación en caso de detección

Derio, 14 de Abril de 2016





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Ochlerotatus caspius



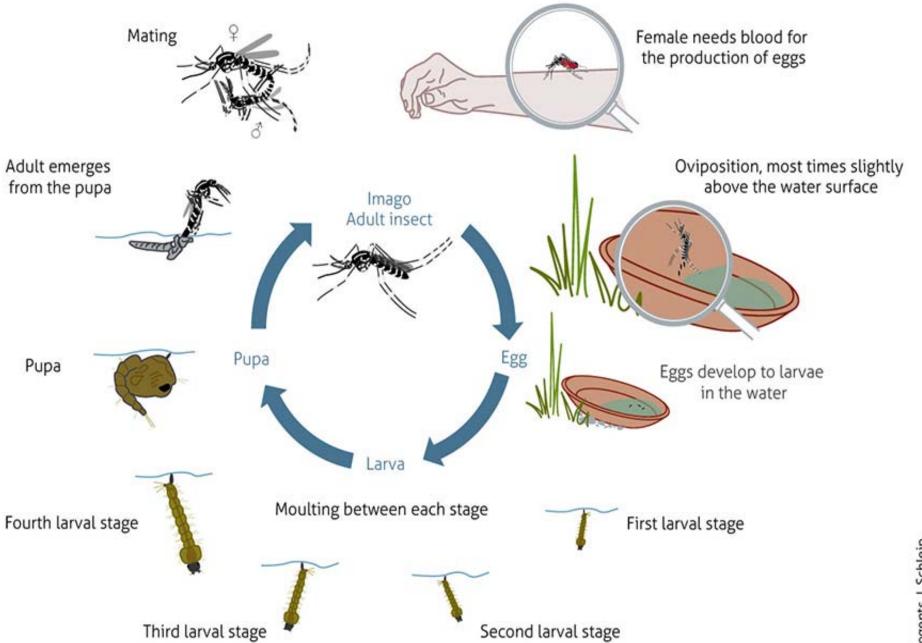






Foto Raúl Escosa







#### Mosquitos invasores en Europa

Aedes albopictus (Albania 1979, Italia 1990)

Aedes aegypti (Rusia 2001, Portugal 2004, Georgia 2007, Holanda 2010)

Aedes japonicus (Suiza y Alemania 2008, Austria y Slovenia 2011)

Aedes atropalpus (Holanda 2009)

Aedes koreicus (Belgica 2008, Italia 2011)

Aedes triseriatus (Francia 2004)



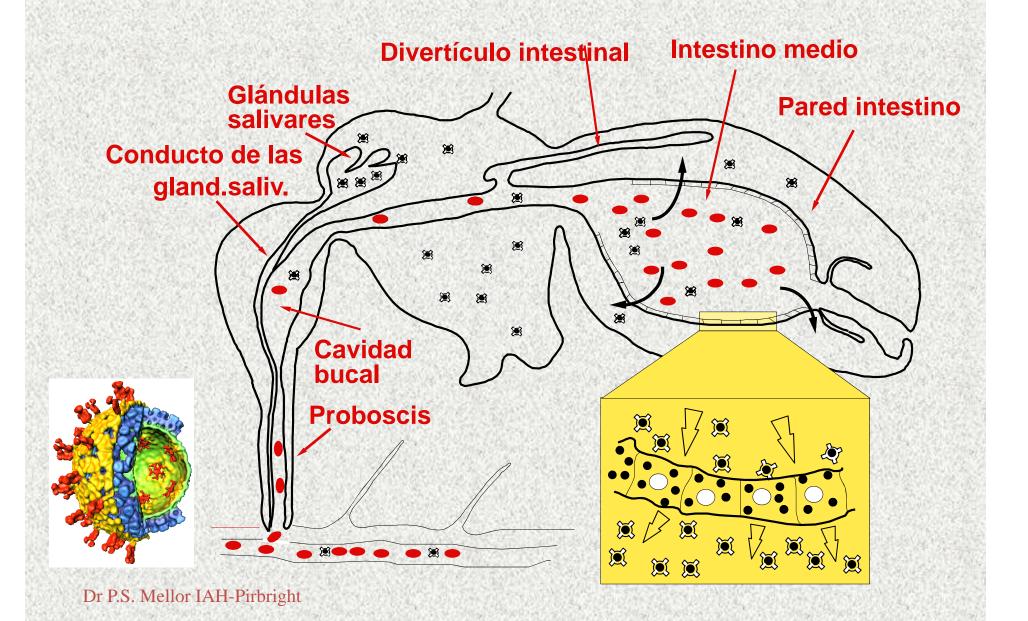


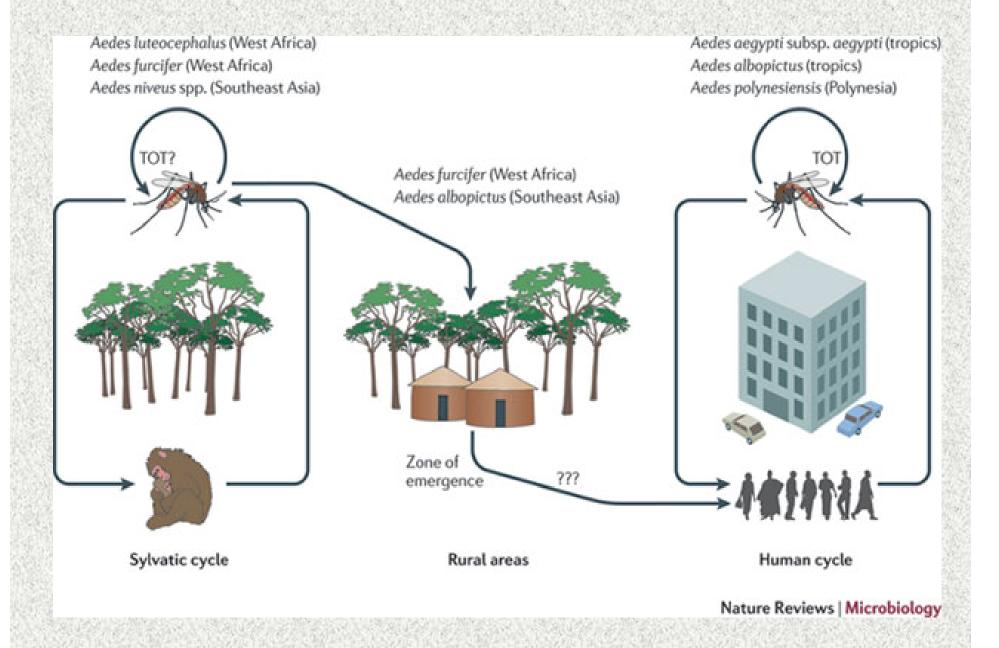




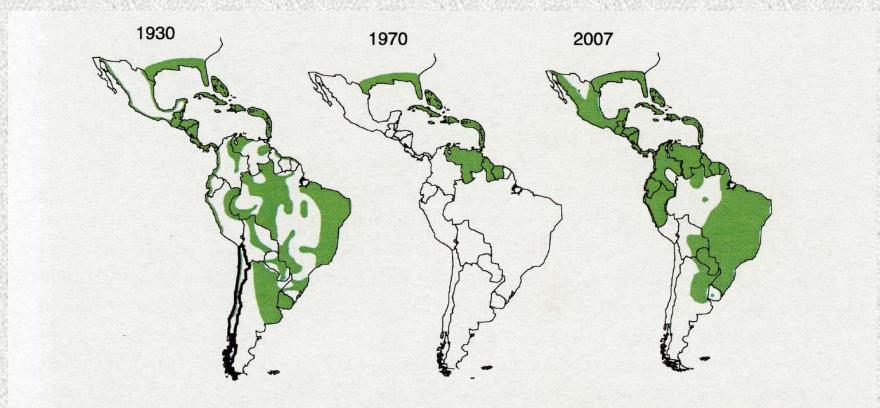


#### CICLO DE REPLICACION DEL VIRUS DE LA EN CULICOIDES







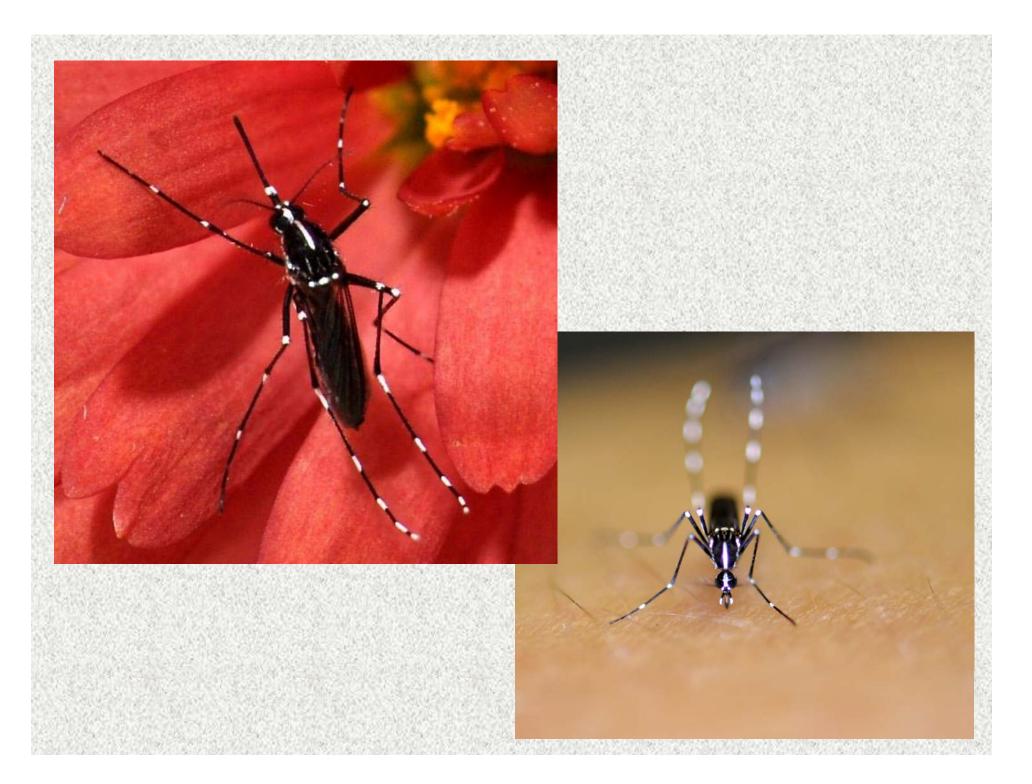


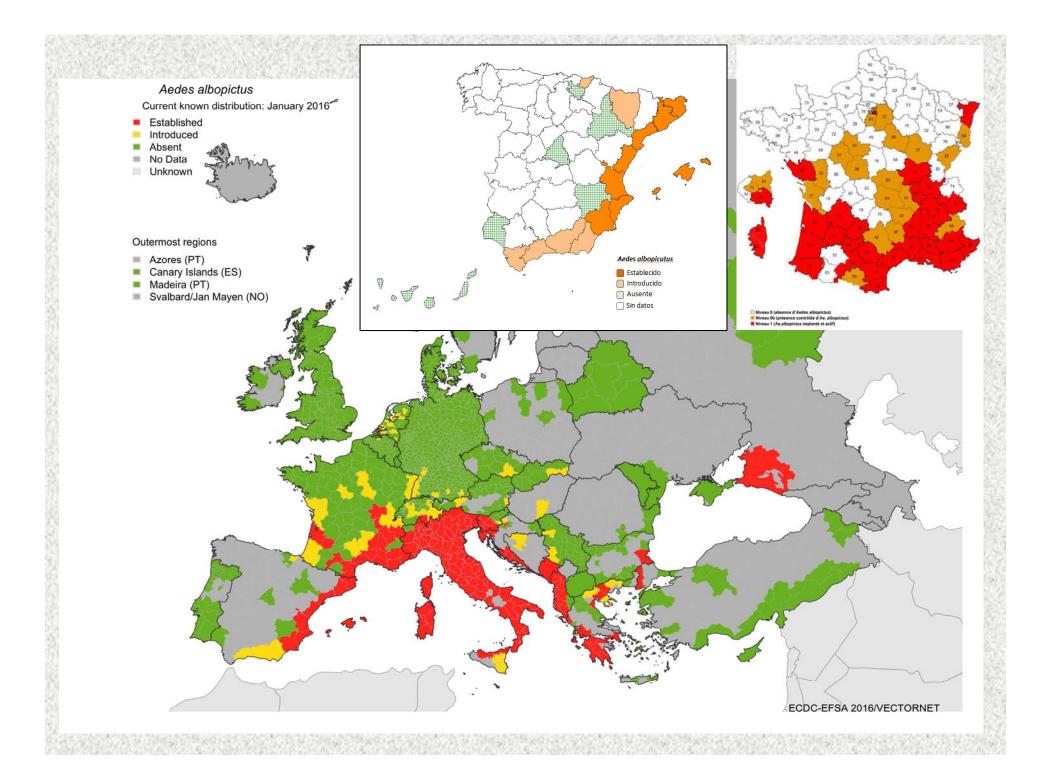
**Fig. 8** Distribution of *Aedes aegypti* in American countries in 1930, 1970, and 2007. Source: Courtesy, Division of Vector-Borne Infectious Diseases, CDC, Fort Collins, CO; adapted from Gubler (1998)



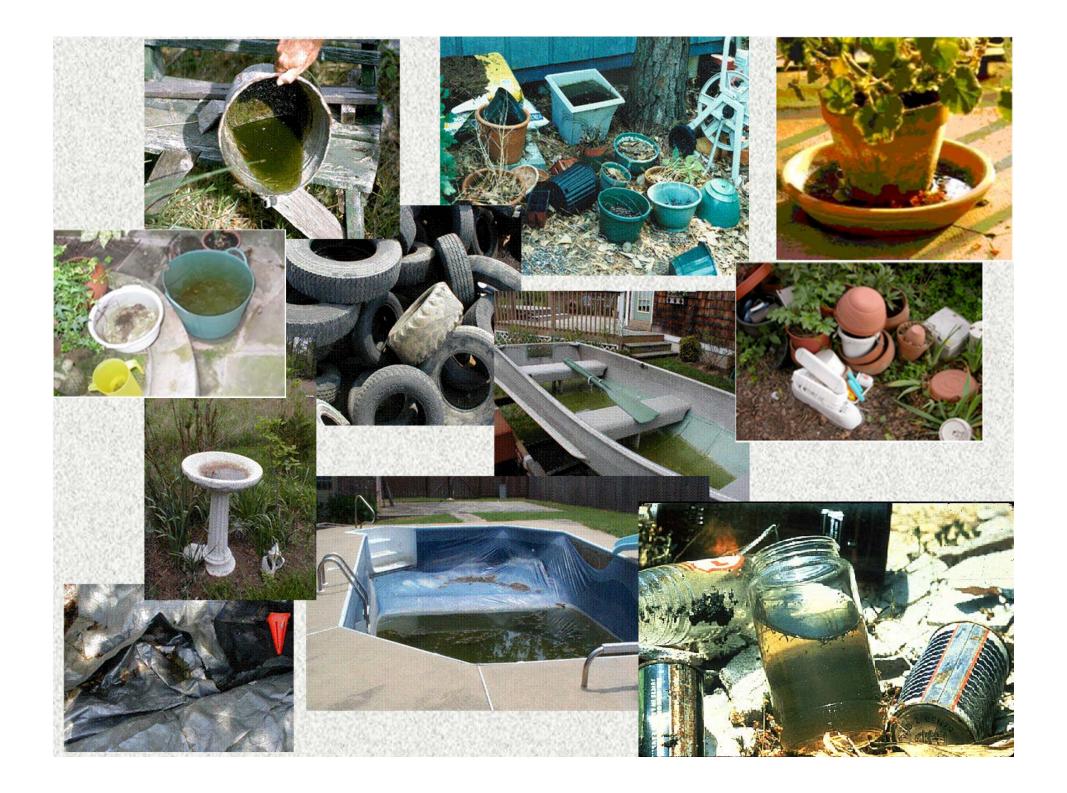
James Gathany, CDC - This media comes from the <u>Centers for Disease Control and Prevention</u>'s <u>Public Health Image Library</u> (PHIL), with identification number <u>#2165</u>.

Mosquito tigre asiático (Aedes albopictus)



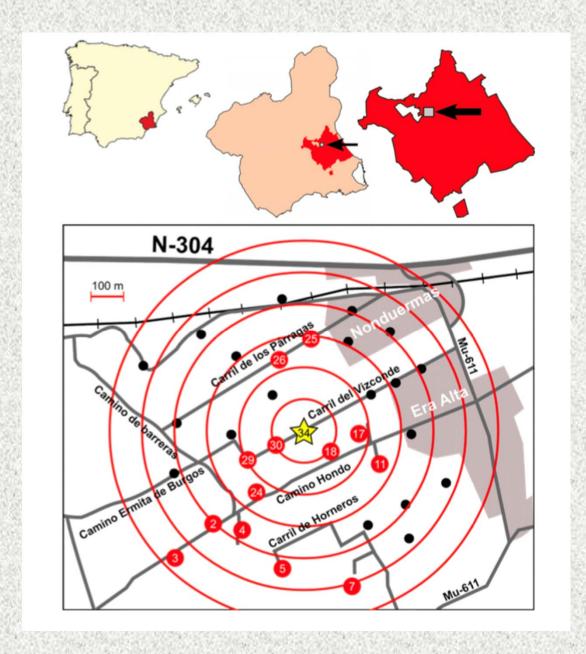


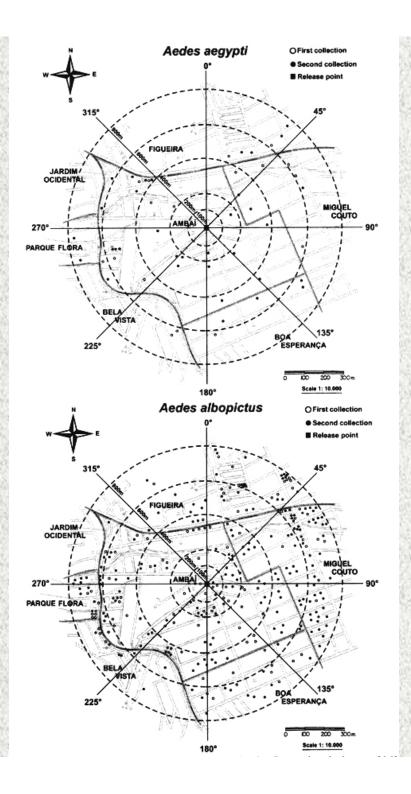
- Se ha adaptado a criar en ambientes urbanos
- Las larvas se desarrollan en habitats artificiales
- Alcanza densidades elevadas
- Actividad diurna
- Muy agresivos
- Preferencia para picar al hombre
- Penetra dentro de las casas a picar





#### Presencia invernal





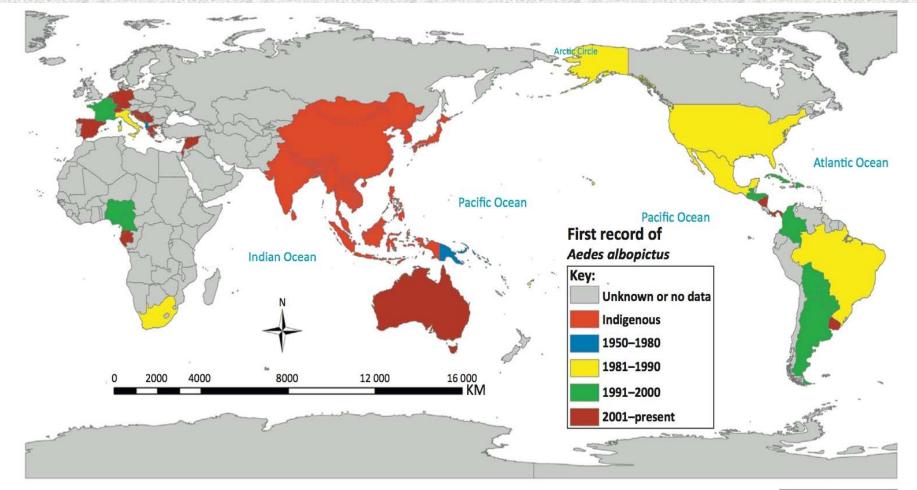
#### Dispersión natural

# Tratamiento interior vehículos



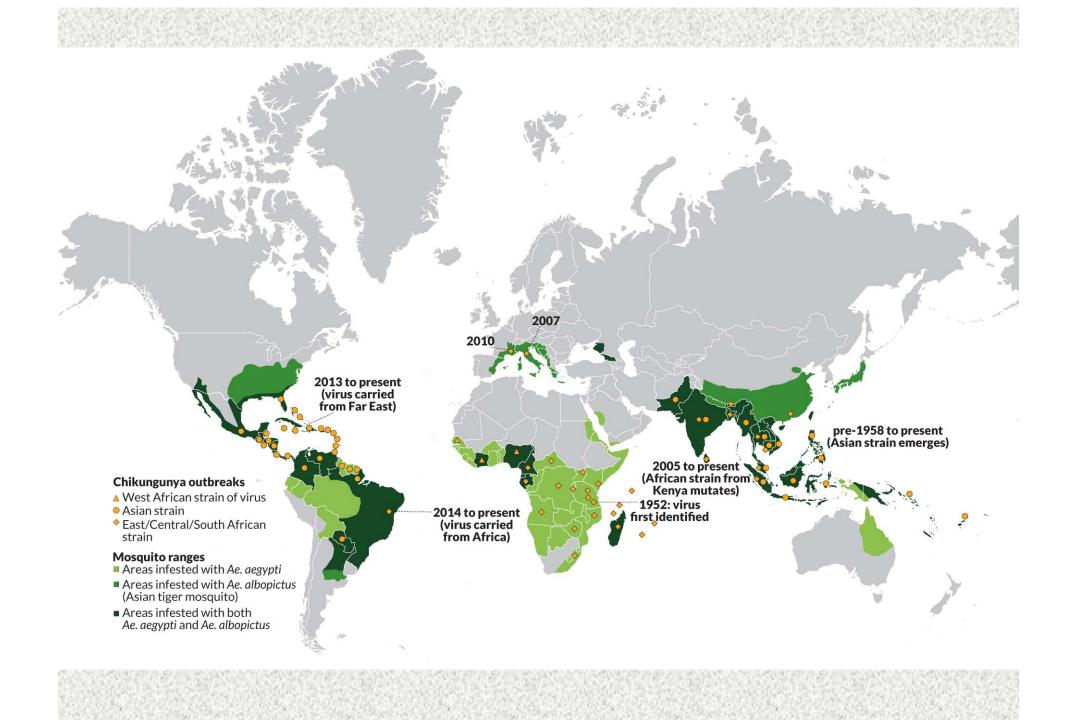




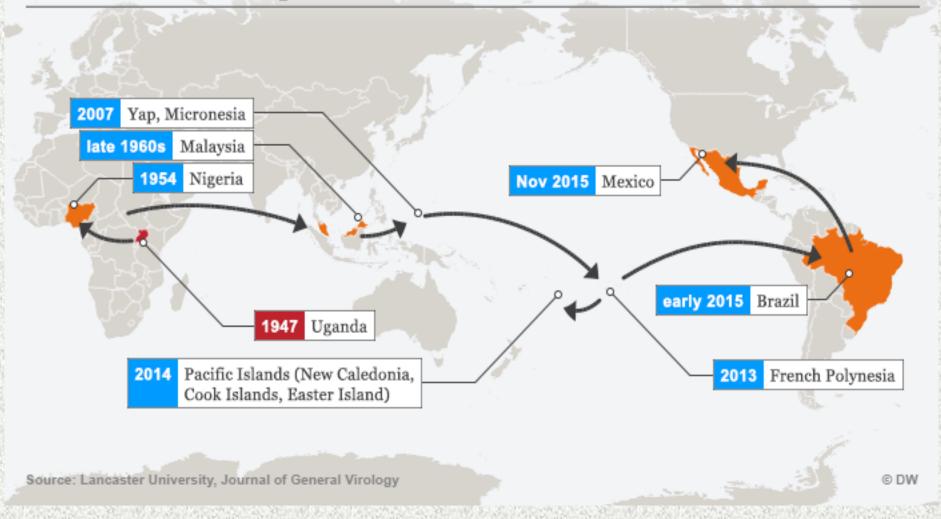


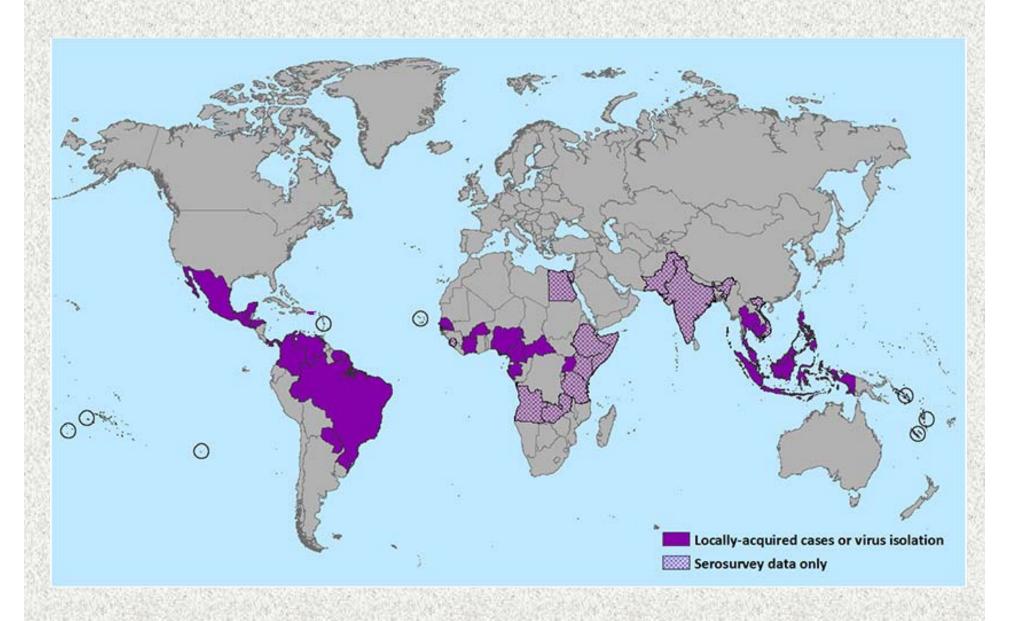
TRENDS in Parasitology

Distribución actual de Aedes albopictus



#### How the Zika virus spread around the world



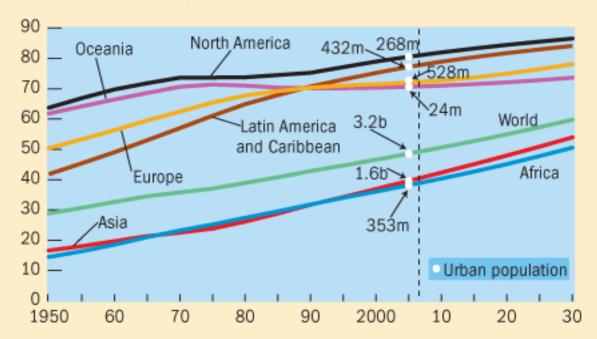


Pathogens and diseases	Transmission in Europe	Important vectors to human
Arboviruses		
Chikungunya	Italy 2007; France 2010	Ae. aegypti, Ae. albopictus
Dengue 1–4	Until early 20th century; Croatia and France 2010	Ae. aegypti, Ae. albopictus
Eastern equine encephalitis, La Crosse encephalitis, Rift Valley fever	-	Aedes spp., Culex spp.
Sindbis	Endemic in northern Europe	Aedes cinereus, Cx. pipiens
Japanese encephalitis, Murray Valley encephalitis, St Louis encephalitis, Ross River fever, Venezuelan equine encephalitis, Western equine encephalitis	_	Culex spp.
West Nile	Endemic in southern Europe	Cx. pipiens, Cx. modestus
Yellow fever	Until 19th century, in ports	Ae. aegypti, Ae. africanus, Haemagogus spp.
Plasmodium protozoa		
Malaria	Endemic until mid-20th century; since then sporadic cases; epidemic in Greece 2011	Anopheles spp.

Principales enfermedades transmitidas por mosquitos

### Within the next year, the world's urban population will surpass its rural population.

(urban population as a percent of total population)



Source: United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2006 Revision (2007).

Note: m-million people; b-billion people.



El Reglamento Sanitario Internacional -RSI-(2005), que entró en vigor el 15 de junio de 2007, establece que los países deben disponer programas para la vigilancia y el control de vectores y reservorios en los puntos de entrada y cercanías de aeropuertos, puertos y pasos fronterizos terrestres.

#### Vigilancia Entomológica

Conjunto de procedimientos desarrollados en respuesta a un riesgo reconocido y realizados para apoyar acciones posteriores.

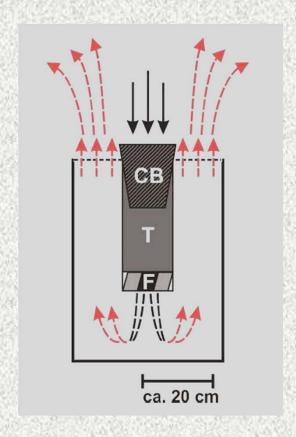
**ECDC 2012** 









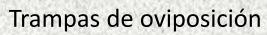






Trampa BG Sentinel















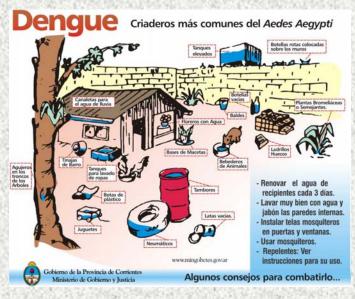
AtrapaelTigre.com







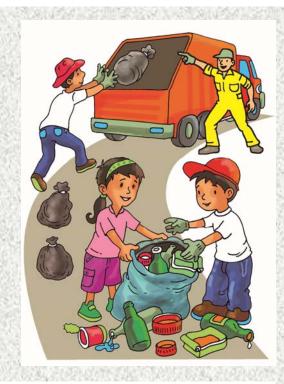


















http://www.santacruz.gob.bo/



















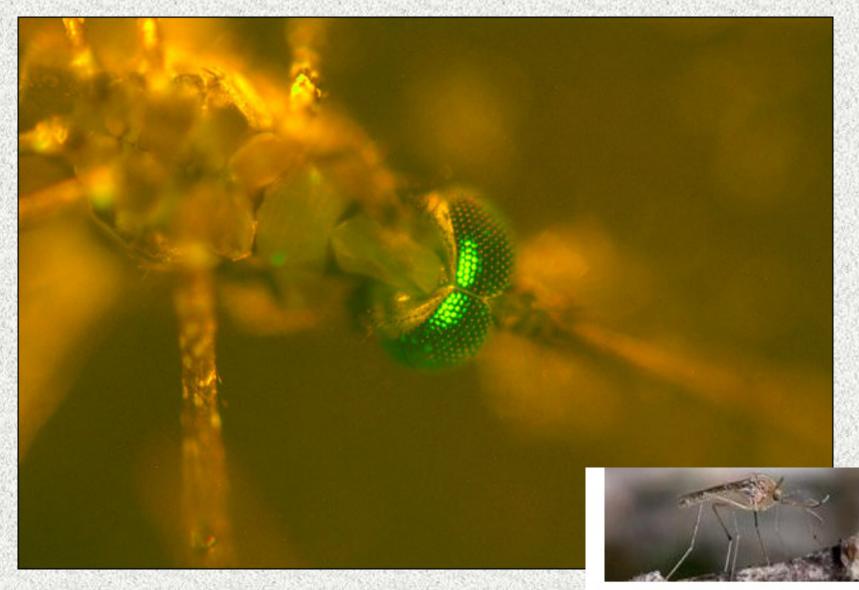












Control genético

Genetically Modified Mosquitoes to Battle Dengue

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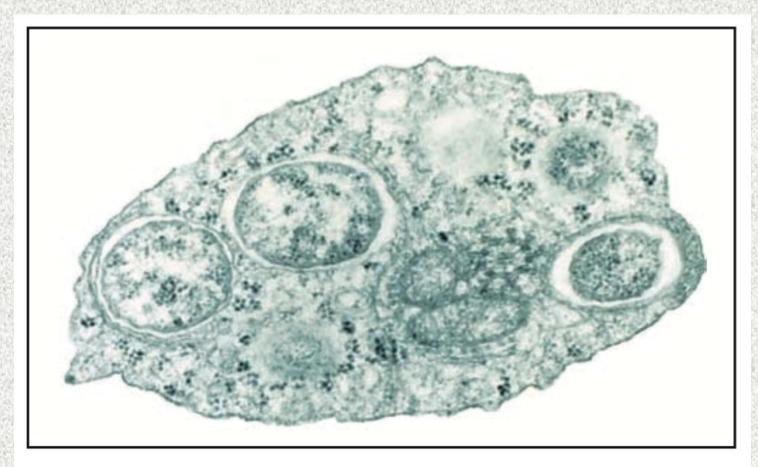


FIGURE 2 The endosymbiotic bacterium Wolbachia pipientis
Source: Genome Sequence of the Intracellular Bacterium Wolbachia. PLoS Biol 2/3/2004: e76.
http://dx.doi.org/10.1371/journal.pbio.0020076; Author:
Scott O'Neill



Muchas gracias por su atención jlucien@unizar.es