

Žuta groznica, Denge groznica, cijepljenje i
kontrola populacija komaraca prijenosnika

Seminar iz Zdravstvene i
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PMF, Biološki odsjek
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Žuta groznica – općenito bolesti i simptomi

- Akutna virusna hemoragijska bolest
- Prenose ju komarci (*Aedes* i *Haemogogus*)
- Simptomi: groznica, glavobolja, bol u mišićima, povraćanje, gubitak apetita, žutica...
- Inkubacija 3 do 6 dana
- Simptomi nestaju za 3 do 4 dana
- Toksična faza (?)

Yellow Fever

Stage 1 Symptoms



high fever and chills



severe headache



dizziness



fatigue



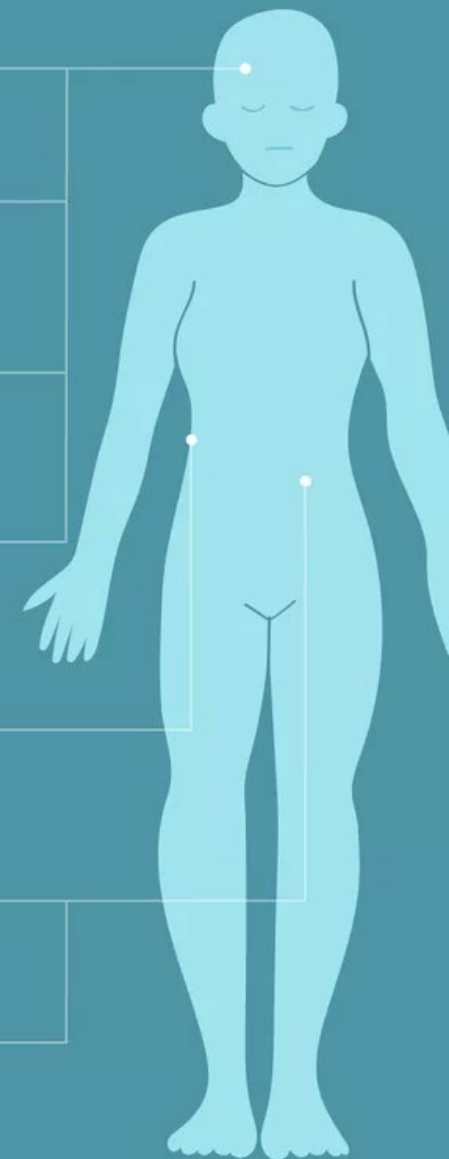
back and body aches



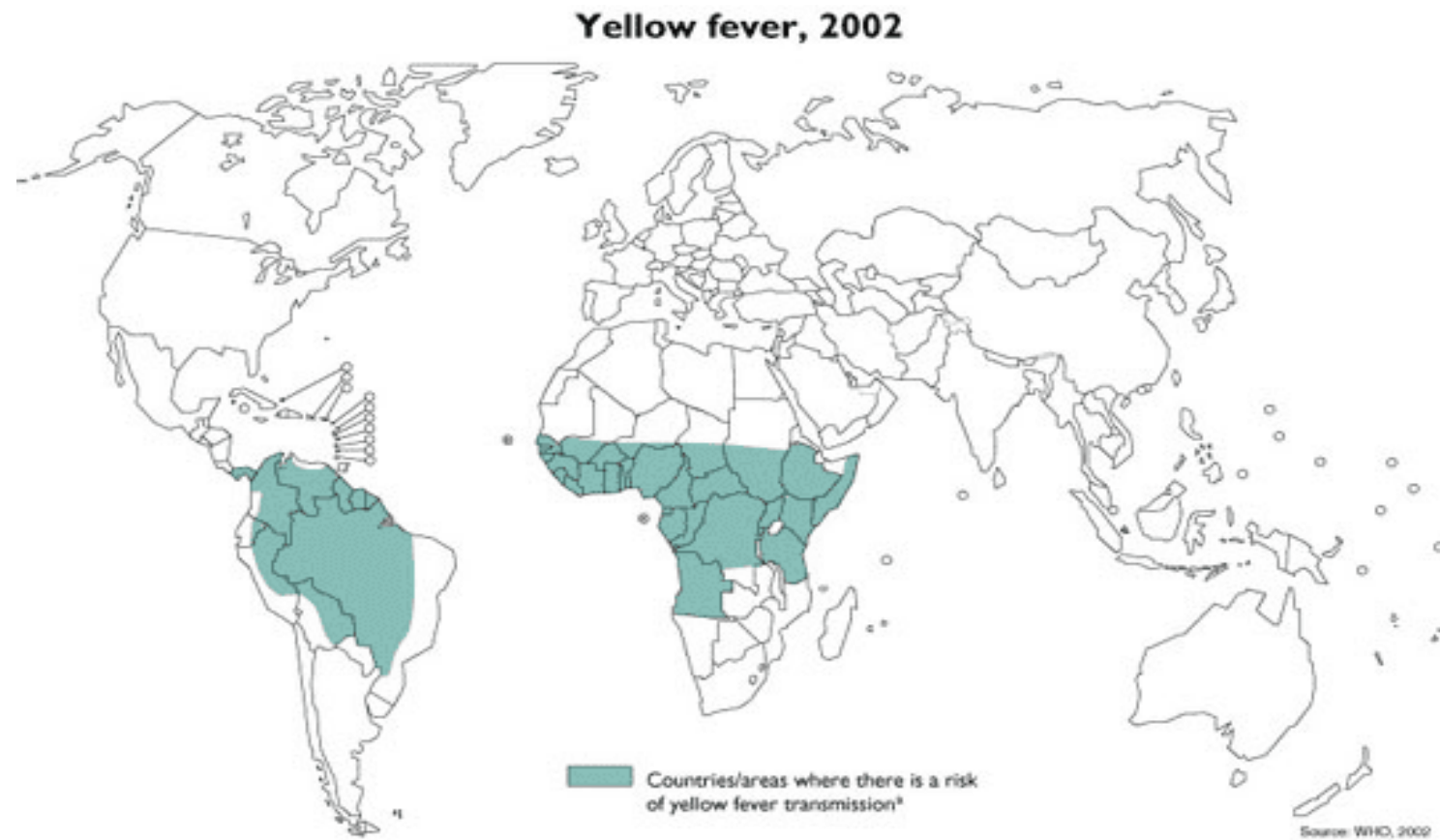
nausea and vomiting



lack of appetite



Rasprostranjenost



^a Either yellow fever has been reported or disease in the past plus the presence of vectors and animal reservoirs create a potential risk of infection (considered to be endemic areas).

Dijagnostika i liječenje

- Nema specifičnog antivirusnog lijeka
- Rano liječenje poboljšava stopu preživljavanja
- Dijagnostika pomoću PCR, ELISA ili PRNT
- Česta kriva dijagnostika



Denge groznica

- Vektori komarci *Aedes* – *A. Aegypti* ili *A. albopictus*
- Denge može biti uzrokovana jednim od četiri srodna virusa – virusom denga 1,2,3 i 4
- Oko 4 milijarde ljudi živi u područjima s rizikom od denge groznice
- Svake godine do 400 milijuna ljudi zaraženo



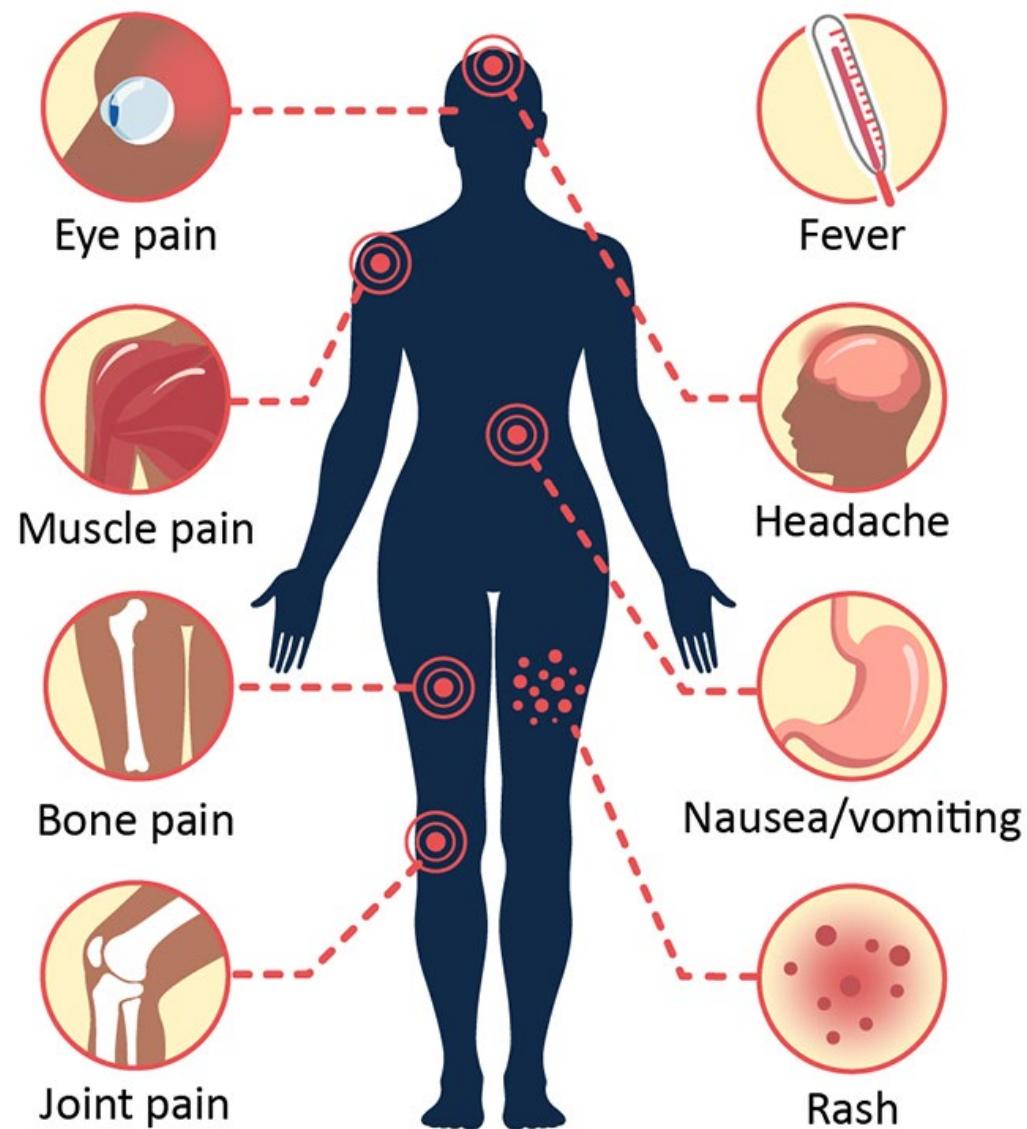
Simptomi i liječenje

- Najčešći simptomi – povraćanje, mučnina, osip, bolovi...
- Simptomi traju 2 do 7 dana
- Teška denga može dovesti do šoka, unutarnjeg krvarenja ili smrti
- Simptomi mogu postati ozbiljni u roku od nekoliko sati
- Nema posebnog lijeka za dengu

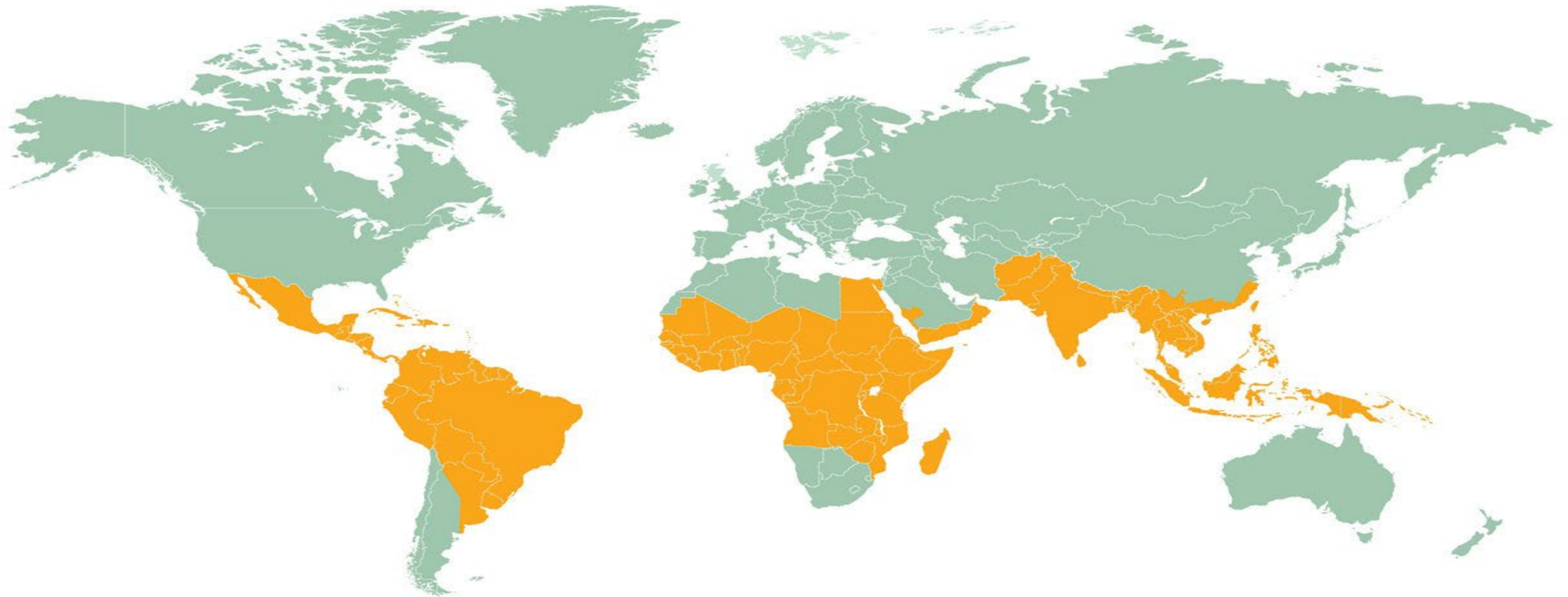
<https://www.cdc.gov/dengue/is-it-dengue-or-covid.html>

Dengue Symptoms

Fever with any of the following



Rizična područja



Prevenција žute i denga groznice

1. cijepljenje

- Cjepivo protiv žute groznice osigurava imunitet u 95% cijepljenih pacijenata
- Dovoljna jedna doza za imunizaciju
- Reakcije na cjepivo općenito blage
- Cijepljenje nije preporučljivo za djecu mlađu od 9 mjeseci, trudnice, osobe s alergijom na jaja i proteine te osobe s imunodeficiencijom

INTERNATIONAL CERTIFICATE OF VACCINATION OR PROPHYLAXIS
Certificat international de vaccination ou de prophylaxie

This is to certify that ^① Jane Mary Doe ^② 22 March 1960 F United States
Nous certifions que (name - nom) (date of birth - date) (sex - sexe) (nationality - et de nationalité)

[passport number] whose signature follows ^③ Jane Mary Doe
(national identification document, if applicable - document d'identification nationale, le cas échéant) dont la signature suit

has on the date indicated been vaccinated or received prophylaxis against ^④ Yellow Fever in accordance with the international
a été vacciné(e) ou a reçu une prophylaxie à la date indiquée (name of disease or condition - nom de la maladie ou de l'affection) conformément au Règlement sanitaire

Vaccine or prophylaxis Vaccin ou agent prophylactique	Date	Signature and professional status of supervising clinician Signature et titre du professionnel de santé responsable	Manufacturer and batch no. of vaccine or prophylaxis Fabricant de vaccin ou de l'agent prophylactique et numéro ou lot	Certificate valid from: Certificat valable à partir de : jusqu'à :	Official stamp of the administering center Cachet officiel du centre habilité
^④ Yellow Fever	^⑤ 15 June 2018	^⑥ John M. Smith, MD	[Batch (or lot) #]	^⑦ 25 June 2018, life of person vaccinated	[^⑧]

Prevenција žute i denga groznice

1. cijepljenje

- Četverovalentno, živo atenuirano cijepivo za Denge groznicu
- Dengvaxia – komercijalno dostupan od 2021. godine
- Najčešće nuspojave – glavobolja, malaksalost, , bol na mjestu injekcije
- Nije preporučljivo cijepiti osobe koje nisu bile u kontaktu s infekcijom



Vaccine	Type	Stage	Earliest Licensure ^a
CYD-TDV Sanofi Pasteur	Live attenuated chimeric	Completed	2015
TV003/TV005 (NIH/NIAID/Butantan Institute)	Live attenuated chimeric	Phase III	2018–2019
TDV (Inviragen/Takeda)	Live attenuated chimeric	Phase III	2017–2018
TDEN (GSK/WRAIR)	Purified inactivated whole virus	Phase II	2018
V180 (Merck/NIAID)	Subunit	Phase I	–
D1ME100 (U.S. Naval Medical Institute)	DNA	Phase I	–

^a Source: Mahoney (2014) [33].

Kontrola vektora

- Poduzimanje hitnih mjera za suzbijanje vektora kao što je raspršivanje insekticida
- Aktivno praćenje brojnosti vektora
- Sprečavanje pristupa komarcima staništima za polijeganje jaja
- Redovito čišćenje i pražnjenje spremnika za vodu
- Korištenje repelenata, prozorskih mreža te insekticida
- Nošenje odjeće koja smanjuje izloženost kože komarcima

Izvori:

- <https://www.cdc.gov/dengue/index.html>
- <https://www.sciencedirect.com/topics/medicine-and-dentistry/yellow-fever-virus>
- https://en.wikipedia.org/wiki/Dengue_vaccine
- <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>
- <https://www.who.int/news-room/fact-sheets/detail/yellow-fever>

Slike preuzete s:

- <https://reliefweb.int/map/world/countries-and-areas-risk-yellow-fever-transmission-2002>
- https://www.123rf.com/photo_56969842_blood-sample-positive-with-yellow-fever-test.html
- <https://thenativeantigencompany.com/current-challenges-to-effective-yellow-fever-diagnostics/>
- <https://www.verywellhealth.com/yellow-fever-signs-symptoms-and-complications-4161199>
- <https://www.who.int/news-room/fact-sheets/detail/yellow-fever>



Hvala na pažnjí!