

PEME ADVICE

Are your crew drinking enough water?

Over the last 12 months, several cases of illness on Members' ships indicate possible dehydration in the underlying health of the crew. The majority of these cases concern crew who have suffered from kidney stones.

Kidney stones, also known as nephrolithiasis, are formed when waste products from the blood (usually oxalate and urate) are filtered out by the kidneys into the urine. When the concentration of these waste products in the urine is too high, they form crystals. These crystals then build up in the kidneys to become stones. Once a kidney stone has formed, it will attempt to pass through the urinary system. Small stones may pass through without causing any problems, but large stones can block the ureters or urethra, causing severe pain and sometimes urinary tract infections.

For the prevention of kidney stones, as well as to promote good health, it is important to be adequately hydrated. Staying hydrated can help us to perform better, both mentally and physically, and it can also help to offset potential health risks.

Our brains are about 70% water, and our bodies around 50-75% water, so it is not surprising that being inadequately hydrated can affect how we feel and perform.

It doesn't take long to start to feel the effects of dehydration. When the body's H₂O levels drop by as little as 1-2% the body can start to feel the effects of mild dehydration. These include:

- A dry mouth
- Increased thirst
- Feeling tired or sleepy



- Decrease in passing urine
- Dark coloured urine
- Dry or flaky skin
- Headaches and dizziness
- Reduced cognitive function and lack of energy

Working in hot temperatures, too much exercise, working outside in the heat, and some diseases, such as diabetes, can also cause some of the early effects of dehydration.

Despite being surrounded by water, seafarers are often not drinking enough fluids. This can cause increased risk of dehydration symptoms every day. In instances of prolonged dehydration, seafarers may even suffer from low blood pressure, rapid breathing, fever, delirium and unhealthy weight loss.

The solution is simple:

Drink more water - A minimum of eight glasses of water a day is recommended to prevent dehydration.

Avoid alcohol, sugary and caffeine rich drinks - these are diuretics and cause you to pass more urine.

Pace yourself - ensure you have enough rest.

Keep cool - light coloured, loose fitting clothes and a hat if working in the sun.

Not sure if you are dehydrated?

The easiest way is to check your urine colour and regularly get in the habit of checking. Healthy urine is clear with a tinge of yellow. Yellow, gold and brown/orange are the "warning" colours to watch for. When your body is about 3% dehydrated, your urine will be noticeably yellow. When your body is about 5% dehydrated, your urine will appear gold-coloured. When your body is severely dehydrated - more than 5% dehydrated - your urine will appear dark brown or orange.

URINE COLOUR TEST

Good
Good
Good
Fair
Dehydrated
Dehydrated
Very dehydrated
Severely dehydrated