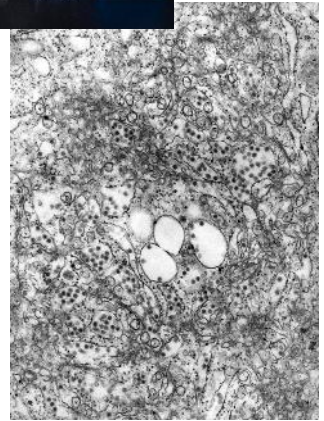


Laboratory workers: Evidence to Recommendations

TBE among laboratory workers

- Transmission occurred through aerosol route
 - Percutaneous or mucosal route possible
- 46 laboratory-acquired infections globally, all before 1995
 - 4 among U.S laboratory workers, all before 1979
- < 10 U.S. laboratories work with TBE virus
 - Research activity might increase with vaccine availability



TBE virus photo credit: Alamy images

Policy question

Should TBE vaccine be recommended for use in laboratory staff working with TBE virus?

Laboratory worker Evidence to Recommendations notes

- Population for vaccination have scientific understanding of disease and vaccines
- Same GRADE assessment as vaccination for travelers

Evidence to Recommendations: Public health problem, values, and acceptability

Topic	Decision	Comment
Public health problem	No, not of public health importance overall	<ul style="list-style-type: none">• Only 4 U.S. laboratory-acquired infections reported• For laboratorians working with TBE virus there is risk of a severe disease
Values	Desirable effects large relative to undesirable effects No important variability	<ul style="list-style-type: none">• Scientists will understand risks of disease and risks and benefits of vaccination
Acceptability	Yes, acceptable to key stakeholders	<ul style="list-style-type: none">• Acceptable for occupational health directors, laboratory workers, and other researchers, because will improve safety and remove barrier to research

Evidence to Recommendations: Public health problem, values, and acceptability

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Evidence to Recommendations: Resource use, equity, and feasibility

Topic	Decision	Comment
Resource use	Yes, reasonable and efficient allocation of resources	<ul style="list-style-type: none">• Limited number of staff working with TBE virus• Small cost to avoid impact of worker becoming infected
Equity	Probably increased	<ul style="list-style-type: none">• Vaccine likely paid for by employer and will improve safety for staff at occupational risk
Feasibility	Yes, feasible	<ul style="list-style-type: none">• Likely build on existing occupational health program

Evidence to Recommendations: Resource use, equity, and feasibility

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Balance of consequences

- Undesirable consequences *clearly outweigh* desirable consequences in most settings
- Undesirable consequences *probably outweigh* desirable consequences in most settings
- The balance between desirable and undesirable consequences *is closely balanced or uncertain*
- Desirable consequences *probably outweigh* undesirable consequences in most settings
- Desirable consequences *clearly outweigh* undesirable consequences in most settings
- There is insufficient evidence to determine the balance of consequences

Proposed policy option category

- TBE vaccination is **recommended** for laboratory workers

Draft recommendation

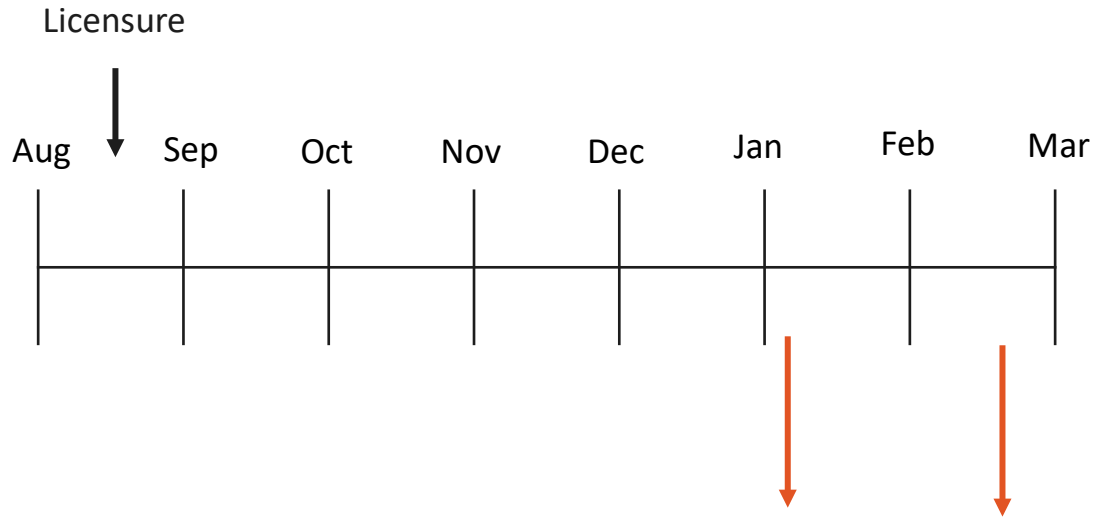
TBE vaccination is recommended for laboratory workers with a potential for exposure to TBE virus

Information accompanying recommendations

- Local biosafety committee should undertake risk assessment of potential for TBE virus exposure considering
 - Type of work to be performed
 - Biosafety level at which work is being conducted
- Vaccination not required for workers handling routine clinical samples

Next steps

Work Group timeline (planned), Jan–Mar 2022



Present to ACIP (today):
Evidence to
Recommendations

ACIP vote on vaccine
recommendations
and finalize MMWR

TBE Vaccine Work Group members and participants

ACIP

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Wilbur Chen

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