TAJUK KURSUS : THE HEART OF COMMUNITY CARE (SANOFI)

TARIKH : 12 NOVEMBER- 13 NOVEMBER 2022 (SABTU & AHAD)

TEMPAT : JEN HOTEL, PULAU PINANG

ANJURAN : SANOFI SDN BHD

DISEDIAKAN OLEH : DR ARMA NOOR

**INFLUENZA**

* Never forget about influenza in the era of COVID-19 pandemic.
* Young people are expected to have good outcome with influenza.
* WHO (World health organisation): Countries are recommended to prepare for the co-circulation of influenza and SARS-CoV-2 viruses. They are encouraged to enhance integrated surveillance to monitor influenza and SARS-Co-V-2 at the same time, and step-up their influenza vaccination campaign to prevent severe disease and hospitalization associated with influenza. Clinicians should consider influenza in differential diagnosis, especially for high-risk group for influenza, and test and treat according to national guidance.

**INFLUENZA VACCINATION RECOMMENDATION**

Recommended for annual influenza vaccination:

By WHO

1. Pregnant woman at any stage of pregnancy
2. Children aged between 6 months to 5 years
3. Elderly (aged 60 and above)
4. Individuals with chronic medical conditions
5. Healthcare workers

By Malaysian Society of Infectious Diseases and Chemotherapy (MSIDC)

1. All healthcare workers
2. All persons 50 years or older
3. All persons aged 18-49 years with 1 or more medical conditions
4. Pregnant woman
5. Persons living in certain institutional centre
6. Obese persons

**SPECTRUM AND PERCENTAGE OF VACCINE HESITANCY**

* Accept all : 30-40%
* Accept but unsure : 25-35%
* Accept some, delay or refuse some : 20-30%
* Refuse but unsure : 2-27%
* Refuse all : <2%

**TIPS FOR CONVERSATION**

* Actively listen to their concern and frame vaccination in a way that matters to them
* Use facts sparingly- too many can confuse
* Frame data clearly and positively. Eg “99% safe” is better than “1% risk of side effects”
* Respect the patient’s informed decision
* Avoid jargon, use content that fit the patient
* Be non-judgemental and non-confrontational
* Stories can be powerful and compelling especially personal
* Build trust

**Q&A**

1. **WHEN IS THE BEST TIME TO BE VACCINATED AGAINST INFLUENZA IN MALAYSIA?**

* There is no ideal vaccine timing for equatorial countries with year-round influenza activity and without defined peaks of disease activity, such as Indonesia, Malaysia and Singapore
* For these countries, the best recommendation would be to use the most recent vaccine formulation recommended by the WHO in that year

Reference: WHO https://www.who.int/bulletin/volumes/92/5/13-124412/en/

1. **WHY DOES INFLUENZA INFECTIONS COME AGAIN AND AGAIN?**

* Immunity from vaccination declines over time
* Influenza viruses are constantly changing
* For the best protection, high risk groups should get vaccinated annually

References: CDC. Keyfacts about seasonal flu vaccine Available at: https://www.cdc.gov/flu/prevent/keyfacts.htm Last accessed on May 2020.

1. **“CAN A PERSON RECEIVE ANOTHER (NON-COVID-19) VACCINE AT THE SAME TIME AS COVID-19 VACCINE?”**

* COVID-19 vaccination is recommended to be separated by at least 14 days from any other vaccine (before or after)”
* However, administration of other non-covid vaccines maybe allowed within 14 days in certain conditions i.e whether the patient is behind or at risk of becoming behind on recommended vaccines or their risk of vaccine-preventable disease (e.g. during an outbreak or occupational exposure, tetanus vaccination in pregnant women).

References: Clinical Guidelines on COVID-19 Vaccination in Malaysia. 4th Edition Oct 2021. Pg56

1. **IF OLDER PEOPLE HAVE A WEAKER IMMUNE RESPONSE, SHOULD THEY STILL GET THE INFLUENZA VACCINE?**

**Immunosenescence :** Refers to the age-associated decline of the immune system that may contribute to the increased incidence and severity of infectious diseases and possibly certain cancers in the elderly.

* They are at increased risk of serious illness, hospitalization and death from influenza.
* The effectiveness of flu vaccine can be lower among some older people (particularly against influenza A(H3N2) viruses but significant benefit can be observed.
* Flu vaccine may protect against more serious outcomes like hospitalization and death.
* Hospitalization can mark the beginning of a significant decline in overall health and mobility for the elderly.

**5a. WHAT ARE THE COMMON SIDE EFFECTS**

* Protection ≥ 2 weeks after vaccination
* Common side effects:
  + Soreness, redness, and/or swelling from the shot
  + Headache
  + Fever
  + Nausea
  + Muscle aches

**5b. CAN I GET INFLUENZA FROM THE VACCINE?**

* The flu vaccine cannot cause flu.
* The vaccines either contain inactivated virus, meaning the viruses are no longer infectious, or a particle designed to look like a flu virus to your immune system.

**CONCLUSION**

* Influenza can cause mild to severe illness, especially in high risk groups, such as older adults & those with chronic medical conditions
* Vaccination is especially important for them & people caring for them, including HCWs
* MI techniques is effective in vaccine communication
* Influenza vaccination during covid-19 endemicity is still important to protect the high risk groups & relieve the healthcare system burden

**TRAVEL MEDICINE**

**BACKGROUND**

• Increasing global travel - travellers exposed to a range of health risks

• 20-70% of travellers report health problems while traveling

• 1-8 % seek medical attention abroad

• 0.01-0.1% require emergency medical evacuation

• 1 in 100,000 dies

**CHALLENGES: LOW AWARENESS OF POTENTIAL HEALTH ISSUES**

Many travellers do not seek pre-departure medical consultation and have no/inadequate vaccine protection or chemoprophylaxis

* Poor understanding of risks

Common reasons for visiting travel clinic: Required vaccines/Pre-university admissions

Compliance to pre-travel advice not always good

Reference: CDC Yellow Book 2020 (Health Information for International Travel)- revised 2 yearly

Pre-travel consultation (at least 4-6 weeks before travel)

* Perform individual risk assessment
* Communicate anticipated health risks
* Provide risk management measures

**RISK MANAGEMENT**

• Immunisations

• Food and water precautions

• Insect bites precautions

• Malaria prevention

• Environmental risks

• Altitude sickness (>2,500 m/8000 ft)

• Travellers with special needs

• Pregnancy

• Co-morbidities

• Travelling with medications

• Personal and safety issues

• Current security situation at destination

• Travel Insurance – age and activity appropriate coverage recommended

• STI risks and prevention

# Just for Women

• ASK ABOUT LNMP AND DOCUMENT (No need routine UPT)

• PLANNING FOR PREGNANCY?

• BREASTFEEDING?

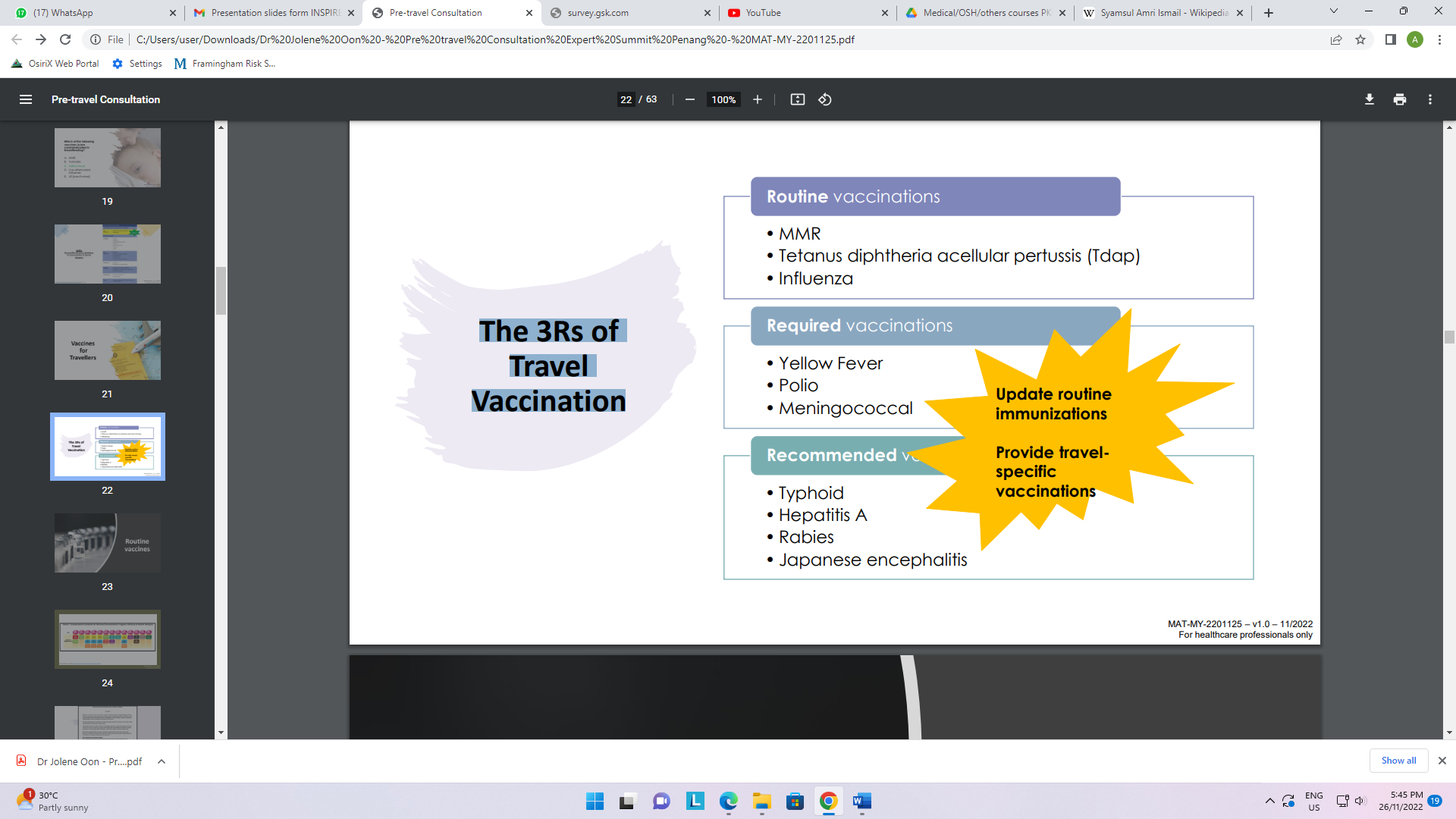
**ACIP’s General Best Practice Guidelines for Immunization in Special Situation**

Graphical user interface, text, application, Word

Description automatically generated

**VACCINES FOR TRAVELLERS**

**THE 3RS OF TRAVEL VACCINATION**



**RECOMMENDED VACCINES**

**Hepatitis A**

• Highly immunogenic

• Rapid seroconversion >95% in 2 weeks in response to primary immunization

• Long-lasting protection

• Good safety profile

• Vaccination does not replace usual food and hygiene practices!

**Typhoid vaccine**

• Covers only S. typhi (no coverage for S. paratyphi or non-typhoidal salmonella)

• Injectable Vi polysaccharide vaccine: Single dose, 50-80% protection for 2-3 years

• Oral Ty21a (live vaccine): 4 doses, 50-80% protection for 5 years

• Recommended for all travellers to endemic areas

• Vaccination does not replace usual food and hygiene practices!

**Japanese Encephalitis**

|  |  |
| --- | --- |
| **Inactivated** | **Live attenuated** |
| • inactivated vaccine  • 96% protective  • Given as 2 doses 28 days apart intramuscularly  • If risk of exposure persists after 1 year, a  booster is recommended after 1 to 2 years of the primary vaccination.  • Last minute travellers: 0 and 7 days | • live vaccine  • Rapid seroconversion: 2 weeks after  vaccination, 93.6% seroconverted  • High seroconversion rate: After one dose, 99.1 % seroconverted after 30 days  • Long term protection: 84% remain protected 60 months  • Modelling analysis suggests a high level of protection for at least 10 years |

**Rabies vaccine**

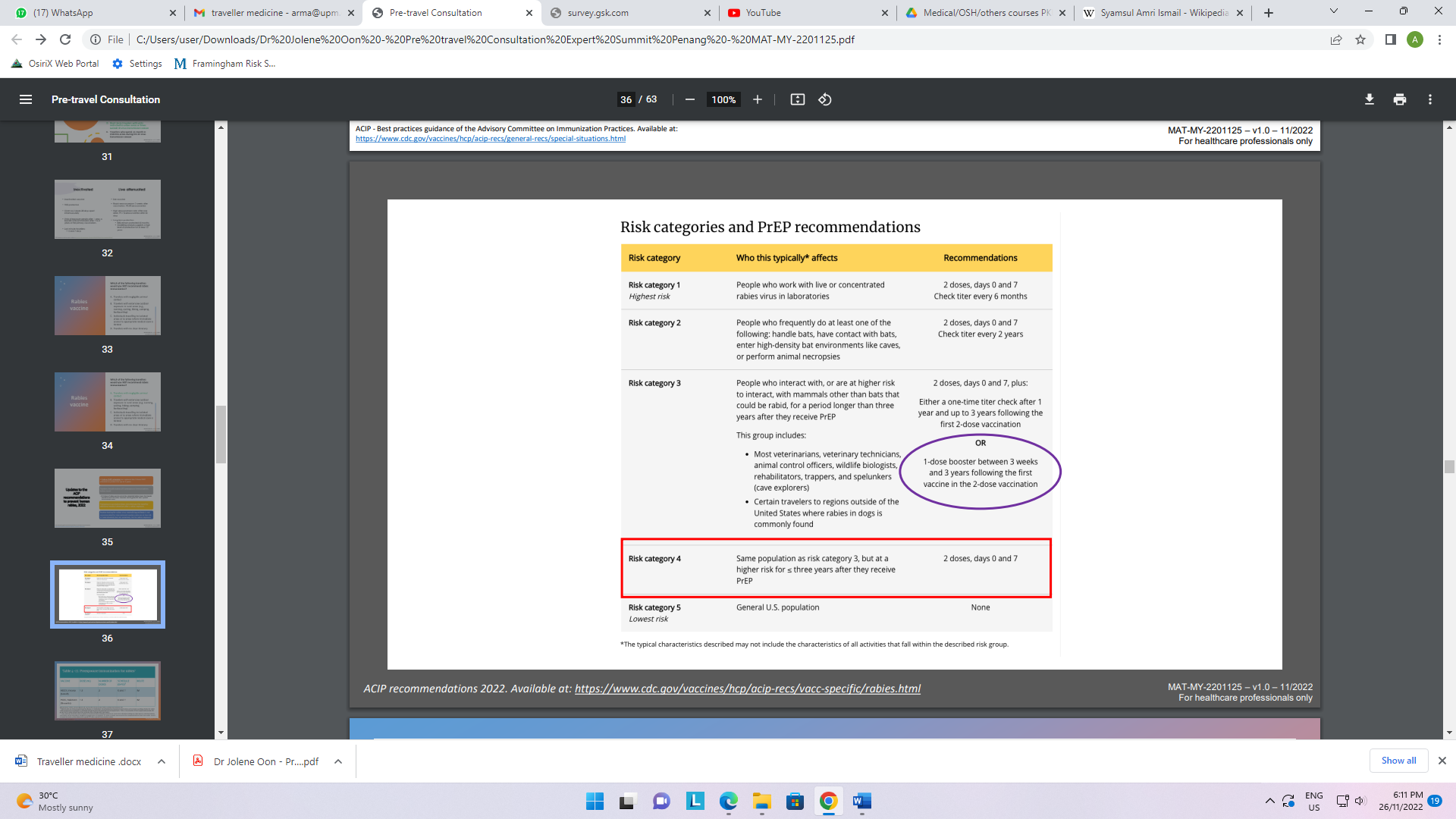
**Updates to the ACIP recommendations to prevent human rabies, 2022**

A 2-dose PrEP schedule has replaced the 3-dose PrEP schedule to protect for up to 3 years.Travelers should receive all 2 preexposure immunizations before travel.

* If 2 doses of rabies vaccine cannot be completed before travel, the traveller should not start the series. Few data exist to guide PEP after a partial immunization series.

Preexposure vaccination does not eliminate the need for additional medical attention after a rabies exposure.

Routine testing for rabies virus-neutralizing antibody is not recommended for international travellers who are at low risk or have elevated, but not sustained, risk for rabies exposure



**REQUIRED VACCINES**

**Meningococcal vaccine (A, C, Y and W-135)**

• Menactra (to be given 4 weeks apart from Prevenar)

• Menactra reduces the immunogenicity of Prevenar

**Yellow Fever**

Graphical user interface, application

Description automatically generated

**Yellow fever vaccine**

• Live vaccine

• Recommended for those aged ≥9 months who are living within or traveling to endemic zones

• As of 11 July 2016;

* + A single dose of YF vaccine is sufficient to confer life-long protection: booster dose is not needed.
  + “Accordingly, for both existing or new certificates, revaccination or a booster dose of yellow fever vaccine cannot be required of international travellers as a condition of entry into a State Party, regardless of the date their international certificate of vaccination was initially issued”

**Vaccine waiver**

Unvaccinated travellers should be strongly discouraged from travel to destinations that present a true risk for yellow fever.

If travel is unavoidable and the vaccine has not been given, these travellers should be informed of the risk of YF, carefully instructed in methods to avoid mosquito bites, and provided with a vaccination medical waiver

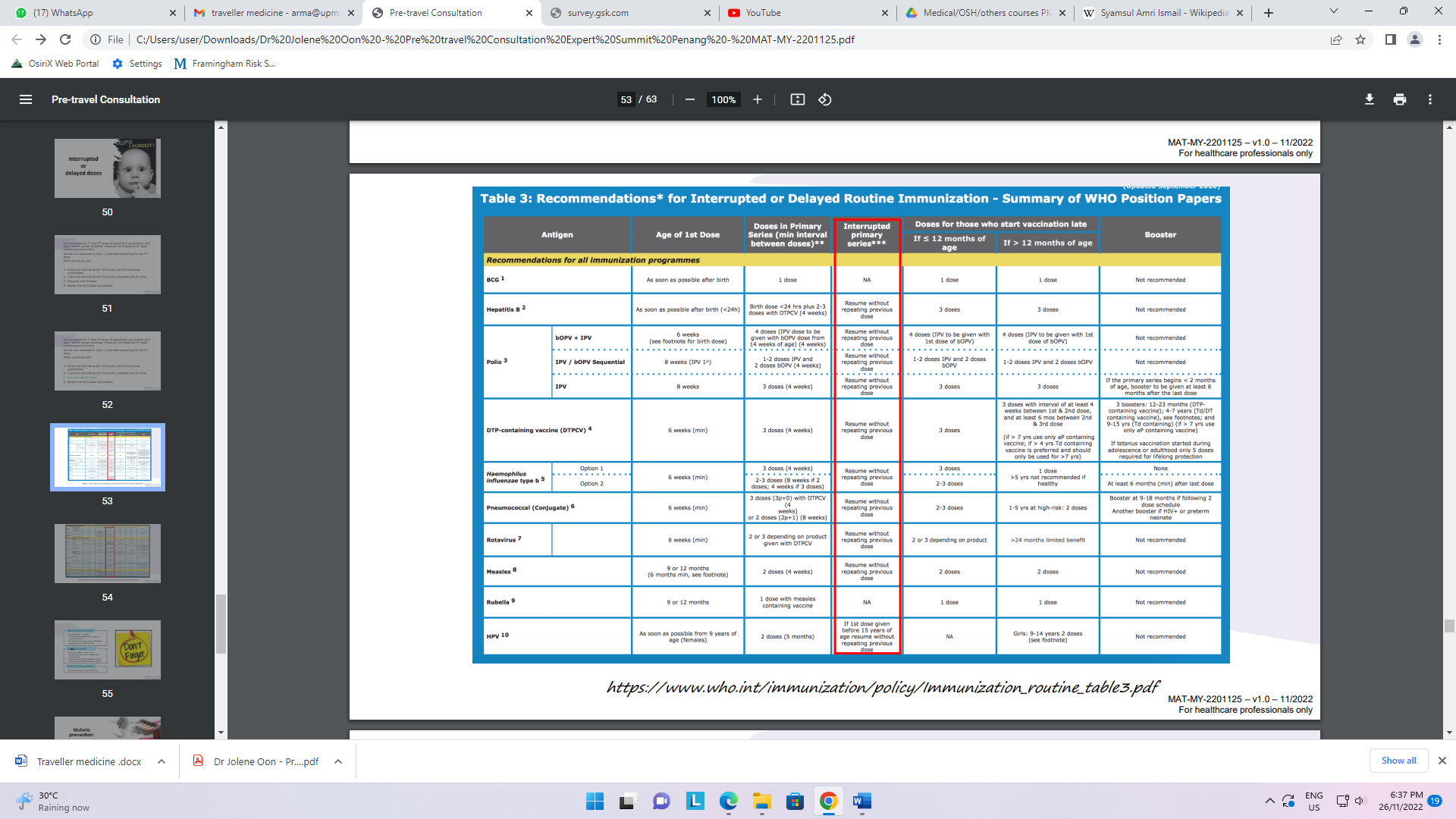
They may wish to travel during periods of lower disease activity.

Travelers should be warned that vaccination waiver documents might not be accepted by some countries, and refusal of entry or quarantine is possible.

**Adverse reactions**

|  |  |
| --- | --- |
| **Viscerotropic (YEL-AVD)** | **Neurotropic (YEL-AND)** |
| • Occurs 2-8 days after vaccination (higher risk in first time vaccinees)  • Clinical features:   * + Fever, malaise, headache, and myalgia that progress to hepatitis, hypotension and multi-organ failure   + Mortality risk: >50%   • Risk: 0.3/100,000 but increases to 1.2/100,000 in those >60 yrs old | • Occurs 4-23 days after vaccination (higher risk in first time vaccinees)  • Clinical features:   * + fever and headache that can progress to encephalitis or an autoimmune demyelinating disease with peripheral or central nervous involvement   + Most patients will completely recover (60 yrs old   **•** Risk: 0.8/100,000 but increases to  2.2/100,000 in those >60 yrs old |

**Interrupted or delayed doses**



Graphical user interface, application, table

Description automatically generated

**General risks of vaccinations:**

• Anaphylaxis 1/1 million

• Low grade fever/flu-like symptoms next 48-72 hours

• Local reactions e.g., pain, swelling or erythema over injection site

**For ALL live vaccines:**

• Female patients must avoid pregnancy for up to 4 weeks post vaccination

• Can be either given together at the same time or at least 28 days apart

**For YF and JE (live) vaccines:**

• Breastfeeding is contraindicated

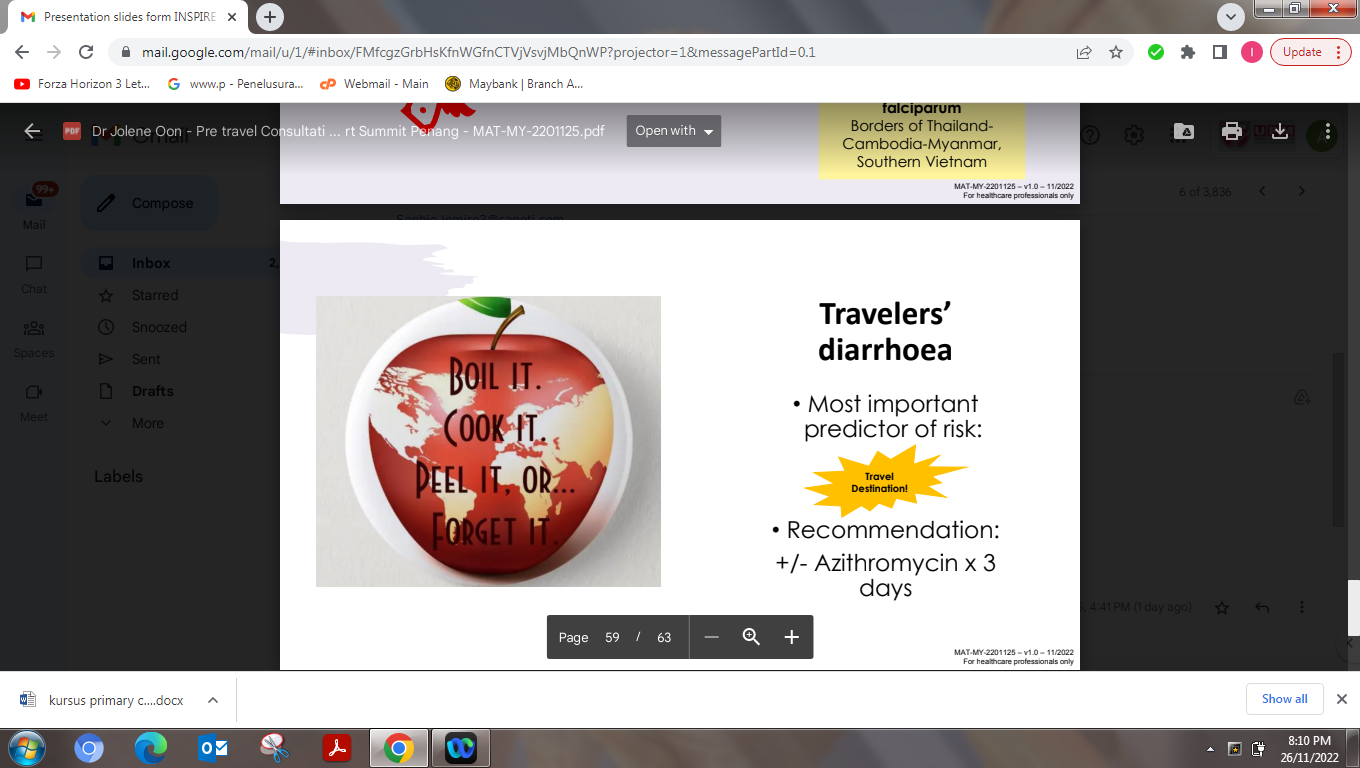
**Malaria prevention:**

* Chemoprophylaxis + mosquito avoidance measures
* Malaria chemoprophylaxis is highly efficacious but not 100% effective
* Mosquito avoidance measures:
* remain in well-screened areas and sleep under mosquito nets
* use an effective insecticide spray in living and sleeping areas during evening and night-time hours
* wear clothes that cover most of the body.
* All travellers should use an effective mosquito repellent, such as those that contain DEET.
* Repellents should be applied to exposed parts of the skin
* If wearing sunscreen, sunscreen should be applied first and insect repellent second

“Anopheles mosquitoes feed at night: transmission occurs primarily during dusk and dawn”

|  |  |  |
| --- | --- | --- |
| **Malarone** | **Doxycycline** | **Mefloquine** |
| * Start 1-2 days before   travel, continue during  travel and for 7 days  after leaving endemic  area: good for short  business trips   * Well tolerated, common * S/E: N&V * C/I: severe renal   impairment, pregnancy | * Start 1-2 days before   travel, continue during  travel and for 28 days  after leaving endemic  area   * Common S/E:   photosensitivity, GI upset,  vaginal yeast infections   * C/I: pregnancy | * Start 1-2 weeks before travel, continue during travel and for 4 weeks after leaving endemic area * Common S/E: CNS (e.g. dizziness, insomnia), psychiatric * C/I: cardiac conduction abnormalities, psychiatric conditions, seizures |

\*Mefloquine-resistant P.falciparum: Borders of Thailand, Cambodia-Myanmar, Southern Vietnam

**Travelers’ diarrhoea**

• Most important predictor of risk: Travel destinations!

• Recommendation: +/- Azithromycin x 3 days

**High altitude sickness**

• Consider prophylaxis in those ascending >2500m/8000ft

• Recommendation: Acetazolamide

• Best is to ascent slowly and descent if unwell

Typical high-altitude destinations:

• Cusco (11,000 ft; 3,300 m)

• La Paz (12,000 ft; 3,640 m)

• Lhasa (12,100 ft; 3,650 m)

• Everest Base Camp (17,700 ft; 5,400 m)

• Kilimanjaro (19,341 ft; 5,895 m)

**COVID-19**

**• Recommendations:**

* Ensure up-to-date (i.e., boosted) on COVID-19 vaccinations prior to travel
* Those not up-to-date should avoid/delay non-essential travel
* Follow destination recommendations for masking and social distancing

**CONCLUSION**

Travelling with medications:

* carry all medications in their original containers with clear labels, including patient name and dosing regimen
* carry enough medication for duration of trip and an extra supply
* carry medications in both hand-carry and checked-in luggage

General travel health kit

Sun protection

Mosquito avoidance measures

Vigilant food and water precautions