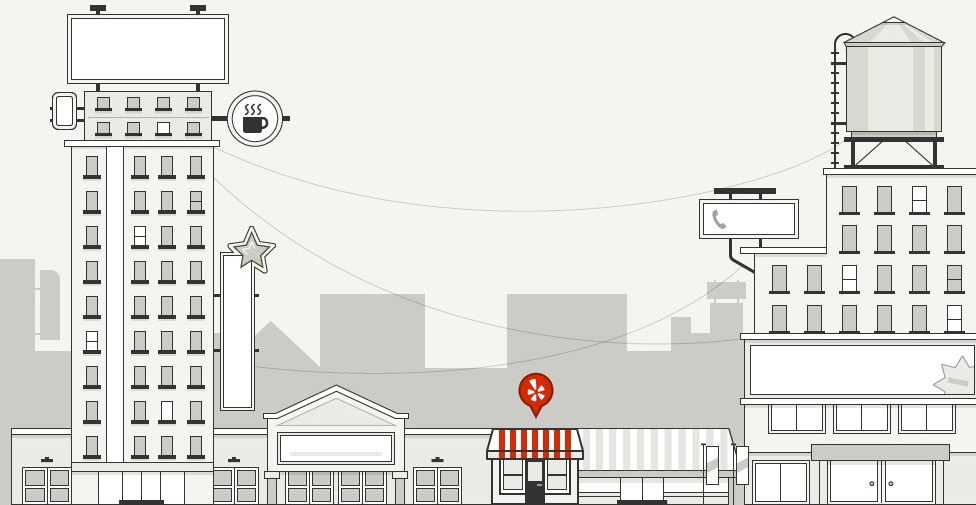


Never Events

LISA 2017

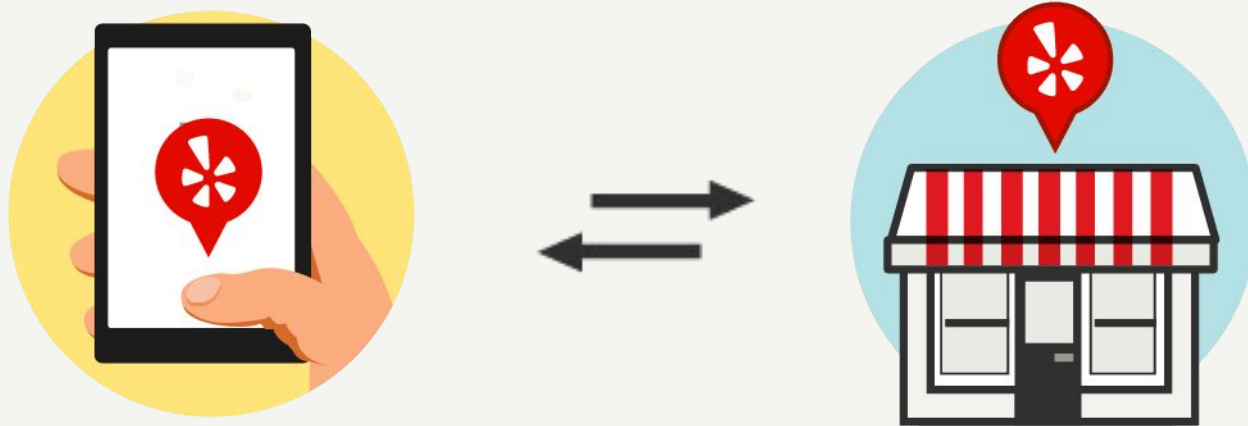
Matt Provost

mattpro@yelp.com/[@hypersupermeta](https://twitter.com/hypersupermeta)



Yelp's Mission

Connecting people with great local businesses.



History of the NHS

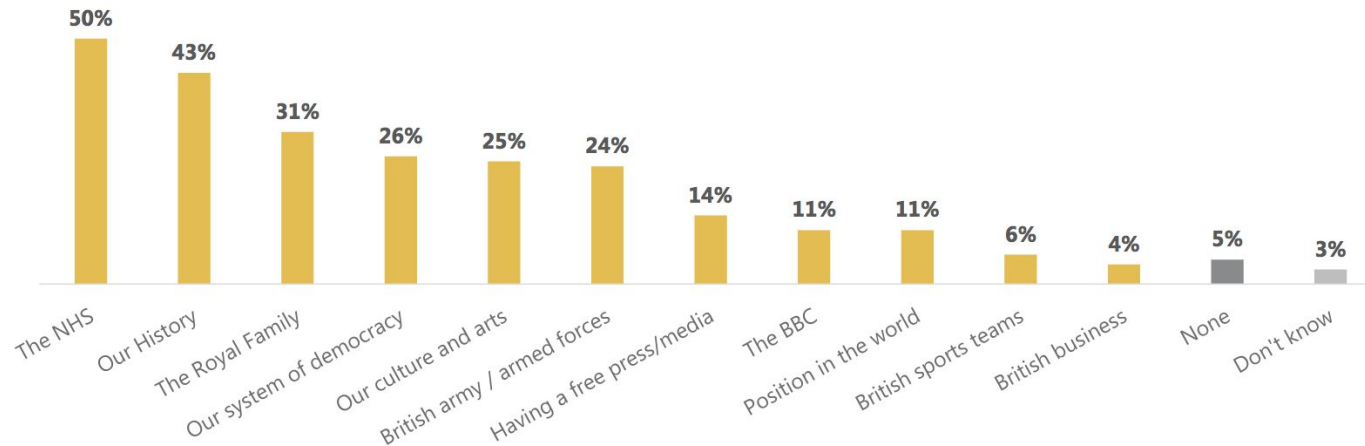


- World's first universal health care system - June 1948
- Clement Attlee's Labour government
- 3 founding core principles
 - Meet the needs of everyone
 - Free at the point of delivery
 - Based on clinical need, not ability to pay
- Serves 64.6 million people in the UK
- 1 million patients every 36 hours
- 5th largest employer in world (2015) - 1.7m staff



The NHS makes us most proud to be British

Which two or three of the following, if any would you say makes you most proud to be British? Please select up to 3 options.



Americans baffled by 'left-wing tribute' to free healthcare during Opening Ceremonies (and what was with those flying Mary Poppines defeating Lord Voldemort?)

Site Web

- **Multimillion-dollar spectacular featured zany aspects of British culture, including the Royal Family, James Bond, Harry Potter, The Beatles, and tributes to its history, including Industrial Revolution**
- **Also featured lengthy tribute to the National Health System (NHS), Britain's publicly-funded network that offers care to all Britons**

By [BETH STEBNER](#)

PUBLISHED: 14:29, 28 July 2012 | **UPDATED:** 18:27, 28 July 2012



241
View comments

Americans have reacted with confusion to the glorification of free universal health care in the London 2012 Olympic Opening Ceremony as the country continues to be divided by the debate over its own healthcare system.

Last night's spectacular \$42million, the brainchild of Oscar-winning British director Danny Boyle, included a segment where dozens of skipping nurses and children in pajamas leaping acrobatically on massive hospital beds, with a large 'NHS' displayed.

NHS Serious Incident Framework

- **Unexpected or avoidable death** of one or more people. This includes:
 - suicide/self-inflicted death; and
 - homicide by a person in receipt of mental health care within the recent past;
- **Unexpected or avoidable injury** to one or more people that has resulted in serious harm;
- Unexpected or avoidable injury to one or more people that requires further treatment by a healthcare professional in order to prevent:
 - the death of the service user; or
 - serious harm;
- **Actual or alleged abuse**; sexual abuse, physical or psychological ill treatment, or acts of omission which constitute neglect, exploitation, financial or material abuse, discriminative and organisational abuse, self neglect, domestic abuse, human trafficking and modern day slavery where:
 - healthcare did not take appropriate action/intervention to safeguard against such abuse occurring; or
 - where abuse occurred during the provision of NHS-funded care.





Yelp is currently down for maintenance.



Uh, oh... looks like Darwin has been a busy puppy. Don't worry, we'll be back shortly!

Never Events

Never Events arise from the **failure of strong systemic protective barriers** which can be defined as successful, reliable and comprehensive safeguards or remedies e.g. a uniquely designed connector to prevent administration of a medicine via the incorrect route.

Serious Incident Framework 2015



Never Event Criteria

- ✓ Wholly preventable
- ✓ Potential to cause serious patient harm or death
- ✓ Has occurred in the past, risk of recurrence remains
- ✓ Easily recognised and clearly defined



Never Event Criteria

They are **wholly preventable**, where guidance or safety recommendations that provide strong systemic protective barriers are available at a national level, and should have been implemented by all healthcare providers.



Systemic Protective Barriers

- **Physical barriers** (e.g. special equipment that makes it impossible to connect medications via the wrong route)
- **Time and place barriers** (e.g. withdrawal of concentrated medication from settings to prevent accidental selection) or systems of double or triple checking only where supported by visual or computerised warnings, standardised procedures, or memory/communication aids.





Systemic Protective Barriers

As all human action is vulnerable to human error, particularly where there is a risk of staff becoming overloaded, processes that rely solely on one staff member checking the actions of another or referring to written policies are **not** strong barriers.

Revised Never Events Policy and Framework 2015



Never Event Criteria

Each Never Event type **has the potential to cause serious patient harm or death**. However, serious harm or death is not required to have happened as a result of a specific incident occurrence for that incident to be categorised as a Never Event.



5.1 Minimum Reporting Requirements

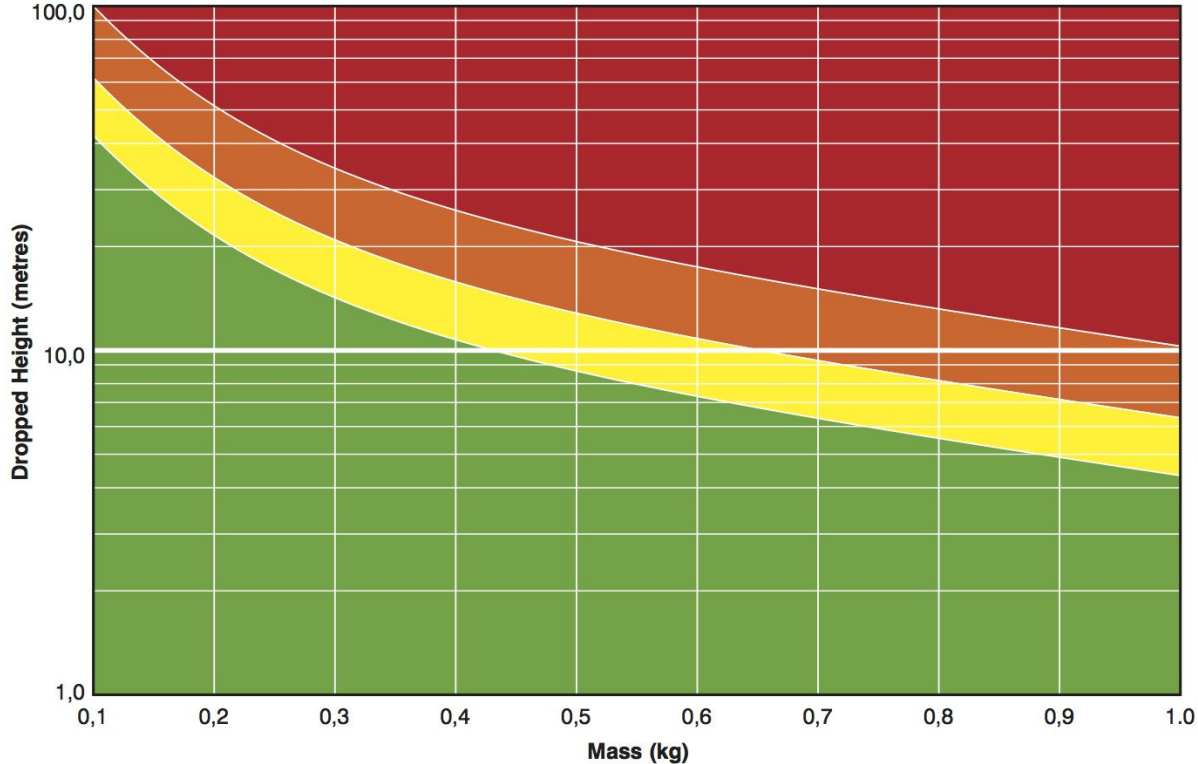
Recommended Practice

Each company's incident reporting procedure requires personnel to report all dropped object incidents, whether or not the incidents result in injuries. The following is included in the report, specifically for incidents related to dropped objects:

- Incident location and area.
- Weight and height of potential dropped object.
- Whether the dropped object occurred within a specific No-Entry or Restricted Access Zone as defined by the company (or as defined in section 2.7).
- Number of people present in the DROPS No-Entry or Restricted Access Zones at the time the object dropped.
- Dropped-object-related incidents (e.g., unsafe act or condition, near miss, incident with consequences) with the results of using the DROPS Calculator included in Annex A.

DROPS METRIC CALCULATOR

Classification Dropped Objects Potential Consequences 1,0m to 100,0m / 0,1kg to 1.0kg



This Calculator provides a common benchmark in the classification of the potential consequences of a dropped object.

One of a number of similar tools, the DROPS Calculator is endorsed by the DROPS Workgroup and recognised by HSE Organisations. While other 'calculators' exist, they all follow the same principle – plotting the mass of a dropped object against the distance it falls to determine its possible consequences.

Considerations

- With light objects (<0.1 kg) a key influencing factor is the effect of an object punching the skin and damaging tissue/organic functions. The calculator assumes a blunt object so is not compatible with broken glass, metal shards etc.
- The wearing of standard PPE, eg hard hat, safety boots and eye protection, is assumed in the calculator.
- Do not subtract the height of an individual, measure fall distance to solid deck/ ground level.
- DROPS Calculator and other similar tools are guides only providing cursory indication of possible outcome – they are not an accurate prediction.
- In reality, even a small object falling from height can be lethal.

Mass x Distance x Gravitational Acceleration = Fall Energy

| |
|--|
| Fatality |
| LTI Lost Time Injury (Major Injury DAFWC) |
| MTC Medical Treatment Case (Minor Injury) |
| First Aid (Slight Injury) |

Yelp DAR Levels

- **DAR1** - The site is broken, or we're losing lots of money
 - The site is hard down to some or all users
 - We are serving Darwins or HAProxy error pages
- **DAR2** - Users are having a bad experience, or we're losing some money
 - Slow timings (99ths, 50ths) on any site (>2x normal levels)
- **DAR3** - This is serious, but not visible to users or affecting revenue
 - Code cannot get to production



Never Event Criteria

There is evidence that the category of Never Event **has occurred in the past**, for example through reports to the National Reporting and Learning System (NRLS), and a **risk of recurrence remains**.



Never Event Criteria

Occurrence of the Never Event is **easily recognised and clearly defined** – this requirement helps minimise disputes around classification, and ensures focus on learning and improving patient safety.



Never Event Criteria

- ✓ Wholly preventable
- ✓ Potential to cause serious patient harm or death
- ✓ Has occurred in the past, risk of recurrence remains
- ✓ Easily recognised and clearly defined



NHS Never Events List 2015/16

- Surgical
- Medication
- Mental Health
- General



NHS Never Events List 2015/16

- Surgical
 - Wrong site surgery
 - Wrong implant/prosthesis
 - Retained foreign object post-procedure



NHS Never Events List 2015/16

- Medication
 - Mis-selection of a strong potassium containing solution
 - Wrong route administration of medication
 - Overdose of Insulin due to abbreviations or incorrect device
 - Overdose of methotrexate for non-cancer treatment
 - Mis-selection of high strength midazolam during conscious sedation



NHS Never Events List 2015/16

- Mental Health
 - Failure to install functional collapsible shower or curtain rails

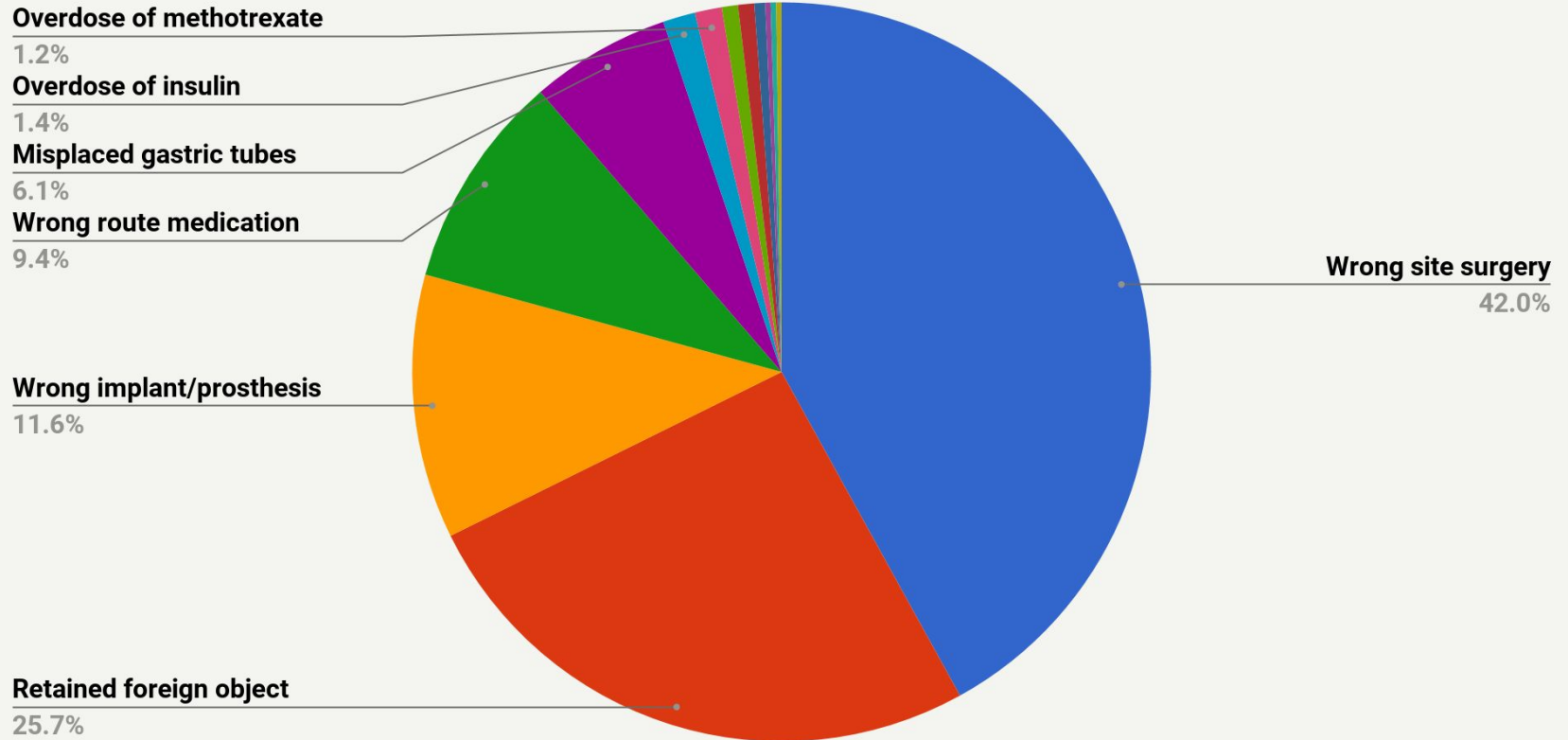


NHS Never Events List 2015/16

- General
 - Falls from poorly restricted windows
 - Chest or neck entrapment in bedrails
 - Transfusion or transplantation of ABO-incompatible blood components or organs
 - Misplaced naso- or oro-gastric tubes
 - Scalding of patients



NHS Never Events 2016-04-01- 2017-03-31

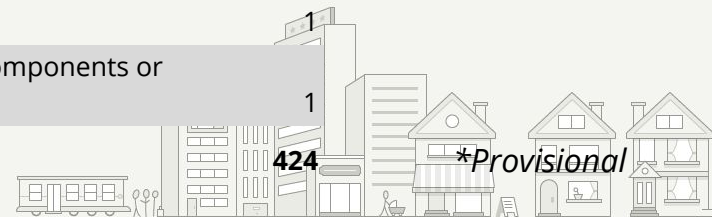


NHS Never Events 2016-04-01- 2017-03-31*

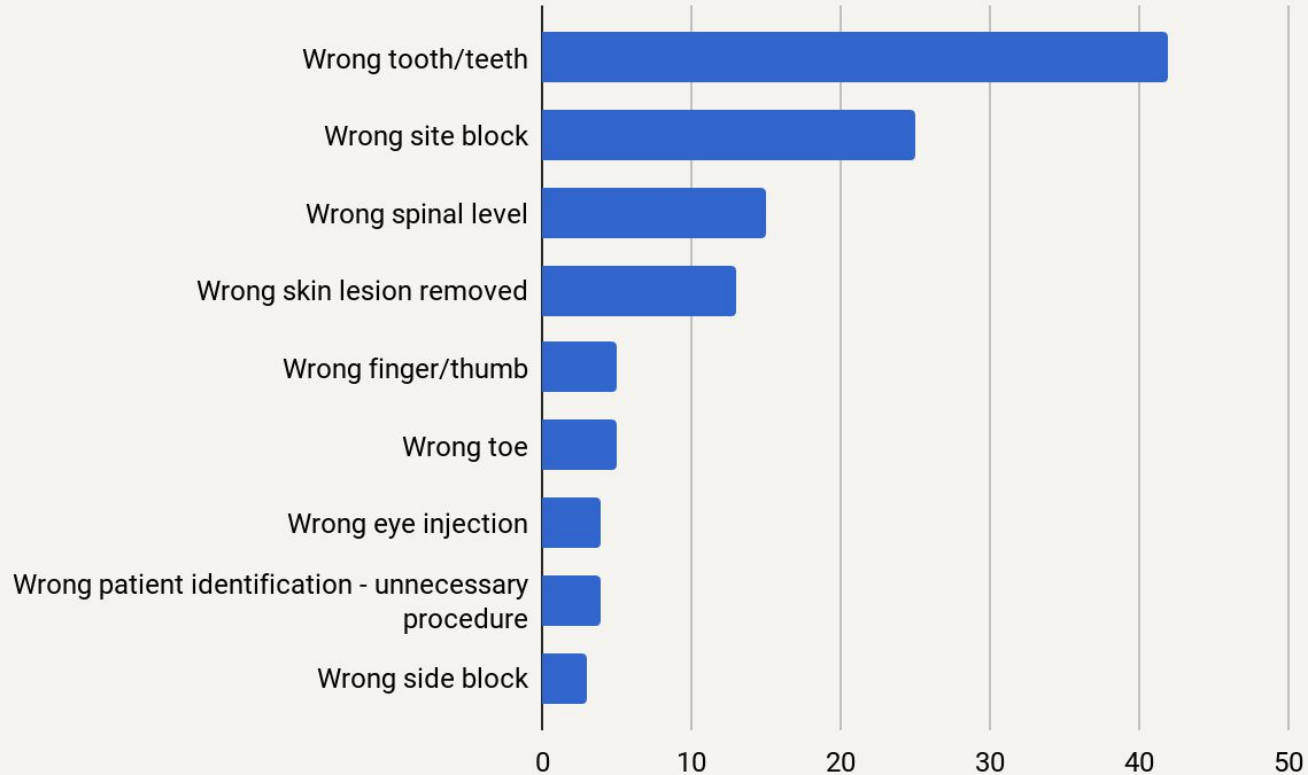
| | |
|---|-----|
| Wrong site surgery | 178 |
| Retained foreign object post procedure | 109 |
| Wrong implant / prosthesis | 49 |
| Wrong route administration of medication | 40 |
| Misplaced naso or oro gastric tubes | 26 |
| Overdose of insulin due to abbreviations or incorrect device | 6 |
| Overdose of methotrexate for non cancer treatment | 5 |
| Chest or neck entrapment in bedrails | 3 |
| Falls from poorly restricted windows | 3 |
| Failure to install functional collapsible shower or curtain rails | 2 |
| Scalding of patients | 1 |
| Mis-selection of a strong potassium containing solution | 1 |
| Transfusion or transplantation of ABO incompatible blood components or organs | 1 |

424

*Provisional



Wrong Site Surgery





Dashboards ▾

Projects ▾

Issues ▾

More ▾

Create

Search



Operations Incident Response / DAR-102

UPDATE statement without WHERE clause impeding the usefulness of our databases



Edit



Comment

Assign

More ▾

In Progress

Closed

Postmortem

Details



Type:

Fault

Status:

CLOSED

Priority:

1 Do now

[\(View Workflow\)](#)



Affects Version/s:

None

Resolution:

Done

Fix Version/s:

[2014 - DAR1-3 - not actual DARs](#)

Labels:

None





GitLab



Trying to restore the replication process, an engineer proceeds to wipe the PostgreSQL database directory, errantly thinking they were doing so on the secondary. Unfortunately this process was executed on the primary instead. The engineer terminated the process a second or two after noticing their mistake, but at this point around 300 GB of data had already been removed.



Summary of the Amazon S3 Service Disruption in the Northern Virginia (US-EAST-1) Region

We'd like to give you some additional information about the service disruption that occurred in the Northern Virginia (US-EAST-1) Region on the morning of February 28th, 2017. The Amazon Simple Storage Service (S3) team was debugging an issue causing the S3 billing system to progress more slowly than expected. At 9:37AM PST, an authorized S3 team member using an established playbook executed a command which was intended to remove a small number of servers for one of the S3 subsystems that is used by the S3 billing process. Unfortunately, one of the inputs to the command was entered incorrectly and a larger set of servers was removed than intended. The servers that were inadvertently removed supported two other S3 subsystems. One of these subsystems, the index subsystem, manages the metadata and location information of all S3 objects in the region. This subsystem is necessary to serve all GET, LIST, PUT, and DELETE requests. The





Dashboards ▾

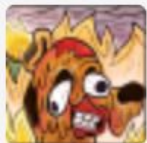
Projects ▾

Issues ▾

More ▾

Create

Search



Operations Incident Response / DAR-37

us-east-1 has been terraformed

Edit

Comment

Assign

More ▾

In Progress

Closed

Postmortem

Details

Type:

Fault

Status:

CLOSED

Priority:

0 Drop everything

Resolution:

Done

Affects Version/s:

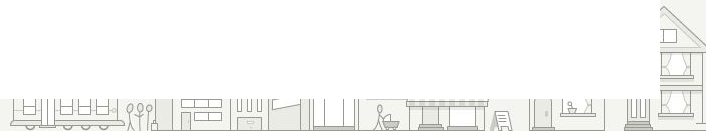
None

Fix Version/s:

2014 - DAR1-3 - not actual DARs

Labels:

None



WHO Surgical Safety Checklist

(adapted for England and Wales)

SIGN IN (To be read out loud)

Before induction of anaesthesia

Has the patient confirmed his/her identity, site, procedure and consent?

Yes

Is the surgical site marked?

Yes/not applicable

Is the anaesthesia machine and medication check complete?

Yes

Does the patient have a:

Known allergy?

No

Yes

Difficult airway/aspiration risk?

No

Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?

No

Yes, and adequate IV access/fluids planned

PATIENT DETAILS

Last name:

First name:

Date of birth:

NHS Number:

Procedure:

*If the NHS Number is not immediately available, a temporary number should be used until it is.

TIME OUT (To be read out loud)

Before start of surgical intervention for example, skin incision

Have all team members introduced themselves by name and role?

Yes

Surgeon, Anaesthetist and Registered Practitioner verbally confirm:

What is the patient's name?

What procedure, site and position are planned?

Anticipated critical events

Surgeon:

How much blood loss is anticipated?

Are there any specific equipment requirements or special investigations?

Are there any critical or unexpected steps you want the team to know about?

Anaesthetist:

Are there any patient specific concerns?

What is the patient's ASA grade?

What monitoring equipment and other specific levels of support are required, for example blood?

Nurse/ODP:

Has the sterility of the instrumentation been confirmed (including indicator results)?

Are there any equipment issues or concerns?

Has the surgical site infection (SSI) bundle been undertaken?

Yes/not applicable

• Antibiotic prophylaxis within the last 60 minutes

• Patient warming

• Hair removal

• Glycaemic control

Has VTE prophylaxis been undertaken?

Yes/not applicable

Is essential imaging displayed?

Yes/not applicable

SIGN OUT (To be read out loud)

Before any member of the team leaves the operating room

Registered Practitioner verbally confirms with the team:

Has the name of the procedure been recorded?

Has it been confirmed that instruments, swabs and sharps counts are complete (or not applicable)?

Have the specimens been labelled (including patient name)?

Have any equipment problems been identified that need to be addressed?

Surgeon, Anaesthetist and Registered Practitioner:

What are the key concerns for recovery and management of this patient?

This checklist contains the core content for England and Wales

www.npsa.nhs.uk/nrls



SIGN IN (To be read out loud)

Before induction of anaesthesia



Has the patient confirmed his/her identity, site, procedure and consent?

Yes

Is the surgical site marked?

Yes/not applicable

Is the anaesthesia machine and medication check complete?

Yes

Does the patient have a:

Known allergy?

No

Yes

Difficult airway/aspiration risk?

No

Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?

No

Yes, and adequate IV access/fluids planned



TIME OUT (To be read out loud)

**Before start of surgical intervention
for example, skin incision**

Have all team members introduced themselves by name and role?

Yes

**Surgeon, Anaesthetist and Registered Practitioner
verbally confirm:**

What is the patient's name?

What procedure, site and position are planned?

Anticipated critical events

Surgeon:

How much blood loss is anticipated?

Are there any specific equipment requirements
or special investigations?

Are there any critical or unexpected steps you
want the team to know about?



SIGN OUT (To be read out loud)

Before any member of the team leaves the operating room

Registered Practitioner verbally confirms with the team:

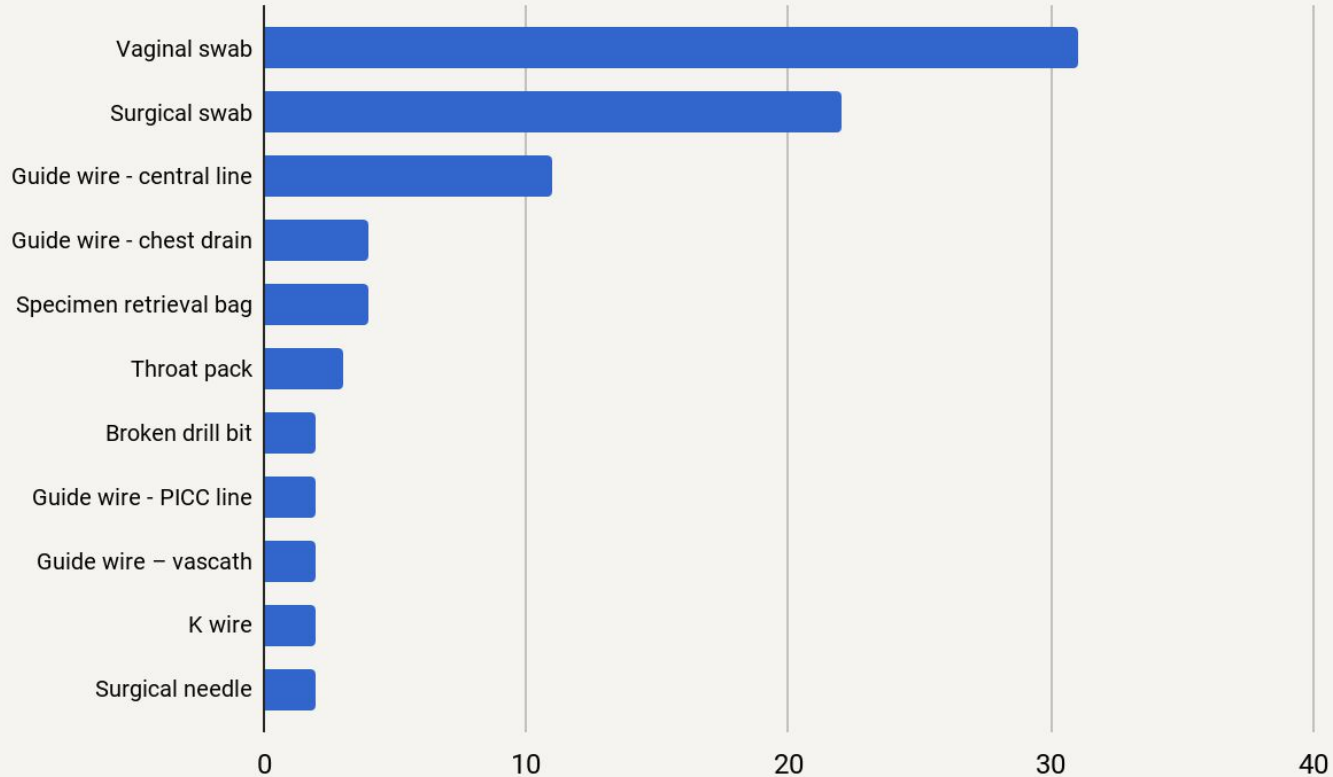
- Has the name of the procedure been recorded?
- Has it been confirmed that instruments, swabs and sharps counts are complete (or not applicable)?
- Have the specimens been labelled (including patient name)?
- Have any equipment problems been identified that need to be addressed?

Surgeon, Anaesthetist and Registered Practitioner:

- What are the key concerns for recovery and management of this patient?



Retained Foreign Object Post-Procedure



Accountable items, swab, instrument and needle count

Unintended retained objects are considered a preventable occurrence, and careful counting and documentation can significantly reduce, if not eliminate these incidents (AORN 2010, AFPP 2011). A count must be undertaken for all procedures where countable objects (e.g. swabs, instruments, sharps) are used.

Although it is the responsibility of the user to return all items, the scrub practitioner implements and manages the checking procedure in order to be able to state categorically to the operating surgeon that all items are accounted for at appropriate points.

The count must be audible to those present and must be conducted by two members of staff, one of whom must be an appropriately qualified member of the perioperative team (i.e. a Registered Nurse or Operating Department Practitioner). The other staff member may be a non-registered practitioner who has attained a validated count assessment through national or locally validated training.

There should be standardisation of how countable items are named/referred to across one organisation and referenced into the local policy – this minimises the risk of confusion. The list below includes common names of items and can be used as a benchmark.

Countable items

Countable items may include, but are not limited to and may include anything additional procured during surgery that has the potential to be retained within a body cavity.

Blades - Bulldoggs - Cotton wool balls - Diathermy tip cleaners - Instruments including screens or detachable parts - Larynx swabs (pneumts, pledgets) - Liga-reels - Local infiltration needles - Laparoscopic retrieval bag - Other isolation bags - Needles - Ophthalmic micro sponges - Patches - Retrievers from swab packs (also acts as an additional check with the count board for swab number accuracy) - Slings/sloops - Sheds - Sponges - Tapes - X-ray detectable gauze swabs, mops or packs - names vary according to local requirements.

Recommendations for Local Policy

Education/training

Where an organisation supports education in the perioperative environment, pre-registered nursing students, student ODPs or student assistant theatre practitioners should have supervisory status until they have been deemed competent to assist with the count by an appropriately qualified member of the profession team. It is recommended that this should be undertaken by a registered practitioner. The count must additionally be signed and validated by an appropriately registered practitioner (RSC or ODP as previously stated).

An introduction to the local count policy must be included in the new staff induction programme. Healthcare assistant/support workers should not be involved with the count until they have attained a validated count assessment or national training package and deemed as competent by a registered practitioner.

Documentation evidence of the assessment should be available and updated as defined by local policy and COT requirements.

Swabbing

All swabs, including larynx swabs (pneumts, pledgets), neuro patches and packs that are used during the procedure must have an X-ray detectable marker fixed securely across the width of the swab.

All swabs and packs must be packed in bundles of five and be of a uniform size and weight. Any package containing fewer or more than five should be reviewed from the procedure area immediately. Checks should be made based on multiples of five and recorded on the count board in multiples of five. This includes the use of custom made bundles utilised in ear, nose and throat surgery.

Responsibility for count

The team must periodically personnel should perform all the counts that are done during a surgical procedure.

The team brief should discuss the staff allocation to scrub and count who should remain constant throughout the procedure.

Where it is known that the operative procedure may take longer than six hours to complete, a risk assessment should be undertaken to ensure that the scrub and circulating practitioners are able to practice for the duration of the case and to plan for the case continuation if circumstances require.

Should it be necessary to replace the scrub practitioner during the procedure, a complete count should be performed, including all X-ray instrument checks, recorded and signed by the incoming and outgoing practitioners. The name of the replacement practitioner must be recorded on the count sheet immediately.

Should it be necessary to replace either person temporarily, the relieving practitioner should follow the standard procedure and issue and sign any additional items to the intra-operative record. The name of the replacement relieving practitioner must be recorded on the intra-operative record.

If a scrub practitioner is not required during procedures such as dilation and curettage the circulating practitioner should be responsible for the count with the operating surgeon as per local policy.

Items which are to be returned to the patient by theatre (e.g. padding, gauze, drapes, catheters) must be recorded in the intra-operative record and documentation must be accompanied by staff who are able to assist with the removal of the item. The removal must also be recorded, including the time, date, name and designation of the practitioner removing the item.

All items must remain in the operating theatre until the procedure has been completed and all counts have been performed, including locally and ODPs used for case continuation. Clinical waste bags should be labelled with the patient's number, date of operation and theatre identity.

Swabs that are used on surface dressing must not be available. The packaging for these swabs should only be opened at an clean site. It is recommended that the

dressings are a different colour from white gauze (e.g. blue) so that they are easily identifiable. A very absorbent gauze should not have the rigging removed by a member of the operating team in order to use it as a surface dressing as this will affect product safety.

Checking procedure

Provision should be made in theatre for a standardised dry wipe count board which states all relevant items used. This board should be permanently fixed to the theatre wall and be at least 1.6m in height that facilitates access and visibility during the procedure.

Physiological should contain a multi-colour marker. The manufacturer is responsible for changing (through) packs prior to the patient prior to or during an operation (AFPP 2011). The marking and removal of the physiological (through) pack should be documented on the anaesthetic record and the theatre dry wipe count board. The NPSA recommends one check and one documented method to identify placement and removal of the pack (NPSA 2006).

The initial count instrument and check count must be performed immediately prior to the commencement of surgery. A second count should occur before closure of a cavity within a cavity (e.g. abdomen) or before closure (e.g. thorax) compartment (the final) before wound closure begins, and finally an exit count at the end of the procedure giving a total of all instruments, swabs, or any detachable items used for catheterisation procedures should remain in theatre and be part of the count. When additional items are added to the list, they should be counted at the time and recorded on the count documentation.

In the event of a MCDOP 1 immediate life threatening emergency (MCDOP 2006) it is recommended that the anaesthetic team perform an initial count and instrument check and the scrub practitioner must remain at the bedside. The team should facilitate a count being undertaken at the earliest and most appropriate opportunity and documented in the patient file.

If a pack is used, any recognition method (e.g. entry clip on abdominal pack kit) must be as assessed appropriate according to the surgical site and patient method. If a blade, needle or instrument is used during the case, the scrub practitioner should ensure that all pieces have been returned to them and are accounted for. Any instruments found to be damaged, and therefore a potential risk, must be sent out of site and labelled for repair. It may be necessary to inform the health protection department, the manufacturers and/or the medical and healthcare products regulatory authority (MHRA).

When checking swabs the scrub practitioner should ensure that the item is fully opened and checked for integrity.

Instruments and items with sharps and/or removable parts should also be included in the count. On completion of the count a verbal statement to the operating surgeon (or designated member of the surgical team) (e.g. surgeon or theatre practitioner) should be made by the scrub practitioner to confirm the count. Instruments and items that are not counted should be recorded on the count board. The circulating practitioner that the operating surgeon acknowledges the relevant statement.

The circulating and scrub persons must remain in the relevant documentation that satisfactory checks have been completed.

Checking techniques

Both practitioners must count aloud and in person. Items should be completely audibly counted and the count should be recorded on the count board. An initial pre-void, for example from a void bag, should be recorded during the count. At the initial count, the count should be recorded on the count board. For inter-void counts, the count should be recorded at the end of the last recorded item.

The integrity of the X-ray detectable markers in swabs, packs, pneumatic, as well as the integrity of the swab and instrument bundles, must be checked during the count. At the initial count, and where added during the procedure, swabs and packs should be checked through groups of five. These should be added to those already counted and the number in the pack be verified. The additions should be in multiples of five.

In the event of an incorrect number of swabs or packs (i.e. not five) the entire packet must be removed from the procedure area and appropriately reported. Hypodermic and other needles should be recorded as a total amount at the commencement of the procedure and additional items should be added individually on the dry wipe board according to the number marked on the outer packaging. Safety packs may be marked and used for a check-back procedure if required.

Opening all packages during the valid check count is not recommended. Used needles on the sterile field should be opened in a disposable, puncture-resistant waste container.

Swabs should be in full view of the operating surgeon and anaesthetist, where applicable, throughout the procedure. Used swabs and packs should be counted at the sterile field. The technique used should be safe and should incorporate infection control measures in conjunction with standard practice.

All items should be fully opened by the circulating practitioner and placed into an appropriate container disposal system as risk assessed and documented locally. If a counted item is inadvertently dropped off the sterile field, the circulating staff member should retrieve it and place it on the scrub practitioner and place it in the appropriate container disposal system to be included in the final count.

Items should not be in or around areas classified as sterile for the purpose. If alteration of any item is required by the senior performing the procedure this must be documented in the patient's records, signed and on the dry wipe board and included in the count.

Instruments

The staff involved in the counting procedure must be able to recognise and identify the instruments and medical equipment used.

Try lists should be available providing an accurate record of instruments. Instruments should be counted audibly, singly and named by the scrub practitioner and allocated instrument. Instrument trays should be standardised to assist with the count.

Count discrepancy

If any discrepancy in the count is identified, the operating surgeon must be informed immediately and the count should be re-performed.

If a thoroughly search does not locate the item, an X-ray may be taken. A plain X-ray is recommended (AFPP 2002). Radiography - image retention, must be used in both circumstances as they may be located on other people's hands. Missing items (e.g. needles) which cannot be detected on X-ray should be recorded on the intra-operative record and flagged together or electronic record. X-rays should be performed at the discretion of the surgeon. It may be necessary to utilise a microscope to assist in the search within the operating field.

Any investigations that need to be done for an unaccounted item must be undertaken before the end of a surgical intervention (i.e. before the patient leaves the operating theatre).

All missing items must be documented in the patient's notes. Any forensic investigation that may follow must be in accordance with local policy.

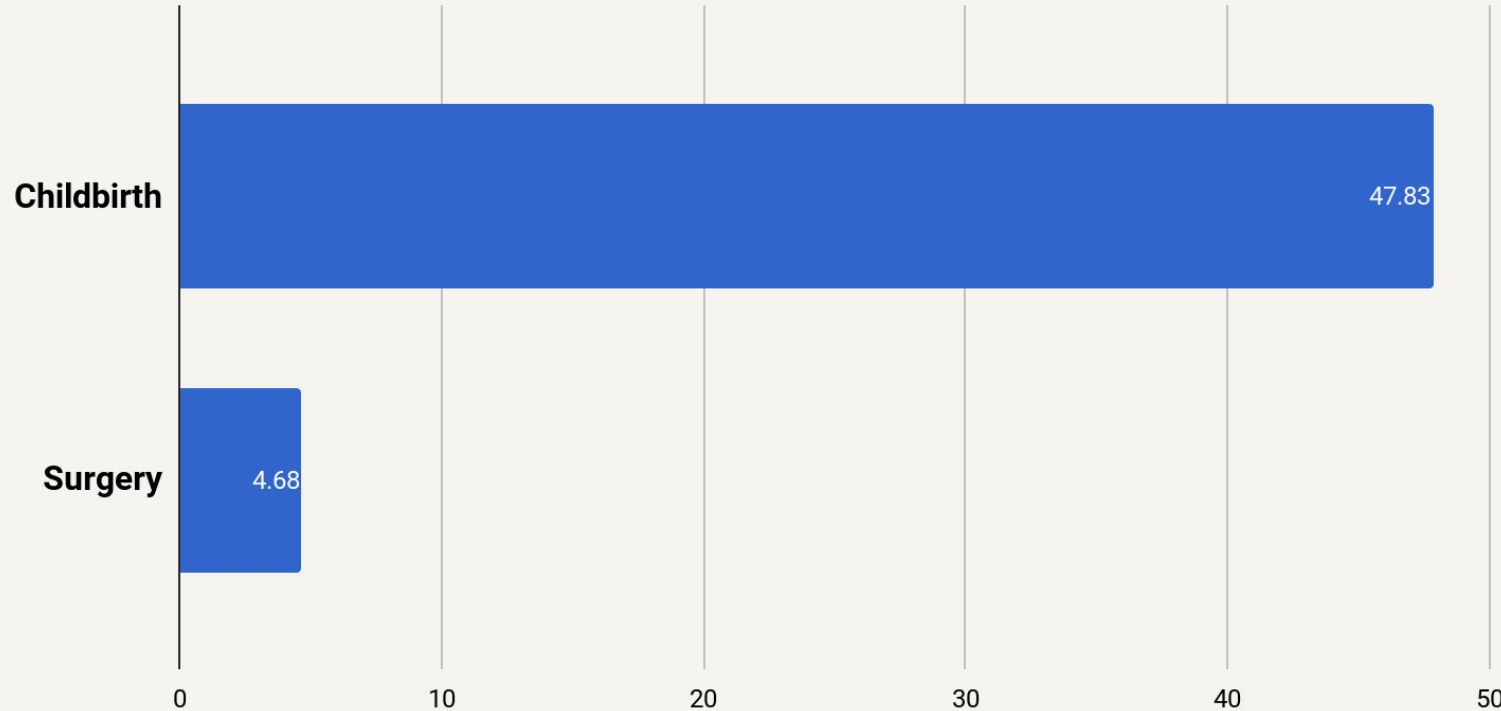
Intentionally retained items should be documented in the patient's notes and must be responsible for recording the ongoing care and removal of the item.

Documentation

A copy of the count record should be retained in the patient's notes indicating the names of the scrub and circulating staff responsible for the final count. Where extensive records are utilised the record should include the names of the scrub and circulating staff responsible for the final count.



Never Events per Million Procedures





Dashboards ▾

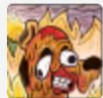
Projects ▾

Issues ▾

Boards ▾

BigGantt ▾

Create



Operations Incident Response / DAR-183

star. [REDACTED].com has not been refreshed on some ELB, breaking rb, tr and pypi



Edit



Comment

Assign

More ▾

In Progress

Closed

Postmortem

Details

Type:



Fault

Status:

CLOSED

[\(View Workflow\)](#)

Priority:



3 Nice to have

Resolution:

Done

Affects Version/s:

None

Fix Version/s:

[2014 - DAR1-3 - not actual DARs](#)

Labels:

None



Serious Incident Management Process

- Inform organisational leaders
- Inform patient/family/carer
- Report on National Reporting and Learning System
- Root Cause Analysis (RCA)
- Review learning and implementation plan
- Public board meeting
- Share appropriate learning
- Include in annual reports and quality accounts



Post Never Event Timeline

Inform organisational leaders
Inform patient/family/carer

Working
Days

2

Report on NRLS

3

Root Cause Analysis

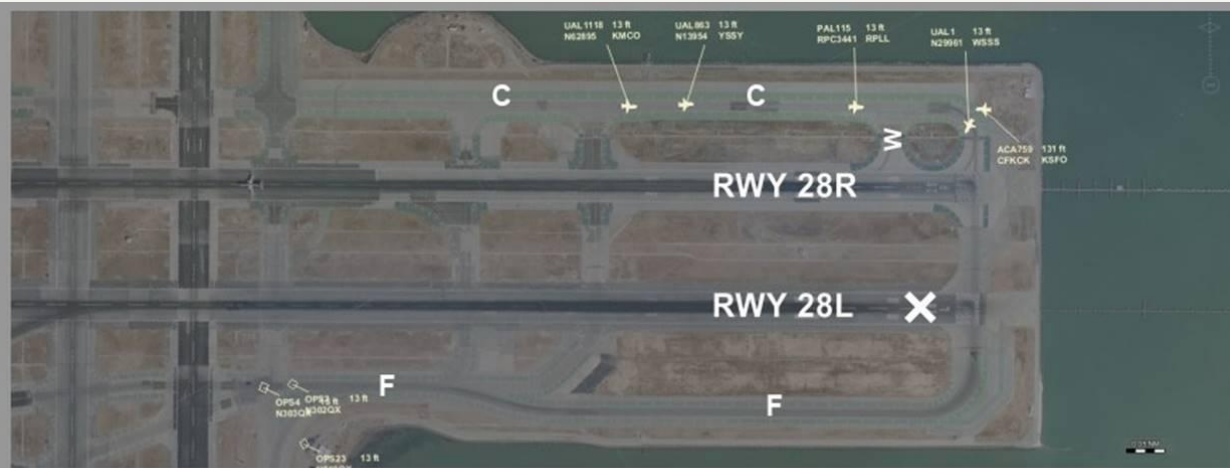
60

Review learning and implementation plan

20*

*Calendar Days





UAL1 (23:56:04): he's on the taxiway.



Checklist

- ✓ Define Serious Incidents
- ✓ Timeboxed Serious Incident Management Process
- ✓ RCA/Postmortem
- ✓ Collect preventable incidents
- ✓ Put Systemic Protective Barriers in place
- ✓ Investigate near misses





We're Hiring!

www.yelp.com/careers/



fb.com/YelpEngineers



[@YelpEngineering](https://twitter.com/YelpEngineering)



engineeringblog.yelp.com



github.com/yelp