

FREE!

Hi-VIZ

EVERYONE GETS HOME SAFE EVERY DAY!

Mission Accomplished!

Workers get another milestone across the line for the Thameslink Programme



The Thameslink Programme hit a major milestone over the Christmas period at the Bermondsey Dive Under, where the first tracks were brought into use in the early hours of 27 December. This work was part of a huge effort across the South East, where Network Rail spent almost £11m and more than 2,600 staff worked round-the-clock out on the tracks.

The Down Sussex Slow line, which will be used by Southern trains travelling from London Bridge to Sussex, is the first new line through the Dive Under, which will be completed in 2018. This new junction, which is similar to a motorway underpass or flyover, will help to untangle the tracks on the eastern approach to London Bridge station.

Currently, as trains from Sussex and Kent approach London Bridge, the railway lines cross at a series of junctions, causing congestion and creating delays. The new line offers a glimpse of the future where there will be six new lines in total running over and through the dive-under, serving Southern, Southeastern and Thameslink passengers.

From 2018, the new junction will allow Southeastern and Southern trains to 'dive under' the newly built lines that will be used by Thameslink services, improving the travel experience for millions of passengers travelling to and through the landmark new station and allowing more trains to run. The next two lines will come into passenger use over the August bank holiday blockade this summer and both will be used by Southeastern services.

Bermondsey Street Strengthening

Article by Joel Frorath, H&S Manager, Skanska



Figure 2 Scaffold working platform



Figure 4 New trimmer beam installed



Figure 5 Bermondsey Street scaffold with loading bay

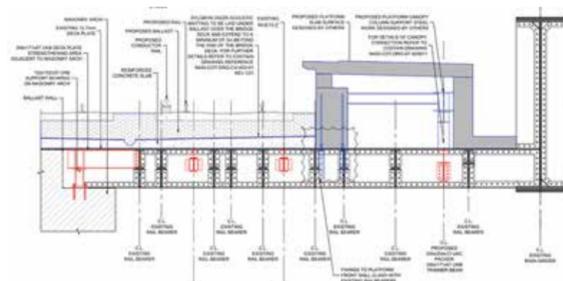


Figure 3 Cross section with proposed strengthening design

For nearly four years Skanska have been working on the Thameslink Structural Strengthening Programme in South London to increase the capacity and durability of 20 metallic structures along the Thameslink route. In May 2016 the works to strengthen one such bridge on Bermondsey Street commenced. This structure was originally constructed at the end of the 19th Century to carry rail traffic in and out of London Bridge Station. As part of the Thameslink works the overlaying track is being realigned and the rolling stock upgraded. Due to these changes the structure required strengthening.

The bridge spans 40m over a pedestrian footpath, part of the Costain London Bridge construction site and a TfL road with high traffic flows. To minimise disruption to the public the scaffold was designed to span the full width of the carriageway and footpath with sufficient height to allow the safe passage of lorries and double decker buses. To provide additional protection, a temporary goal post structure was suspended ahead of the scaffold to form a physical barrier to oversized vehicles. The scaffold installation was completed over a number of weekend road closures, working with the local authorities to minimise disruption. Vehicular and pedestrian portals were also installed within the Costain

site to allow access for construction vehicles/operatives. In early 2016 during night time road closures, the fabrication surveys for this bridge were completed using cherry pickers and scissor lifts for access. These surveys were used for the production of nearly six tonnes of strengthening beams, columns and stiffeners all due to be installed to the underside of the bridge. Three months later this steelwork was being delivered 'just-in-time', offloaded from the delivery vehicle and directly loaded onto the scaffold via a loading bay.

Once on the scaffold, piano skates were used to transport the steelwork to their final installation location minimising manual handling. The existing cross girders were drilled with new cleats installed to support the beams and abutment shelf prepared to accept the new stub columns. During this drilling work the operatives were required to wear respirators, disposable overall and have blood tests as the existing paint was lead based and therefore hazardous to health during prolonged exposure. The new steelwork was jacked into place using hydraulic bottle jacks prior to securing to ensure load transfer occurred from the bridge deck into the new beams.

The strengthening works on this particular structure

required solutions for three main areas. 1) Reduce the current unsupported deck plate span to withstand loading applied directly from the new track alignment. This was achieved with the use of both longitudinal beams and transverse beams with stub columns onto the bearing shelf. 2) Provide support to the station canopy columns from the new station being constructed above the deck as part of the London Bridge Station upgrade. These trimmer beams were installed to share the load between four cross girders and required a different solution at each end of the structure. 3) Cross girder stiffeners that connect the robust kerb above deck into the cross girders below. These stiffeners were used to prevent the existing cross girder from buckling when exposed to large impact loads from a derailed train. See figure 3 with the red items being installed by Skanska and the blue items being installed by Costain as part of the London Bridge works.

During the detailed design stage, Skanska worked very closely with their designer Ramboll to produce an efficient design that could be installed within the restricted time window.

During the design process, Skanska was always looking into ways of reducing the construction time

that would improve efficiency of the works and drive cost savings. When compared the GRIP 4 (Proposed Design) to the GRIP 5 (Final Design) the Skanska / Ramboll team managed to reduce the number of longitudinal beams by 55% thereby reducing the number of probable clashes on site. The new track alignment and resulting zone of influence was also evaluated to remove beams that were not being utilised. The remaining beams now had a larger proportion of the applied load and were calculated to resist this in accordance with Eurocodes.

The underside construction works progressed well with all the steelwork being installed within the programme and no disruption to the operational railway running overhead. The whole site team was commended for their efforts with a special thanks extended to All Task for carrying out the scaffold works and Kilbridge for providing and installing all the steelwork. In total, over 500 man hours were worked to safely deliver this structure within a challenging environment. The site was handed back by the end of July 2016 ready for the next phase of works currently being undertaken by Costain to uncover the bridge deck and construct the new station platform.

Close Call or time2talk?

Close Calls

are Unsafe or have potential to cause harm. The close call team can rectify a problem if you were unable to fix it yourself. Close Calls are the tip of the iceberg. They are clear to see and fix



- MISSING TOEBOARDS ON SCAFFOLDING
- PLANT INSPECTION OUT OF DATE
- NO EDGE PROTECTION
- PERMIT OUT OF DATE
- NO SCAFFOLD TAG
- FIRE DOOR WEDGED OPEN
- INCORRECT PPE

IMMEDIATE CAUSES (BEHAVIOURS / HAZARDS)

- UNPLANNED WORK
- FAULTY EQUIPMENT
- INADEQUATE COMMUNICATION
- UNTRAINED PEOPLE
- DESIGN FLAWS
- INADEQUATE PLANT
- INCONSISTENT PROCESSES

HIDDEN CAUSES (DESIGN, PLANNING, PLANT / EQUIPMENT, PROCESS/ PROCEDURES, PEOPLE)

time2talk

is about looking into layers of protection that may be missing or not working effectively which could allow an accident to happen. A time2talk does not have to be based on a close call. In fact it should be a pre-planned conversation. It can be a conversation to find out about something that you don't fully understand or to ensure that the correct safety Processes are in place or to discuss an idea you may have to improve safety or to realise that after investigating what you thought may pose a risk it is actually not a risk. However you have still gained knowledge of why it is not a risk. By taking the time2talk you will get below the tip of the iceberg and learn how hidden causes can be improved to make things safer.

Don't be afraid to 'rock the boat' It's our duty to challenge and question
You may notice something that nobody has before.

IDENTIFY

PLAN

REVIEW

FEEDBACK





Your Welcome Back Week

Article by Griff Bromfield-Jenkin, Costain SHE team

A positive way to return to work

January return week is stereotypically a difficult time at work. Staff are typically feeling low as the Christmas festivities are coming to an end and the old routine returns. To tackle the January blues, the SHE welcome back week programme was delivered as an injection of energy to get everyone ready for the new year and the first in the four day long series was some light-hearted comedy...

Tuesday

'The Noise Next Door' opened the week creating skills impersonating familiar characters from the site and interacting with the audience to generate key words for improvisation. This dynamic group sang songs with impromptu dance routines too! Feedback from the show was that everyone enjoyed it and thought it was a good gesture to return to work with.



The Noise Next Door



Wednesday



James Elford, Project Manager

Wednesday morning everyone gathered again to listen to an overview of the high potential incidents and accidents of 2016, with a focus on the lessons learnt from the events and how we can improve our performance going forward and preventing these events from reoccurring. The presentation was followed up with a video, outlining a slide show of all the events that we held at London Bridge during 2016 to remind people of the safety messages that they gave us.

Thursday

Dylan shared his personal life-changing experience, engaging the audience in his tragic accident that has left him unable to return to work, he reminding the audience to follow on instinct before doing something that you know is not safe. It was an encouraging talk to not ignore your doubts and to speak up and do something about it.

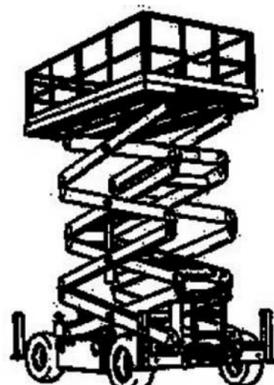


Dylan Skelhorn

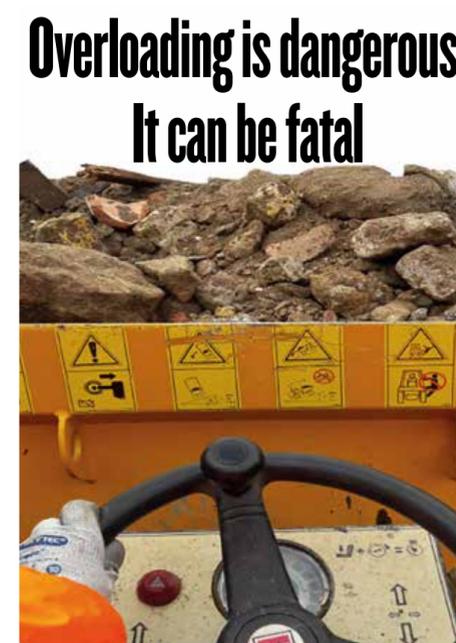
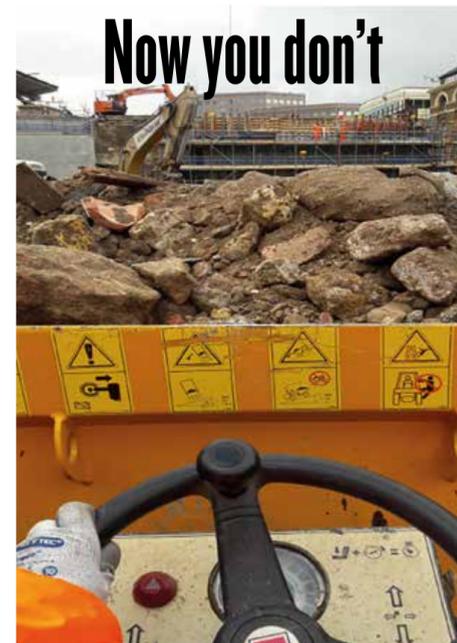
Friday

The week was rounded up with the launch of our work at height campaign, where a team from nationwide platforms toured site speaking with operatives who were using MEWPS, to talk about how to use them safely and manage their use properly.

CAMPAIGN LAUNCH



During Dylan's day on the project, he toured the site speaking to people about working at height and received good feedback on his thought-provoking presentation. "It made me stop and think before I go to work," said David Nott, Trainee Scaffolder. "Thought-provoking presentation we should do more of," added Mike Edwards, NR Construction Manager.



Making Noise Visible

A Very Bespoke Noise Strategy

The Costain Safety, Health & Environment team have been working in collaboration with Pulsar Instruments to produce an innovative design to raise noise awareness implement effective noise control procedures. The existing noise signs at LBSR were found to be stagnant and stationary. Prototypes were trialled on site and developments were made over a 6 month period. The final design is big, and comes with a flashing blue siren, in the familiar style of emergency services, making it all the more difficult to ignore.



- ✓ Illuminated when noise levels exceeded 85dB(A)
- ✓ 300mm in diameter, which was found to be too small.
- ✗ Did not comply with 110v site power requirements.
- ✗ Stationary



- ✓ 300mm in diameter
- ✓ Illuminated when noise levels exceeded 85dB(A)
- ✓ Amber flashing light when noise levels exceeded 85dB(A)
- ✓ Collected noise data for analysis
- ✓ Mobile sign
- ✗ Did not comply with 110v site power requirements



- ✓ 600mm in diameter
- ✓ Illuminated when noise levels exceeded 85dB(A)
- ✓ Blue flashing light when noise levels exceeded 85dB(A)
- ✓ Collected noise data for analysis
- ✓ Longer lead to allow data to be downloaded from a height
- ✓ Complied with 110v site power requirements
- ✓ Weather protected and mobile

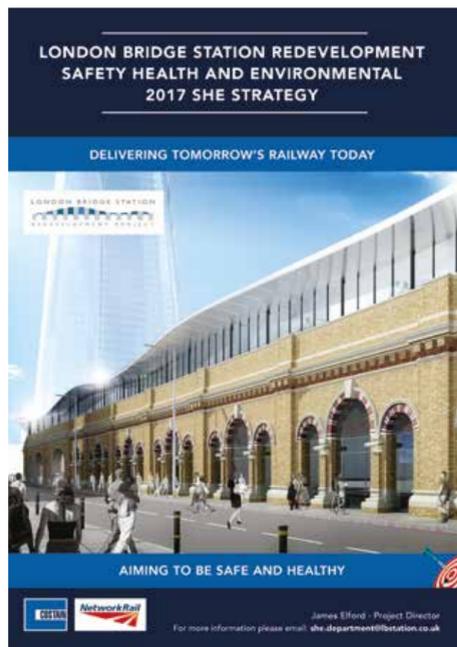


The future for noise monitoring at LBSR was further enhanced by the addition of personal noise dosimeters. These conical gadgets are designed to be attached to a hard hat and record noise throughout a shift allowing data analysis of personal noise levels of operatives in different trades on site.

For further information on the smart signage, hand held meter or personal dosimeters please contact Mark Johnston on mark.johnston@lbstation.co.uk

Be Safe Because You Want To

London Bridge team communicate their plans for 2017



James Eford
Project Director

“I am proud to have worked with you in 2016. We have one of the safest sites in the construction industry, however we can always do more, and we will do more together in 2017.”

Our focus this year will be how we take personal responsibility in making the right choices that result in safe behaviours and also to challenge our colleagues to do the same.

Always consider what could go wrong. Be safe because you want to. ☺

Des Roy
Head of Health and Safety

“This year we aim to build on the success of 2016 and further improve our performance.”

We will be introducing new processes to help us deliver our works responsibly with the safety and health of all concerned as our number one priority.

It is essential that everyone engages with the terms of our strategy and plays their part in delivering the project safely. ☺

Be SAFE
Never compromise on safety

Be HEALTHY
Always prioritise the health of our people

Be RESPONSIBLE
Create a better environment

AIMING TO BE SAFE AND HEALTHY

ENABLERS: AFR ZERO, HPE <6, LTA <9, Env <3

LEADERSHIP & COMMUNICATION IMPROVEMENT PLAN

- SENIORS: Leaders will communicate and deliver all of the 2017 SHE objectives
- ENGINEERS AND MANAGERS: Lead in the implementation of Change Management
- FRONT LINE SUPERVISORS: Input to 100% of WPP and TBS; Seniors to do all FLS 1-3-1s

SAFE BEHAVIOURS IMPROVEMENT PLAN

- WORKERS: CBS engagement – achieving ‘safe because you want to’ behaviours
- SUPERVISORS: CBS and FLS development – improved behaviours and competence
- SUPPLY CHAIN: Adoption of Behavioural Improvement Plans and 100% Safe Start

HEALTH IMPROVEMENT PLAN

- HEALTH MATURITY MATRIX: Increase health profile and standards to Silver Award level
- MENTAL HEALTH: Increase standards with MH First Aid and worker engagement
- HEALTHY HANDLING: Targeted manual handling coaching and intervention programmes

LEARNING IMPROVEMENT PLAN

- LESSONS LEARNT: Leadership in investigations and reconstructing significant incidents
- RISK MANAGEMENT: Achieve a revalidated competence in safety managing works risks
- PROCESS ASSURANCE: Integrated systems to manage Process Safety-related risks

SAFETY THROUGH TECHNOLOGY IMPROVEMENT PLAN

- SMART CONTROL: Integrating people at all levels in the delivery of safe systems of work
- TOTAL ASSURANCE: Integrated safety performance and process measurement systems
- SMARTER PLANT: Active monitoring of plant plus controls for the safety of people

Fitness for 2017

Article by Alex Madgwick, H&S Specialist, Network Rail

For many of us there is a good chance that we will have over indulged during the festive period. There is also a good chance that some of us will have made the New Year’s resolution to get in shape and/or lose weight. Before joining Network Rail, I spent just over 12 years with the Royal Navy which included time at my local careers office providing guidance to prospective servicemen and women. One thing that often tripped people up was the pre-joining

fitness test and the guide below is a basic fitness programme that would be given to people in order to improve their level of fitness and help them pass the pre-joining fitness test. This plan will not turn you into an Olympian however will provide a base level of fitness and offer some structure to follow which is something at the careers office, we noticed people often struggled without. As with any programme it does require dedication and good nutrition.

Do

- Ensure you are eating the right food to fuel your training
- Hydrate regularly
- Wear the right clothes for your training, this will help to keep you healthy and injury free
- Follow the plan closely and make sure you are following the step-by-step guide to each exercise on the website
- You can use the plan to fit within with your lifestyle. Chose the days which suit you

Don't

- Train if you experience any pain or discomfort whilst you are exercising. Please see medical advice and rest until you are given the all clear
- Over-training can cause injury. Please follow the plan closely to ensure you stay fit and healthy

Intensity

LOW INTENSITY

You should be able to easily hold a conversation whilst running this will help you judge the pace

MEDIUM INTENSITY

You should be able to hold a conversation once-in-a-while whilst running. You will be breathing heavily. Your heart rate should be above 70%

HIGH INTENSITY

You won't be able to talk running at this pace. You will be working as hard as you can. Your heart rate should be at its maximum

4 Steps to Zero Harm

- Site induction on first day on the project.
- Task briefing before starting each new task.
- COSS briefing, where applicable, before starting work on the railway infrastructure.
- Other briefings as applicable to the works being undertaken.

It is your responsibility to make sure you understand the briefing issued to you. Ask the questions if you are unclear.

Report all unsafe events and conditions
The goal of Zero Harm can be achieved when we report unsafe event and conditions so that they can be addressed. This helps keeps the workplace safe for us and others.

- Care for yourself and others by positively intervening when something is not safe or correct. Stop and Talk!
- Every unsafe event or condition must be reported. This can be done in various ways; using the close call cards on the project, speaking to your supervisor or speaking to a member of the project team.
- If you see an unsafe event that can be rectified safely, please rectify it. Do not forget to also report it! Reporting it ensures that it is communicated across the project and prevents it happening again.

Stop work when anything changes
Employees will ensure that work stops and the supervisor is notified when there are changes to the site, the planned safe system of work, or they are concerned that the activities are unsafe.

- If it is not written as an activity in the task briefing, stop work!
- If the worksite changes, stop work!
- If the weather changes, stop work!
- If it does not look right, then it probably is not, stop work!

Work will only restart once employees have been re-briefed on the new risks and the actions needed. If a task is stopped for safety reasons we will back up our employees and conduct an investigation so we can learn from it and prevent a recurrence.

On our sites, everyone will be expected to remember the 4 Steps.
You will be stood-down and re-briefed if you cannot remember the 4 Steps process.
Zero Harm is easy as
B – Be fit for work
A – Always receive a briefing before starting work
R – Report unsafe events and conditions
S – Stop works if anything changes



Article by Stephen Hillier, EHS Specialist, Siemens

Siemens places great importance on health and safety and everyone has a personal responsibility to achieve this important goal, which applies to our employees, visitors, contractors, customers and business partners.

Our approach to safety can be summed up in four simple letters **B.A.R.S**

Be fit for work
Everyone should advise their supervisor before starting work if they have any health issues (mind or body) which can lead to them being unfit to work. This means anything which affects their ability to:

- concentrate on work.
- physically undertake the work.

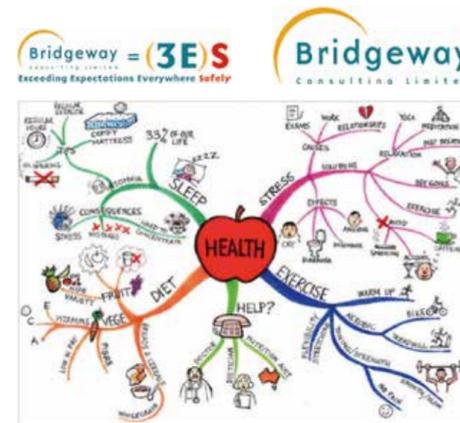
Always receive a briefing before you start work
Employees will only start work once they have been briefed and fully understand the task, risks and rules. This includes:



Let's work together to achieve Zero Harm.

The Bridgeway Possession Team: Aiming to Get Lean in '17

The Bridgeway TLP Possession Support team have started the New Year as they mean to go on in terms of their personal fitness and overall wellbeing. During January, the Bridgeway HSQE team organised a health and wellbeing session for the possession team at Deptford and many of them volunteered to undertake a health check/mini medical which covered checks for cholesterol measurement, Body Mass Index (BMI), diabetes and blood pressure. There was also advice on hand in relation being fit for work: eating the right foods, getting exercise and also information on how to sleep better – especially as they all work nights and weekends. There is another session programmed for the spring to see how they are all getting on with their new personal health and wellbeing commitments (see right).



<p>Iain Lenagh "I would like to lose some weight."</p> <p>Daniel Firmingar "I want to lose weight as I'm getting married this year."</p> <p>Matt Bishop "I am going to join a gym and lose some weight."</p> <p>Kelly Mullins "I will make changes to my eating habits and diet."</p> <p>Steve Gatland "I will continue with cross fit and maintain a balanced diet."</p>	<p>Ricky Arnold "I have already made lifestyle changes and will continue at the gym weight training."</p> <p>Garry Terry "I will stop smoking and will make changes to my diet."</p> <p>Rod Shoveller "Keeping to my existing diet, working well, and I am happy with my progress."</p> <p>Tim O'Dea "I will join a local gym and make changes to my diet."</p> <p>Alex Allcorn "I have joined a gym and will make significant changes to my diet."</p>
--	--



Heart Health for the Heart Month



Kate Cook is a nutritionist who has worked with leading companies for 16 years to improve health through inspiring change in nutrition. Eating better, she believes, is not only better for individuals but for companies too. She has written 5 books including "The Corporate Wellness Bible" and has a clinic in Harley Street, London.

Kate will be giving us some advice on health and wellbeing. If you have any specific requests for articles that you'd like to see Kate cover contact sharon.fink@networkrail.co.uk.

When reading food labels you should be aware the manufacturers often list salt as sodium this is important as 1g of sodium equates to 2.5g of salt! If a food has more than 0.6g of sodium or 1.5g salt then it should be regarded as high in salt.

2. Improve your diet & cut down on fat



Saturated fat and trans fats raise high cholesterol (LDL), can lower good cholesterol (HDL) and therefore should be avoided.

Moderate amounts of unsaturated fat is good for your cholesterol levels and can be found in foods such as olive oil, rapeseed oil, nuts and seeds.

You should also increase your daily intake of fruit and vegetables. Pomegranates, blueberries and spinach are high in antioxidants which have an inflammatory effect on the blood vessels reducing the risk of heart disease. Oranges, mushrooms and bananas are high in potassium which helps to regulate blood pressure.

3. Get moving



Many of us have very busy lifestyles these days and struggle to fit in a regular exercise regime but there are a few small changes you can make to your day to increase your physical activity; try getting off the bus or tube a stop earlier on your way to work, taking the stairs instead of the escalator or parking further away from the shops.

Just 30 minutes of exercise a day can help increase your heart health by making your circulatory system more efficient, keeping your blood pressure low and lowering your cholesterol.

4. Stop Smoking



Smokers are twice as likely to have a heart attack compared with those who have never smoked. Smoking narrows the arteries, raises blood pressure and thickens the blood making it more likely to clot.

To get help to stop smoking you should visit your GP who can advise you of the various treatments and support available.

5. Know your family history



You have an increased chance of heart disease if there is a history of it in your family.

You are considered to have a family history of heart disease if your father or brother was under the age of 55 when they were diagnosed or your mother or sister was under the age of 65 when they were diagnosed.

If you are aware of a family history of heart disease you should contact your GP who might want to check your cholesterol and blood pressure.

Although you cannot change your family history, by following the first four steps in this article you can increase your heart health and give yourself a better chance of living a longer and healthier life.

Wordsearch

Wordsearch by Tim Witcomb, Network Rail

A wordsearch puzzle: The following 30 words are hidden in the grid above. Words can appear forwards or backwards. Can you find them all?

- | | | | | |
|------------------|--------------|-------------------|---------------|-------------------|
| HAPPY NEW YEAR | KEENLY | FORTITUDE | ID TAG | LIFE SAVING RULES |
| LOSE SOME WEIGHT | SPRINGY | FORGET IT | CLOSE CALLS | AGENDA |
| INTENTION | ENTITLED | LONG IN THE TOOTH | JOIN THE GYM | SUMMER HOLIDAYS |
| FOOLISH | FINESSE | SAFE WORKING | GOOD | KING CRAB |
| ANNULMENT | RESOLUTION | NESTLED | NOT LAST LONG | INORGANIC |
| STAFFED | STOP SMOKING | OUTVIED | TRAUMAS | PRIDEFUL |

S	P	R	U	S	L	L	A	C	E	S	O	L	C	I
U	L	E	N	T	I	T	L	E	D	E	G	O	O	D
M	O	O	N	O	T	L	A	S	T	L	O	N	G	T
M	S	L	E	P	R	I	D	E	F	U	L	G	O	A
E	E	U	O	S	A	F	E	W	O	R	K	I	N	G
R	S	T	M	M	E	I	N	O	R	G	A	N	I	C
H	O	I	Y	O	Y	N	O	I	T	N	E	T	N	I
O	M	O	G	K	W	E	H	F	I	I	V	H	U	F
L	E	N	E	I	E	S	O	U	T	V	I	E	D	O
I	W	A	H	N	N	S	A	M	U	A	R	T	E	R
D	E	G	T	G	Y	E	R	Y	D	S	T	O	L	G
A	I	E	N	C	P	Y	L	N	E	E	K	O	T	E
Y	G	N	I	R	P	S	D	E	F	F	A	T	S	T
S	H	D	O	A	A	F	O	O	L	I	S	H	E	I
Y	T	A	J	B	H	A	N	N	U	L	M	E	N	T

According to the NHS, someone in the UK has a heart attack every two minutes and one in three of those people die within 24 hours of the attack. But it doesn't have to be that way – the majority of heart attacks in people under the age of 75 are avoidable.

Follow these 5 steps to improve the health of your heart and live a longer and healthier life:

1. Reduce your salt intake



Although the body does need a small amount of salt, too much salt can lead to high blood pressure. Adults are recommended to have no more than 6 grams or 1 teaspoon of salt each day.