Weather Forecasts and High Impact Allergy and Asthma Suffering

Weather Trends 360 CEO Captain Bill Kirk

Speaker

Bill Kirk

- Weather Trends 360 CEO
- 17-time award winning technology firm specializing in YEAR-AHEAD weather and sales forecasting for Fortune 500 companies and small businesses worldwide
- USAF Gulf War Veteran, Captain
- Bible Scholar
Inspiration for YEAR-AHEAD Forecasting
(31 Years ago)

Year-Ahead Savvy Customers
(Weather & Sales Forecasting)

- 143 Fortune 5,000 clients
- 18 years supporting pharma and many diseases for IQVIA, Pollen.com, Bayer, J&J...
- Thousands of farmers and small businesses
- 18 Years in business
- 17 Technology awards – Forbes 5th Most Promising Company
- Clients in 195 countries
How we do it...a YEAR-AHEAD
(Weather & Sales Forecasting)

- Traditional weather forecasting is physics-based that changes everyday. It struggles to get the week 2 forecast right.

- Weather Trends year-ahead forecast is more accurate than a week 2 forecast.

- It’s trillions upon trillions of statistical calculations to generate year-ahead worldwide forecasts.

Traditional Meteorology & Physics
Not how we do it

- Meteorology 101 is Physics based, a moving target with ever changing forecasts.

- If there was just one drop (one storm) that would be easy Physics highly accurate forecasting.

- But there are millions of interactions in the atmosphere (surface and aloft) making this a very challenging way to predict long term weather.

- Not how we do it!
Weather Trends, Statistics & Climate Cycles
A better way to plan a year ahead

- Trillions upon trillions of statistics and 24 climate cycle trends allow for much more accurate YEAR-AHEAD weather forecasting.
- If you can get the weather right, week-by-week, a YEAR-AHEAD, then it’s also possible to predict seasonal sales and weather ailments that complicate human suffering, everywhere on Earth!
- PhD Academics at the University of Miami, West Point Military Academy, Penn State and others validated the approach is the best way to make very long lead forecasts that don’t change once issued for PROACTIVE vs REACTIVE planning.

Year-Ahead Accuracy
Outperforms NOAA’s month ahead outlook 83% of the time!

PhDs at the Univ. of Miami and West Point Military Academy proved WTI more accurate over 11 years than NOAA 83% of the time; despite being a year ahead, NOAA just a few days ahead. CLICK HERE FOR THE AUDIT REPORT
The Power of 1° Degree®
September 2021 will be a tough month for Ragweed sufferers

Predictive Analytics
Based on Big Data
Dry weather anytime means more suffering

Weather Trends Power of 1 Degree® technology has analyzed IQVIA historical daily Asthma Index data by location, 3-Zip patient level data, EPA pollution by day, CDC Flu data, Allergy POS by week and Weather to develop short range and year-ahead Asthma & Allergy suffering models.

- Warm/Dry Spring more pollen, pollution in the air results in higher Asthma suffering
- Cool/Dry Summer slight increase in Asthma suffering
- Warm/Dry Fall Ragweed pollen & pollution result in higher Asthma suffering
- Cold/Dry Winter more pollution, lower humidity results in higher Asthma suffering
Asthma & Allergy Medications
Dry weather anytime means more prescriptions and suffering

For 19 years, Weather Trends has been predicting year-ahead allergy sales and suffering for large retailers and manufacturers. The correlation between Allergy prescriptions filled and Asthma prescriptions is 94.8%, with both responding to warmer/drier weather in Spring and Fall, Colder/Drier in Winter.

59% of U.S. in Drought Phases
As of 29 June 2021 – the most in 9 Years!

- Wet weather and wet soil conditions help to suppress pollen and pollutants and minimize dust from agricultural planting. 2019 record low drought.
- 2021 currently has the highest dry to drought conditions in 9 years due in part to several climate cycles (La Nina-Neutral, -PDO, +AMO, Solar Minimum) teaming up together, a 100-year event.
- Excessively wet areas in the South would have higher incidents of allergic reactions to mold spores.
Wild Fires 36% Below Average
as of 7 July 2021

- Wild fire acres burned in the U.S. are trending 36% below average for the 2021 season to date. 1.6M acres burned vs an average of 2.5M.
- Drought seasons have less underbrush (fuel) available to burn. Severe fire seasons typically occur after a wet/snowy Winter.

U.S. Weekly Weather Trends
March 2021 – December 2021

- Spring (March – June) Warmest/Driest in 9 years – intense Allergy & Asthma season.
- Summer (June-August) is a bit cooler and slightly wetter than last year.
  - July coolest in 6 years (above avg), wetter vs LY = slightly diminished suffering.
  - August coolest in 4 years, driest in 6 years = increasing weeds
  - September peak suffering rag weed period 8-22 September!
  - October warmest in 4 years, driest in 7 = high pollution, extended allergy season.

⭐ Greatest increase in year-over-year Allergy & Asthma suffering.
Ragweed Season
August – September Outlooks

- **AUGUST:** Warmer/Drier areas are limited as the warmer areas are also generally wetter.
  - Arkansas worst suffering than last year with the greatest change toward warmer and drier weather

- **SEPTEMBER:** Texas to the Midwest and the Southeast Middle Atlantic likely to have more ragweed suffering than last year
  - Texas – Oklahoma and Virginia greatest change toward hotter/drier weather.

U.S. 2021 Hurricane Season Update
WTI YEAR-AHEAD FORECAST: 3rd Most Active in 165 Years!

- 5 Named Tropical Storms before the 4th of July breaks 165 year record for the fastest start to the season!
- Hurricane Elsa (#5) impacted the Lesser Antilles, Cuba and Florida.
- Last year had 5 right after the 4th of July with the season going onto be the most active on record with 30 named storms.
- Fast starts guarantee a much above average hurricane season.
Christmas in July! 😊
December 19th – 25th Temperature Trend Outlook

Asthma, Allergy and Flu Index Forecasts
www.allergyandasthmanetwork.org/weather
Free Tools to Anticipate Suffering Ahead
14-Day Short Range Asthma Suffering Index and Year-Ahead Weather

www.weathertrends360.com/Asthma

www.weathertrends360.com/Planner

Business Solutions for the Medical Industry
weather and sales forecast everywhere on Earth

- Weather and sales forecasts by mile, by week A YEAR-AHEAD everywhere on Earth.

- **Power of 1° Degree Predictive Analytics** based on your drug/sales data, emergency room visits, any metric. Understand what weather is influencing your business.

- **Short range** tactical planning tools out 14 days.

- **Data feeds** to your existing planning and forecasting systems.

- **Proactive not Reactive** planning.
TIME FOR QUESTIONS

Record your questions in the question box
We’ll get to as many as we can!

Next Webinar

COVID and Your Family: Variants, Vaccines and Risks Based on Age Groups
Thursday, July 22\textsuperscript{nd}, 2021
4:00 PM ET
Register at allergyasthmanetwork.org – News - Webinars