

# Treatment of Hypersensitivity Pneumonitis (HP)



Hypersensitivity pneumonitis (HP) is a lung condition in which your immune system reacts to certain substances in the air you breathe. This fact sheet addresses treatment of HP. For more information about HP, see the ATS Patient Information Series fact sheet “What is Hypersensitivity Pneumonitis” at [www.thoracic.org/patients](http://www.thoracic.org/patients).

## First-line treatments

There are both non-medication and medication-based treatments for HP. Overall, the most important treatment is avoiding further inhalation of the particles causing your lung disease.

Please refer to Part 1 of this series for more information on specific causes and diagnosis of HP at [www.thoracic.org/patients](http://www.thoracic.org/patients).

## Antigen avoidance

Hypersensitivity pneumonitis (HP) occurs when you breathe in proteins from molds, bird feathers, and other things that cause allergic reactions in your lungs. Breathing in these particles over time can lead to inflammation and permanent scarring in your lungs. The first and most important step in treating HP is to work with your healthcare team to identify what you are inhaling that is causing the problem. This can be challenging and about half the time, it is not possible to identify the problem. If you do find out what is causing it, getting your environment cleaned and staying away from the particles injuring your lungs is the most important thing you can do. Sometimes this may require you to hire a professional cleaner to clean/fix in your home or workplace.

More information can be found on mold-related problems in the ATS Patient Information Series on Mold-Specific Concerns Associated with Water Damage for Those with Allergies and Other Lung Diseases.

## Medications

Sometimes the lung injury caused by HP will continue to worsen even after cleaning and removing the inhaled dusts from your environment. When this is the case, your healthcare provider may give you specific medications to help reduce the amount of inflammation in your lungs. The most common type of medications lung specialists use to reduce the inflammation caused by HP are called steroids, such as prednisone.

Other medications your healthcare team may use

include (but are not limited to) mycophenolate mofetile, azathioprine, or rituximab. These medications are used on a case-by-case basis depending on your body's response to steroids or the development of steroid side effects. There is some evidence to suggest that patients who may benefit the most from these medications are those with signs of significant inflammation on chest imaging.

If your lung scarring continues to worsen despite these medications, there are two medications approved to help slow down decline in lung function. These medications are nintedanib and perflinone, and you should talk to your healthcare team about whether they are right for you.

## Supplemental oxygen

The lung inflammation and scarring caused by HP can sometimes make it difficult to get enough oxygen into your body. People with HP should have their oxygen levels routinely evaluated with a device used to detect oxygen levels in your blood, called a “pulse oximeter.” The prescription of extra oxygen (“supplemental oxygen”) is required when oxygen levels fall below a certain level in your blood. Your healthcare team may recommend that you have oxygen that you wear all day or just at night. Over time, the amount of extra oxygen you need may increase or decrease depending on how your body responds to other treatments. There are a number of devices that can help provide oxygen to you, and more specific information can be found in the ATS Patient Information Series fact sheet on Oxygen Therapy.

For more information on pulse oximetry and ways in which you can safely monitor your oxygen levels at home, please refer to the ATS Patient Information Series on Pulse Oximetry.

## Pulmonary rehabilitation

If you feel very short of breath and are not able to do all your activities at home, your healthcare team may recommend a pulmonary rehabilitation program. This is typically an outpatient, exercise and education-

based program that can help you to feel less short of breath and improve your ability to do physical activity. It includes physical exercises and related education that are individualized to you. Education on medications, nutrition, smoking cessation, and counseling on oxygen are also important parts of the program. You will work with a pulmonary rehab specialist 1 to 2 times per week for an average of 4 to 12 weeks, followed by at-home exercises you can do on your own.

The American Thoracic Society has partnered with the COPD Foundation and the Gawlicki Foundation to create a public awareness website for pulmonary rehabilitation located at [www.livebetter.org](http://www.livebetter.org) and <https://www.copdfoundation.org/Learn-More/Pulmonary-Rehabilitation/What-is-Pulmonary-Rehabilitation.aspx>. Additionally, more information on pulmonary rehabilitation, including a brief ATS Video on Pulmonary Rehabilitation, can be found at [www.thoracic.org/patients](http://www.thoracic.org/patients).

### Clinical trials

There are many scientists who are studying new types of treatment for HP and other similar forms of lung disease. You should ask your healthcare team if they are aware of any ongoing research for treatment of HP and whether any clinical trials are right for you.

Please visit [www.clinicaltrials.gov](http://www.clinicaltrials.gov) for more information related to new treatments and active research in the field of HP.

### Lung transplant

Some people with severe, end-stage lung disease from HP may qualify for a lung transplant. Lung transplantation is a procedure where healthy lung(s) are donated to a person with end-stage lung disease. These surgeries are performed by specialized surgeons and managed by transplant pulmonologists, which are specialized lung doctors who evaluate candidates for transplant and who help keep your new lungs healthy after transplant. Not all hospitals perform lung transplantation, and lung transplant programs are typically located at highly specialized centers throughout the United States. If needed, your healthcare team will refer you to a lung transplant program where a group of doctors will perform extensive testing to determine whether you are a good candidate for a lung transplant.

For more in-depth information, the American Thoracic Society has an extensive Patient Education and Information Series on lung transplantation for both adults and children, which can be found at the following web address: [www.thoracic.org/patients](http://www.thoracic.org/patients).

### Palliative care

Unfortunately, end-stage lung disease from HP can lead to chronic and severe breathlessness, cough, pain, and other symptoms. Palliative care is a team of healthcare providers who specialize in helping improve patients' quality of life when they experience a significant symptom burden from life-threatening and end-stage conditions. Palliative care

specialists can also help patients with spiritual, emotional, and psychological well-being. Palliative care can begin at any stage of your illness and in virtually any healthcare setting (your home, clinic, rehabilitation facility, or even during hospitalization). It has been shown that early involvement of a palliative care team can actually help you to live longer with a terminal condition.

Hospice care is different than palliative care in that hospice providers typically become involved at the very end of life to when life-prolonging treatment is failing. Hospice specialists are experts in relieving suffering at the very end of life, typically when there is less than 6 months to live.

For more information, please see the ATS Patient Information series on Palliative Care for People with Respiratory Disease or Critical Illness.

### Action Steps:

- ✓ Be sure to speak with your healthcare provider about help with antigen avoidance
- ✓ Ask your healthcare team if there are any medications needed for your lung disease or if you would benefit from enrollment in a clinical trial
- ✓ Ask your healthcare provider if pulmonary rehabilitation is right for you
- ✓ Ask if there are lung transplant doctors where you live and if they have any suggestions to help ensure you are a good candidate for transplant
- ✓ Ask your healthcare team if they believe you may benefit from being evaluated by a palliative care team

### Healthcare Provider's Contact Number:

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### Resources:

#### American Thoracic Society

- [www.thoracic.org/patients](http://www.thoracic.org/patients)

#### ATS Livebetter Website

- <http://www.livebetter.org>

#### <http://www.clinicaltrials.gov>

#### National Institutes of Health

- <https://www.nlm.nih.gov/health-topics/hypersensitivity-pneumonitis>

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