To investigate the existence of ‘asymptomatic transmission’ we need to look at several factors

1. Validity of the PCR test to identify people capable of transmitting an infectious virus.
2. **Is it correct that 1 in 3 people who test PCR positive are asymptomatic?**
3. Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in the early studies and also in Government thinking?
4. Where genuine asymptomatic (not pre-symptomatic) transmission is assessed in the studies, have the authors controlled for all confounders?
5. Calling everyone with a positive PCR test ‘a case’, even if asymptomatic.
6. Ignoring studies giving an ‘inconvenient’ result.

2. Is the claim that ‘1 in 3 people with the virus have no symptoms’ correct?

- **Professor Norman Fenton searched for the origin of the Government’s ‘1 in 3’ and couldn’t find any obvious source.**
- **He debunked the ‘1 in 3’ claim by using the figures from the Office for National Statistics (ONS) to show that the claim is contradicted by the government’s own case numbers** over the Dec 20 – Feb 21 period. He reasoned that if the “1 in 3” claim is correct then, over this period, the actual infection rate must be at least 11 times higher than the infection rate reported by the Office for National Statistics (ONS), which was 0.71%. If the reported infection rate of 0.71% is correct then the actual number of people with the virus (i.e the whole virus, not a genetic fragment) who have no symptoms is at most 2.9%. This is 1 in 34, not 1 in 3.
- ‘We argue that this contradiction can only be explained by the false positives being generated by RT-PCR testing. Hence, the published infection rate is estimating the number of people who test positive rather than the number of people with SARS-Cov-2 virus.’

(N. E. Fenton, M. Neil, and G. S. McLachlan, “What proportion of people with COVID-19 do not get symptoms?,” 2021. [Online]. Available: http://www.doi.org/10.13140/RG.2.2.33939.60968)

To investigate the existence of ‘asymptomatic transmission’ we need to look at several factors

1. Validity of the PCR test to identify people capable of transmitting an infectious virus.
2. Is it correct that 1 in 3 people who test PCR positive are asymptomatic?
3. **Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in the early studies and misleading the Government?**
4. Where genuine asymptomatic (not pre-symptomatic) transmission is assessed in the studies, have the authors controlled for all confounders?
5. Calling everyone with a positive PCR test ‘a case’, even if asymptomatic.
6. Ignoring studies giving an ‘inconvenient’ result.

3. Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in studies and misleading the Government?

- When the Government refers to **people who ‘have no symptoms’,** they are presumably **aggregating pre-symptomatic with asymptomatic**, since there is no indication that they are aware of the distinction.
- However, **many of the early studies in 2020 also failed to make the distinction.**
- There are a large number of studies and meta-analyses from 2020, many from China. This was a time period in which every researcher was rushing to produce a paper on SARS-CoV-2, with a consequent reduction in quality. Not only are these studies small, but the subjects are often not representative of the general population.
- There are flaws with these studies, since subjects were not quarantined and could therefore have picked up the infection anywhere.
- **Some of the better meta-analyses admit that pre-symptomatic transmission could not be estimated and consequently there could be no distinction between pre-symptomatic and asymptomatic transmission.**

Asymptomatic transmission from an immune system perspective

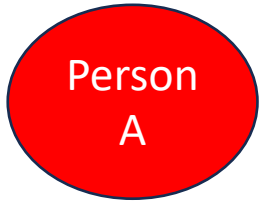
- From **Dr Mike Yeadon**: 'Asymptomatic spread is a fallacy capitalized upon to spread fear and induce compliance. Only people who have discernible symptoms of a respiratory infection pose any health risk to others, because **to be an efficient source of infection, you need a high viral load. If you have a high viral load, your immune system will fight back, which always induces symptoms.'**
- '**And those people are not…walking around in the community**, because if you're full of virus and symptomatic, you are also ill, and ill people tend to stay at home or in bed.'
- An editorial from Professor Allyson Pollock in the BMJ: '**Searching for people who are asymptomatic yet infectious is like searching for needles that appear and reappear transiently in haystacks**, particularly when rates are falling.'

(https://articles.mercola.com/sites/articles/archive/2021/05/15/planet-lockdown.aspx?ui=32d3de160460d5372474824 8da8b3ffa560c047b02260865fa2ebc33906212d1&sd=20150403&cid_source=dnl&cid_medium=email&cid_content=art1HL&cid=20210515&mid=DM873673&rid=1157736460; Pollock AM, Lancaster J. Asymptomatic transmission of covid-19: What we know, and what we don't. BMJ 2020;371:m4851)

To investigate the existence of ‘asymptomatic transmission’ we need to look at several factors

1. Validity of the PCR test to identify people capable of transmitting an infectious virus.
2. Is it correct that 1 in 3 people who test PCR positive are asymptomatic?
3. Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in the early studies and also in Government thinking?
4. **Where asymptomatic (not pre-symptomatic) transmission is assessed in the studies, have the authors controlled for all confounders?**
5. Calling everyone with a positive PCR test ‘a case’, even if asymptomatic.
6. Ignoring studies giving an ‘inconvenient’ result.

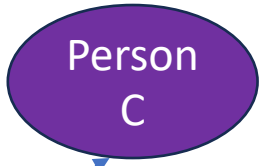
Explaining confounding
(and why Test & Trace didn't work)



1. Person A is presymptomatic with COVID

2. Person A has coffee with Person B

3. Person B later has a drink with Person C



4. Person C is pre-symptomatic with COVID

5. Person A is later diagnosed with COVID but because he has the NHS App, several other people are pinged, including Person B

6. Person B goes for testing and is positive for COVID. Has Person B picked it up from Person A, Person C or some other contact?

Or because SARS-CoV-2 is aerosolised, did Person B pick it up in the atmosphere?

4. The problem of confounding

- The vast majority of **studies that claim to show asymptomatic transmission do not take place under quarantine conditions**. For this reason, potential individuals who may pick up COVID from the asymptomatic index case are **circulating among their normal contacts and may pick it up anywhere.**
- This is exemplified by the Yanes-Lane et al. meta-analysis of 5 transmission studies from early 2020. They calculated that **18.8% close contacts exposed to genuinely asymptomatic index patients were COVID-19 positive**.
- However, **these contacts were found by contact tracing**, so the individuals who tested positive may equally well have been in contact with other infectious individuals.
- The authors themselves admit "It is likely that transmission from index patients who remained asymptomatic throughout infection may not be detected or reported due the nature of the asymptomatic infection. Therefore, **secondary attack rates estimated from these studies may not be truly representative of real-world attack rates**."

(Yanes-Lane M, et al. Proportion of asymptomatic infection among COVID-19 positive persons and their transmission potential: A systematic review and meta-analysis. PLoS One 2020;15:e0241536)

And the results of the Test & Trace App

- A study showed that the results of the first 3 months of the UK Test & Trace (**Oct-Dec 2020**) showed that the app was used by 16.5 million people (28% of the population) and sent 1.7 million exposure notifications. These **1.7 million were required to isolate.**
- The authors estimated that **only 6% of these 1.7 million subsequently developed symptoms and tested positive.**
- **This secondary attack rate (SAR) from the Test & Trace App was similar to the SAR for manually traced close contacts.**
- **So the app proved to be an expensive waste of time and people's lives** – manual tracing of close contacts would have achieved the same result.

(Wymant C, et al. The epidemiological impact of the NHS COVID-19 app. Nature. 2021 Jun;594(7863):408-412)

To investigate the existence of ‘asymptomatic transmission’ we need to look at several factors

1. Validity of the PCR test to identify people capable of transmitting an infectious virus.
2. Is it correct that 1 in 3 people who test PCR positive are asymptomatic?
3. Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in the early studies and also in Government thinking?
4. Where genuine asymptomatic (not pre-symptomatic) transmission is assessed in the studies, have the authors controlled for all confounders?
5. **Calling everyone with a positive PCR test ‘a case’, even if asymptomatic.**
6. Ignoring studies giving an ‘inconvenient’ result.

5. Calling every positive PCR test ‘a case’

- The WHO defines a confirmed case as **“A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.”** National guidance fell into line.
- **But a true case is someone who is symptomatic and has been diagnosed by a doctor.** The test result is merely to give confirmation to the doctor’s initial diagnosis. A true case may also be someone who was pre-symptomatic when tested. But not when they were asymptomatic when tested and remained asymptomatic.
- **Never before have asymptomatic people been referred to as ‘cases’ on the basis purely of a test result.**
- To start from a dubious test result and infer disease with no physician involvement is just wrong and engenders fear and anxiety in the individual concerned.
- **Inevitably, it gave rise to a ‘casedemic’.**

To investigate the existence of ‘asymptomatic transmission’ we need to look at several factors

1. Validity of the PCR test to identify people capable of transmitting an infectious virus.
2. Is it correct that 1 in 3 people who test PCR positive are asymptomatic?
3. Is ‘pre-symptomatic’ being aggregated with ‘asymptomatic’ in the early studies and also in Government thinking?
4. Where genuine asymptomatic (not pre-symptomatic) transmission is assessed in the studies, have the authors controlled for all confounders?
5. Calling everyone with a positive PCR test ‘a case’, even if asymptomatic.
6. **Ignoring studies giving an ‘inconvenient’ result.**

6. Ignoring studies giving an 'inconvenient' result: a Chinese study of c10 million people, Nov 2020

- This was a PCR testing programme from between May 14 and June 1, 2020 in Wuhan comprising almost 10 million subjects aged 6 years or over.
- **300 tested positive without symptoms** and 63% of these were seropositive, indicating that they had been exposed to the virus.
- There were **no positive tests amongst 1,174 close contacts** of asymptomatic cases i.e. **zero asymptomatic transmission.**
- The level of asymptomatic PCR positive tests is merely 0.003%, which is much lower than in any other study. There was no attempt to separate asymptomatic from pre-symptomatic, although with numbers this low that hardly matters.
- Remarkably, this study was clearly approved for publication by the Chinese authorities, even though it contradicts previously published Chinese case reports alleging asymptomatic transmission.
- **Despite being published in Nature, this study has been dismissed as Chinese propaganda.**

(Cao S, et al. Post-lockdown SARS-CoV-2 nucleic acid screening in nearly ten million residents of Wuhan, China. Nat Commun. 2020 Nov 20;11(1):5917)

And the global response to the Gao study?

- **Nothing.**
- **But government policy had relied on the apparently substantial risk of asymptomatic transmission based upon small and poor quality early Chinese studies.**
- But if we are going to rely on and make policy as a result of early, small, poor quality Chinese studies, **shouldn't we make a new policy as a result of a later, much larger Chinese study?**
- **Or write both off as Chinese propaganda?**
- **But at least be consistent and don't cherry pick the studies that suit.**
- Governments and health authorities similarly took no notice at all of the study Luo *et al*. showing zero or close to zero asymptomatic transmission.

So does asymptomatic transmission exist?

- I would conclude that it is possible but rare. This concurs with the early statements from the WHO, SAGE and Public Health England.
- We should not be making policy that affects the entire UK population based on a hypothesis that asymptomatic transmission exists, when:
  - There is no evidence of asymptomatic transmission with any other respiratory virus, including SARS-CoV-1 and common cold coronaviruses.
  - The idea of asymptomatic transmission arose from a single case report, later found to be completely wrong.
  - The test gives an unknown number of false positives.
  - Asymptomatic transmission is frequently aggregated with pre-symptomatic transmission in studies and public statements.
  - Studies using contact tracing prove nothing because the virus is aerosolised.
- The claim for asymptomatic transmission should have been checked and double checked before any of the pandemic measures were introduced.

And the result of this belief in asymptomatic transmission:

- **'Evidence-free' policies: no foundation in science or the history of epidemic control:**
  - Mass testing
  - Lockdown
  - Quarantine, normally only for the genuinely sick
  - School closures
  - Social distancing
  - And more
- **But ministers are generally not scientists** and they can't be expected to understand the ramifications of some of the points made here.
- **But where were the government's scientific advisers all this time?**

Existence of ‘asymptomatic transmission’ – other factors: Summary

- No evidence for the government’s claim that ‘1 in 3’ people with the virus have no symptoms. The claim was debunked by Professor Normal Fenton.
- ‘Pre-symptomatic’ is regularly aggregated with ‘asymptomatic’ in studies and government pronouncements. Both are largely impossible to assess, thereby distorting any claim for asymptomatic transmission.
- A true study of asymptomatic transmission must take place under quarantine conditions, otherwise those PCR positive could have picked up the virus or viral fragments from other people. This is particularly the case contact tracing.
- A true case is someone who is symptomatic and has been diagnosed by a doctor. If there is no doctor’s diagnosis, a positive test result is meaningless.
- Studies showing that asymptomatic transmission is zero or close to zero were ignored.
- The fanatical belief that asymptomatic transmission was widespread resulted in ‘evidence-free’ policy decisions: Mass testing, Lockdown, Quarantine, School closures, Social distancing etc.
- Where were the government scientific advisers?

References: Asymptomatic meta-analyses and studies

- Zhou J, et al. Viral emissions into the air and environment after SARS-CoV-2 human challenge: a phase 1, open label, first-in-human study. Lancet Microbe. 2023 Aug;4(8):e579-e590
- Tayyar R, et al. Low infectivity among asymptomatic patients with a positive severe acute respiratory coronavirus virus 2 (SARS-CoV-2) admission test at a tertiary care center, 2020-2022. Infect Control Hosp Epidemiol. 2023 Sep 25:1-3;
- de Laval F, et al. Lessons learned from the investigation of a COVID-19 cluster in Creil, France: effectiveness of targeting symptomatic cases and conducting contact tracing around them. BMC Infect Dis. 2021 May 19;21(1):457;
- Johansson MA, et al. SARS-CoV-2 Transmission From People Without COVID-19 Symptoms. JAMA Netw Open. 2021 Jan 4;4(1):e2035057
- Sah P, et al. Asymptomatic SARS-CoV-2 infection: A systematic review and meta-analysis. Proc Natl Acad Sci U S A. 2021 Aug 24;118(34):e2109229118
- Mahmood M, et al. Transmission frequency of COVID-19 through pre-symptomatic and asymptomatic patients in AJK: a report of 201 cases. Virol J. 2021 Jul 3;18(1):138;
- Buitrago-Garcia D, et al. Occurrence and transmission potential of asymptomatic and presymptomatic SARS-CoV-2 infections: A living systematic review and meta-analysis. PLoS Med. 2020 Sep 22;17(9):e1003346
- Byambasuren O, et al. Estimating the extent of asymptomatic COVID-19 and its potential for community transmission: Systematic review and meta-analysis. J Assoc Med Microbiol Infect Dis Can. 2020 Dec 31;5(4):223-234
- Madewell ZJ, et al. Household Transmission of SARS-CoV-2: A Systematic Review and Meta-analysis. JAMA Netw Open. 2020 Dec 1;3(12):e2031756
- Luo L, et al. Contact Settings and Risk for Transmission in 3410 Close Contacts of Patients With COVID-19 in Guangzhou, China : A Prospective Cohort Study. Ann Intern Med. 2020 Dec 1;173(11):879-887
- Qiu X, et al. The role of asymptomatic and pre-symptomatic infection in SARS-CoV-2 transmission-a living systematic review. Clin Microbiol Infect. 2021 Apr;27(4):511-519
- He J, et al. Proportion of asymptomatic coronavirus disease 2019: A systematic review and meta-analysis. J Med Virol 2020
- https://wwwnc.cdc.gov/eid/article/27/2/20-4168_article)

Pre-symptomatic transmission: References

- Zhou J, et al. Viral emissions into the air and environment after SARS-CoV-2 human challenge: a phase 1, open label, first-in-human study. Lancet Microbe. 2023 Aug;4(8):e579-e590.
- Mahmood M, et al. Transmission frequency of COVID-19 through pre-symptomatic and asymptomatic patients in AJK: a report of 201 cases. Virol J. 2021 Jul 3;18(1):138;
- de Laval F, et al. Lessons learned from the investigation of a COVID-19 cluster in Creil, France: effectiveness of targeting symptomatic cases and conducting contact tracing around them. BMC Infect Dis. 2021 May 19;21(1):457
- Casey-Bryars M, et al. Presymptomatic transmission of SARS-CoV-2 infection: a secondary analysis using published data. BMJ Open. 2021 Jun 28;11(6):e041240
- Furukawa NW, et al. Evidence Supporting Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 While Presymptomatic or Asymptomatic. Emerg Infect Dis. 2020 Jul;26(7):e201595
- Zhang W, et al. Secondary Transmission of Coronavirus Disease from Presymptomatic Persons, China. Emerg Infect Dis. 2020 Aug;26(8):1924-1926.
- Slifka MK, Gao L. Is presymptomatic spread a major contributor to COVID-19 transmission? Nat Med. 2020 Oct;26(10):1531-1533