

# 65<sup>th</sup> Medical Brigade Health Promotions

Air Quality Information in Area II



Yellow Dust from Mongolia blankets Seoul

**Facts & FYI on:**

## **Asian Dust / Yellow Sand HwangSa / Air Pollution**

### **Mold**

**USFK link for Asian Dust conditions:**

<http://www.usfk.mil/usfk/weather-yellowsand>

Dust conc. in micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ )	Level of Health Concern	Health Alert Color Code	People at High Risk*	People without respiratory or cardiovascular health problems
0-399 $\mu\text{g}/\text{m}^3$	Low	No Alerts	No activity limitations	
400-799 $\mu\text{g}/\text{m}^3$	Moderate	Health Advisory	Avoid or minimize all outdoor activities	Do not conduct outdoor physical training: Cancel outdoor activities with prolonged or heavy physical exertion†
800 or greater	High	Health Warning	Remain indoors as much as possible. Keep physical activity levels low if you must go outside	

For current ASIAN DUST LEVELS go to: <http://www.usfk.mil> and click on Yellow Sand, or call the 65<sup>th</sup> Medical Brigade Force Health Protection Office at DSN 737-1741

Commanders, Supervisors, and School Leaders should:

- Identify individuals at high risk and implement appropriate protective measures
- Include Asian Dust conditions in Training Risk Assessments

\*High Risk:

- People with breathing problems such as asthma, emphysema, or COPD
- Persons with heart disease
- Respiratory tract infections such as colds or influenza

†Heavy Exertion

- Outdoor recess or organized sports activities
- Aerobic exercises such as running or ruck marching
- Mowing lawns with a push mower

### **65<sup>th</sup> Medical Brigade link for Asian Dust at US Installations Korea-wide**

<http://www.korea.amedd.army.mil/webapp/yellowSand/Default.asp>

### **Korean Metrologic Agency site**

<http://web.kma.go.kr/eng/weather/asiandust/forecastchart.jsp>

### **For Air Quality in CONUS**

<http://www.airnow.gov/>

**KoreaAir is a Real Time Air Quality Report Website that can help people visualize pollution peninsula-wide.**

<http://www.airkorea.or.kr/airkorea/eng/realtime/main.jsp>

### **Asian Dust / Yellow Sand / HwangSa**

originates in the Gobi Desert which is part of Mongolia in Northern China. It is a result of several factors that have impacted eastern and southern Asia as far back as 1150 B.C. and Korea as early as 147 A.D.

It is a weather phenomenon that picks up sand from the Gobi Desert, but it now also picks up dust and air pollutants from industrialization of China and the desertization of Mongolia secondary to the diverting of rivers and seas for mass irrigation in China.

Not only do the irritants of sand and dust agitate existing respiratory illnesses, but pollutants also make up a portion of the Asian Dust. These include: sulfur, soot, ash, carbon monoxide, as well as viruses, bacteria, fungi, combustion by-products, and others. With all these things in the dust, it is easy to understand how those with already weakened immune systems have increased problems when Asian Dust arrives.

The best preventive measure is avoidance. If you are not able to avoid the dust, then taking precautions such as wearing a barrier mask is the next best option to **limit your exposure**.

Commanders and leaders should identify those at high risk and implement appropriate protective measures and include Asian Dust conditions in Training Risk Assessments. Profiles & fitness for duty evaluations can also be reviewed to make informed decisions.

## **During an Asian Dust plume people should:**

Avoid outdoor activities, especially the elderly, young children and people with lung diseases (such as asthma), heart disease or diabetes; dust tends to make their conditions worsen.

- Keep windows and doors closed.
- Remove contact lenses; wear glasses
- Brush your teeth; wash your hands, face and eyes with warm water upon returning indoors & before handling food
- Drink plenty of water to keep you well hydrated & your tears flowing
- Use air filters &/or a humidifier to keep air clear and moist to improve comfort
- Wash fruits and vegetables exposed to yellow sand before consumption
- Don't burn candles or spray aerosols
- Don't smoke indoors
- Vacuum or dust off outer garments, shoes, purses, backpacks and clothing before storing them in a closet with clean clothes
- If you must be outdoors, you may want to invest in a mask or other barrier. Masks commonly seen worn by locals are readily available at many stores and may help reduce exposure.

The above suggestions are to allow you to make an informed decision to care for those you are responsible for. There is no way to totally eliminate the exposure, only minimize or manage it. You need to make an informed decision and implement what best helps you and others from succumbing to the effects of the dust if you are vulnerable.

## **Carbon Monoxide**

Floors heated by fossil fuels & enclosed areas that cars run are the main environments that put Soldiers and family at risk of Carbon Monoxide poisoning while stationed in Korea. Carbon Monoxide is a colorless, odorless and tasteless gas that binds to blood cells and blocks oxygen. Symptoms include headache, disorientation and death if one remains exposed to the gas. Treatment is fresh air or high concentration oxygen if you are hospitalized. Simple awareness of your environment when dealing with automobiles or other fuel burning engines producing exhaust. Additionally, a carbon monoxide alarm, a device much like a smoke detector for your residence will help keep you safe.

**Mold, Mildew & Fungi** are present in most environments. Facility managers and housing occupants stationed in Korea have either had or heard of horror stories of the never-dying, always returning mold.

In theory, getting rid of this menace is easy; remove the *warm, moist & dark* environment molds thrive in and they are gone. Hot, humid summers in Korea tend to be the time mold problems surface.

Treat the underlying problem to prevent an on-going battle. A commercial antifungal like Lysol or 5% bleach solution may clean up an area, but mold often returns due to underlying conditions. Leaking pipes, condensation in an

enclosed area, lack of ventilation and lack of cleanliness can manifest their return. Just cleaning the mold probably will not work. Also, hiding the problem by painting over it is also not very helpful; it often returns with a vengeance. Ensuring adequate ventilation will probably reduce the vast majority of most mold problems. If they persist, contact your facility manager, landlord or housing office.

Remember to address:

Moisture -- Ventilation -- Cleanliness

Dehumidifiers may be needed to address the moisture issue especially if ventilation is limited; if not issued, you might want to consider buying them at your own expense. It may be worth it if you are "fighting" with Mother Nature or other conditions you cannot control, especially if damage occurs and you are forced to pay because you took no action.

For more information on mold, visit:

<http://www.cdc.gov/mold/faqs.htm>

<http://phc.amedd.army.mil/topics/workplacehealth/ih/Pages/IndoorAirQualityandMold.aspx>

## **65<sup>th</sup> Medical Brigade Health Promotions**

**Visit us at:**

<http://www.korea.amedd.army.mil/HealthPromotion/index.html>

**Give us a call at 736-1741 or 1751 if you have any questions.**