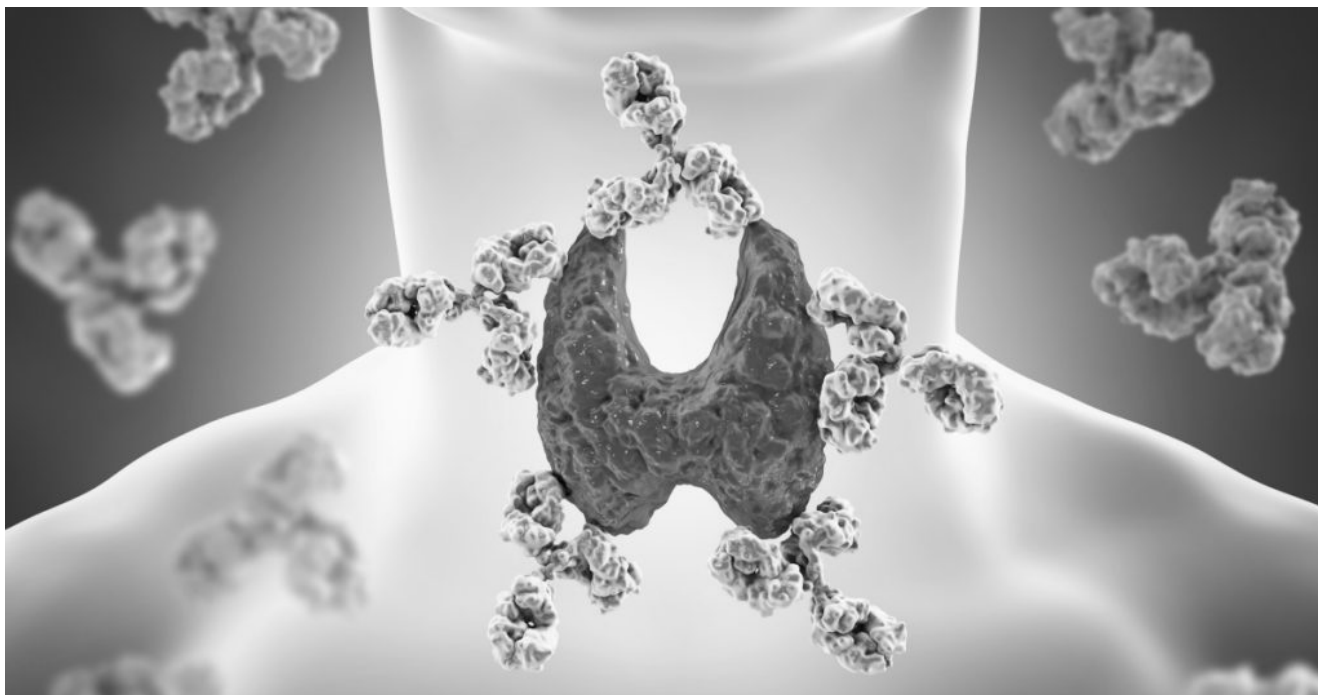


Study Links Pfizer's COVID-19 Vaccine to Thyroid Disorders



A [recent study](#) published in *Frontiers in Endocrinology* shows Pfizer's COVID vaccine can disrupt thyroid autoimmunity and induce Grave's Disease. Graves' disease is an [autoimmune disorder](#) that can cause hyperthyroidism (overactive thyroid). With Graves' disease, your immune system attacks your thyroid gland, causing it to produce more thyroid hormones than needed.

Among the 99 healthcare workers enrolled in this 12-month [study](#), nine were excluded for various reasons. Serum samples from 70 participants were sufficient to measure thyroid autoimmune antibodies and functions. In 33 participants, anti-thyroglobulin antibodies (TgAb) and anti-thyroid peroxidase antibodies (TPOAb) were also analyzed between the second and third COVID vaccine dose and four weeks after the third dose to assess the response of the antibodies after the third shot.

The antibodies tested help [measure your thyroid function](#) and discern whether the cause of any abnormalities has an

autoimmune component.

Participants enrolled aged between 38 and 54 years and were 69% female. According to the [study](#), during the 32 weeks after administration of the second vaccine dose and 4 weeks after the third dose, the median antibody titer increased from 325 U/mL to 17,627 U/mL ([Table 1](#) and [Figure 1](#)).

All participants had increased antibody titers.

The mean thyroid-stimulating hormone receptor antibody (TRAb) increased from 0.81 IU/L at baseline to 0.91 IU/L 32 weeks after the second dose and 0.97 IU/L 4 weeks after the third dose.

Thyroid Stimulating Hormone (TSH), free thyroxine (FT4), and triiodothyronine (FT3) (labs that measure how well your thyroid is working) were not significantly changed between each time point. However, TSH decreased in a time-dependent manner, suggesting the possibility of progression in subclinical hyperthyroidism after the vaccine.

Those who experienced an increase in TRAb showed less increase in TSH but more of an increase in FT4 than non-responders. Conversely, in overall subjects, FT3 and FT4 tended to decrease after the third vaccine dose. Researchers theorized this could be due to non-thyroidal illness or a “disturbance” of FT4 to FT3 conversion following vaccination.

Although researchers stress further clinical evidence from studies with larger samples are needed to clarify if the mRNA vaccine could potentially induce Grave’s Disease, they concluded their research shows Pfizer’s COVID-19 vaccine can disrupt thyroid autoimmunity.

Other studies show COVID-19 vaccines can cause thyroid problems

This is not the only study linking COVID-19 vaccines to

thyroid disorders:

- A December 2021 [study](#) published in Human Vaccines & Immunotherapeutics found Pfizer's COVID-19 vaccine may trigger subacute thyroiditis.
- A May 2021 [study](#) in the Journal of the Endocrine Society describes a case of subacute thyroiditis that occurred after mRNA COVID-19 vaccination.
- Another May 2021 [study](#) in the Journal of Endocrinology and Metabolism describes three cases of vaccine-induced subacute thyroiditis.
- A [paper](#) published in February 2021 in Autoimmunity Reviews explains how COVID-19 vaccines can trigger autoimmunity.
- A December 2021 [paper](#) in Metabolism Open describes two case reports of vaccine-induced subacute thyroiditis and concluded subacute and silent thyroiditis may occur after COVID-19 vaccination.
- A March 2022 [study](#) in the Journal of Endocrinological Investigation found an association between thyroid disorders and COVID-19 vaccines. Among 83 reported cases, most cases (68.7%) of thyroid abnormalities were observed after vaccination with mRNA-based vaccines, followed by viral vector vaccines (15.7%) and inactivated vaccines (14.5%). Subacute thyroiditis was the most common COVID-19 vaccination-related thyroid disease, accounting for 60.2% of all cases, followed by Graves' disease (25.3%). In addition, patients with focal painful thyroiditis (3.6%), silent thyroiditis (3.6%), concurrent Grave's Disease and subacute thyroiditis (2.4%), thyroid eye disease (1.2%), overt hypothyroidism (1.2%), atypical subacute thyroiditis (1.2%) and painless thyroiditis with TPP (1.2%) were also reported.
- A May 2022 [paper](#) in the Journal of Endocrinological Investigation describes 12 patients who presented with

new onset or relapse of Graves' disease hyperthyroidism shortly after receiving an mRNA COVID-19 vaccine and identified 21 other case reports in medical literature.

- A July 2022 [study](#) in the Journal of Endocrinological Investigation found COVID-19 vaccines may trigger autoimmune thyroid disorders and may be associated with “permanent or transient thyroid dysfunction in susceptible individuals.”
- A 2021 [paper](#) published in Ophthalmic Plastic and Reconstructive Surgery describes a woman with controlled Grave's disease who developed thyroid eye disease three days after receiving Pfizer's COVID vaccine.
- In a 2022 [paper](#) published in the Journal of Endocrinological Investigation, researchers analyzed data from 51 patients who developed subacute clinical thyroiditis after SARS-CoV-2 vaccination. They found that in those with a previous history of thyroid disease, mRNA vaccination may predispose one to develop subacute subclinical thyroiditis. Of course, researchers concluded this shouldn't dissuade vaccination because thyroid conditions can be treated with medications that permanently damage an individual's thyroid function and keeps them dependent on pharma for life.

There are more papers in the medical literature that support the relationship between mRNA COVID-19 vaccination and thyroid conditions, yet researchers think the subpar “benefits” of COVID vaccines outweigh the risk of experiencing often life-long thyroid dysfunction (and the medical conditions resulting from it). Regardless, people should know thyroid disorders are a potential risk they're signing up for when they get vaccinated—and nobody should force a product on an individual that could cause a disease that is far worse than the one COVID vaccines do not prevent.