YEL-AND and YEL-AVD

Yellow fever vaccine associated neurotropic disease (YEL-AND) and yellow fever vaccine associated viscerotropic disease (YEL-AVD)

Cases of YEL-AND are estimated to occur in 0.8 cases per 100,000 doses distributed, and for YEL AVD, 0.3 cases per 100,000 doses distributed [1]. For individuals who are aged 60 years and older, the risk increases several fold, to approximately 2.2 cases per 100,000 doses for YEL-AND and 1.2 cases per 100,000 doses for YEL-AVD (US data) [2]. Individuals with specific medical history are at increased risk.

Before giving a YF vaccine, a careful risk assessment must be undertaken to check for contraindications and precautions (see yellow fever factsheet for further details).

Yellow fever vaccine associated neurotropic disease (YEL-AND)

The clinical presentation of neurological events begins two to 56 days following receipt of vaccine (US data), with fever and headache that can progress to encephalitis (inflammation of the brain), or an autoimmune demyelinating disease (a disorder that can interrupt nerve transmission) with peripheral or central nervous involvement. Most patients will completely recover. Almost all cases have occurred in those receiving the vaccine for the first time with no underlying YF immunity [2].

Yellow fever vaccine associated viscerotropic (YEL-AVD)

The clinical presentation begins one to eighteen days (median four days) following vaccination (US data), with fever, malaise (generally feeling unwell), headache, and myalgia (muscle pain) that progress to hepatitis (inflammation of the liver), hypotension (low blood pressure), and multi-organ failure and, in some cases, death (case fatality rate is approximately 48 percent according to US data) [2]. Worldwide all reported cases of YEL-AVD have occurred in first-time vaccine recipients [2].

	If a traveller presents with a suspected adverse event following YF vaccination, ensure the UKHSA guidance is followed in managing and reporting the incident**. Further information can be found in** Management and reporting adverse events**.**	

REFERENCES

1. Lindsey NP, Rabe IB, Miller ER et al. Adverse event reports following yellow fever vaccination, 2007-13. J. Trav Med. Jul 4 2016;23 (5) [Accessed 6 February 2023]
2. Gershman M.D. Staples J.E. CH4 Yellow fever in US Centers for Disease Control and Prevention (CDC) Health Information for International Travel, 'Yellow book' 2020 [Accessed 6 February]