INFORMED COVID-19 MRNA VACCINATION DECISIONS WITH FACT BOXES



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Fact box: How safe and effective are COVID-19 mRNA vaccines for adults under the age of 60?

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This fact box compares adults under the age of 60 years who have not been vaccinated against COVID-19 (left side) with vaccinated adults (right side). It is assumed that 240 out of 1,000 unvaccinated people will get sick. This is comparable to your risk of getting sick if you have close contact with someone who is infected.

	1,000 non-vaccinated adults	1,000 vaccinated adults
Benefits of the vaccine		
How many get COVID-19?	240	10
and – depending on their age or previous medical conditions – have to be treated in hospital due to severe illness?	6 to 31	0 to 1
and experience long-term complications from COVID-19?	The numbers are still uncertain. There is clear evidence of permanent respiratory distress and memory impairment due t COVID-19 ("long COVID").	
Harms from the vaccine		
How many are unable to participate in their daily activities (due to temporary fatigue, fever, aches, or chills) on individual subsequent days <u>due to a vaccine dose?</u>	0	82
How many suffer severe harm (e.g., allergic overreaction) within a month <u>due to a vaccine dose?</u>	0	Close to 0
How many suffer from long-term complications <u>due to the</u> vaccination?	0	There are currently no indication of long-term complications.

Sources for the vaccines Comirnaty (manufacturer BioNTech/Pfizer) and Moderna (manufacturer Moderna): Baden 2020. NEJM; BioNTech & Pfizer 2020. www.comirnatyeducation.de CDC 2021. MMWR; EMA 2020. www.ema.europa.eu; FDA 2020. FDA Briefing Document; Polack 2020. NEJM; RKI 2020. reporting data; STIKO 2021. Epidemiological Bulletin.

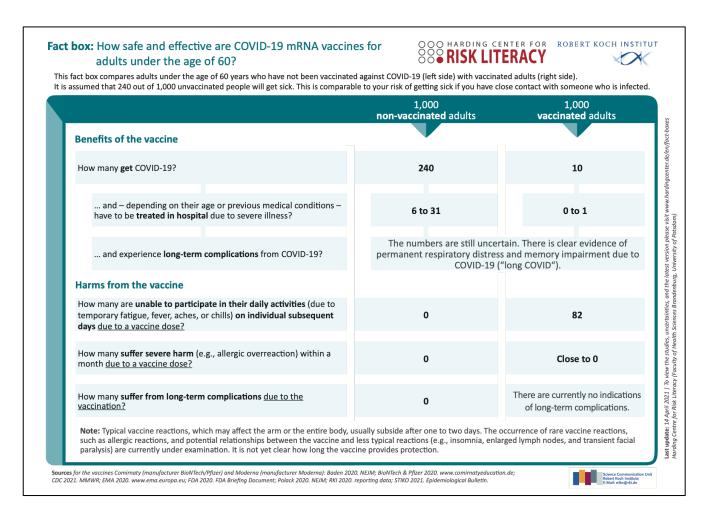
paralysis) are currently under examination. It is not yet clear how long the vaccine provides protection.



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What is a fact box?



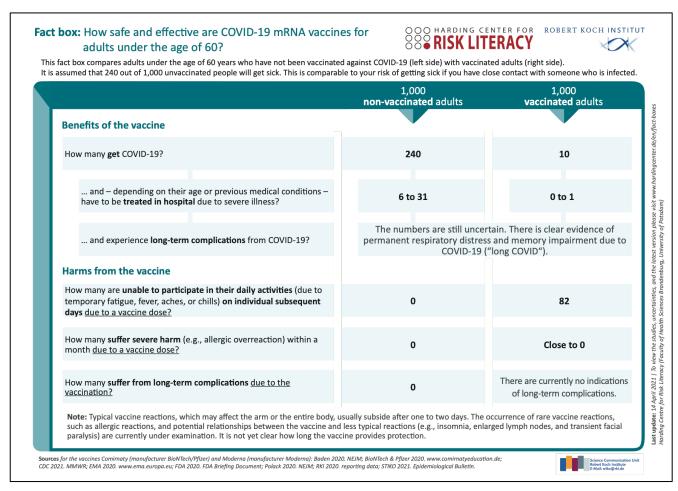




- Evidence based summary
- Balanced overview of benefits and harms
- Not designed to enforce directed behavioral change

Aim

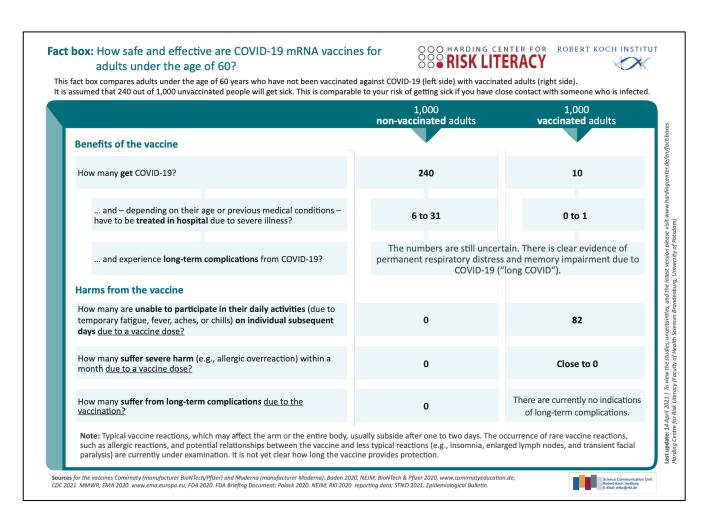
- Support informed decisions
 - Comprehensive knowledge
 - Decision is congruent with needs and preferences
- Maybe boost of vaccination uptake for people who lack information



FACT BOX ON COVID-19 MRNA VACCINES — KEY ELEMENTS



What are the key elements of a fact box?



FACT BOX ON COVID-19 MRNA VACCINES — KEY ELEMENTS



Description of the reference class

Most relevant endpoints for benefits and harms

Short summary/ additional note about typical and rare side effects

Sources

Fact box: How safe and effective are COVID-19 mRNA vaccines for adults under the age of 60? This fact box compares adults under the age of 60 years who have not been vaccinated against COVID-19 (left side) with vaccinated adults (right side). It is assumed that 240 out of 1,000 unvaccinated people will get sick. This is comparable to your risk of getting sick if you have close contact with someone who is infected. 2 groups of the 1,000 1,000 non-vaccinated adults vaccinated adults same Benefits of the vaccine denominator with the same How many get COVID-19? 240 10 reference group ... and – depending on their age or previous medical conditions – 6 to 31 0 to 1 have to be **treated in hospital** due to severe illness? The numbers are still uncertain. There is clear evidence of ... and experience long-term complications from COVID-19? permanent respiratory distress and memory impairment due to COVID-19 ("long COVID") Numbers as Harms from the vaccine absolute How many are unable to participate in their daily activities (due to temporary fatigue, fever, aches, or chills) on individual subsequent 82 risks or days due to a vaccine dose? statement How many suffer severe harm (e.g., allergic overreaction) within a 0 Close to 0 month due to a vaccine dose? There are currently no indications How many suffer from long-term complications due to the 0 vaccination? of long-term complications.

Note: Typical vaccine reactions, which may affect the arm or the entire body, usually subside after one to two days. The occurrence of rare vaccine reactions, such as allergic reactions, and potential relationships between the vaccine and less typical reactions (e.g., insomnia, enlarged lymph nodes, and transient facial

McDowell et al. 2016

Last update

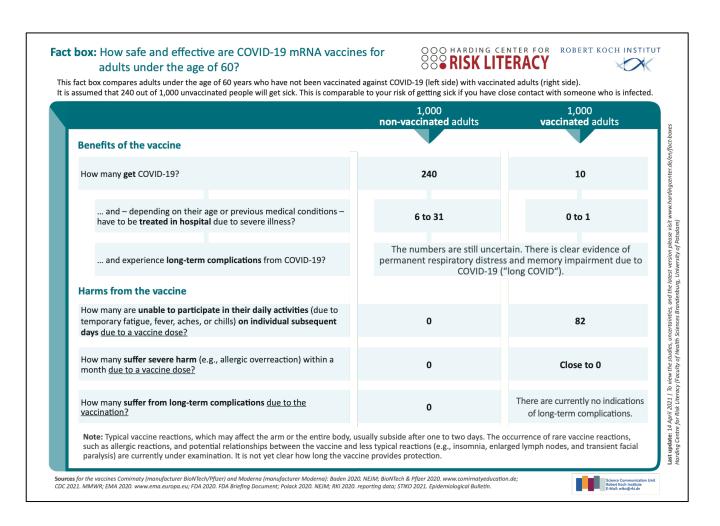
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FACT BOX ON COVID-19 MRNA VACCINES - IMPLEMENTATION



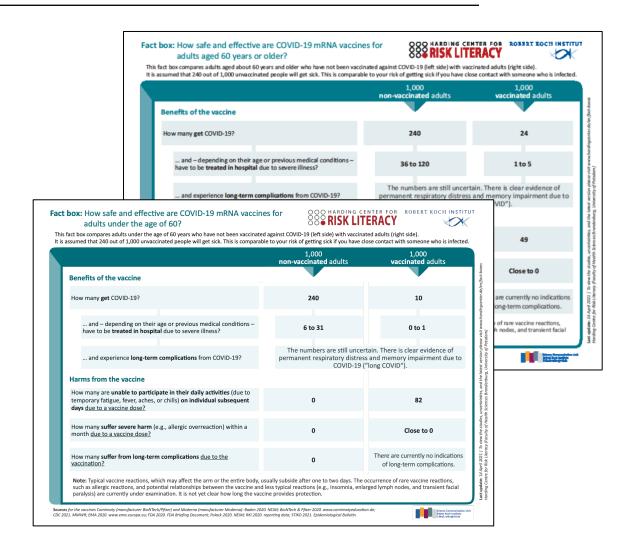
How has the fact box been implemented?



FACT BOX ON COVID-19 MRNA VACCINES - IMPLEMENTATION



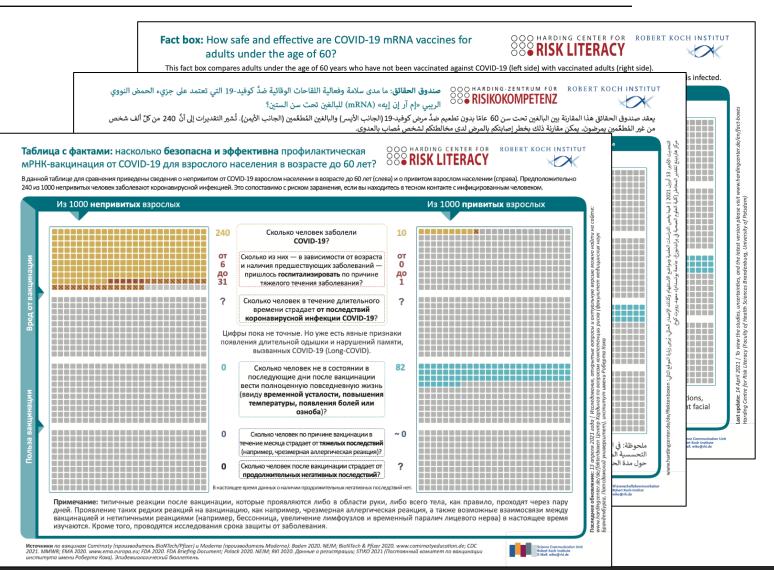
- Fact boxes are embedded in an accompanying text
- Available for two risk groups: people aged 18-59 and from 60 years
- Complex version has been revised and replaced by a simple fact box
- Update and version for youth and young adults in progress



FACT BOX ON COVID-19 MRNA VACCINES - IMPLEMENTATION



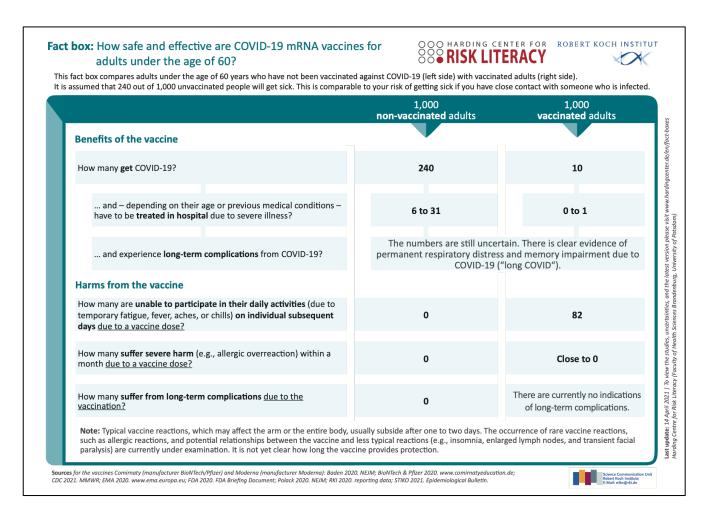
- Visualization is intended to help low-numerate people or people with poor reading skills compare benefits and harms
- Available in nine other languages besides English and German



FACT BOX ON COVID-19 MRNA VACCINES - EVALUATION



Can fact boxes support informed COVID-19 vaccination decisions?



FACT BOX ON COVID-19 MRNA VACCINES - EVALUATION



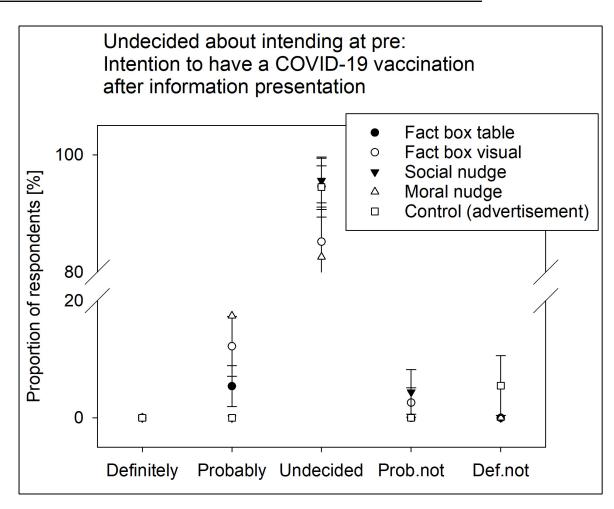
- Knowledge improvement (McDowell et al. 2016, 2019; Brick et al., 2020; Rebitschek et al., under review)
- Representative online survey in Germany with 14,000 invited panelists
- Preregistered study:

https://aspredicted.org/DDI_WHT

More likely vaccination intention in people who were undecided before

Conclusion

- Informed decisions can also lead to vaccination decisions
- Further research on vulnerable groups



Rebitschek et al. (in prep). Evidence-based information against vaccine hesitancy before nudging.

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