

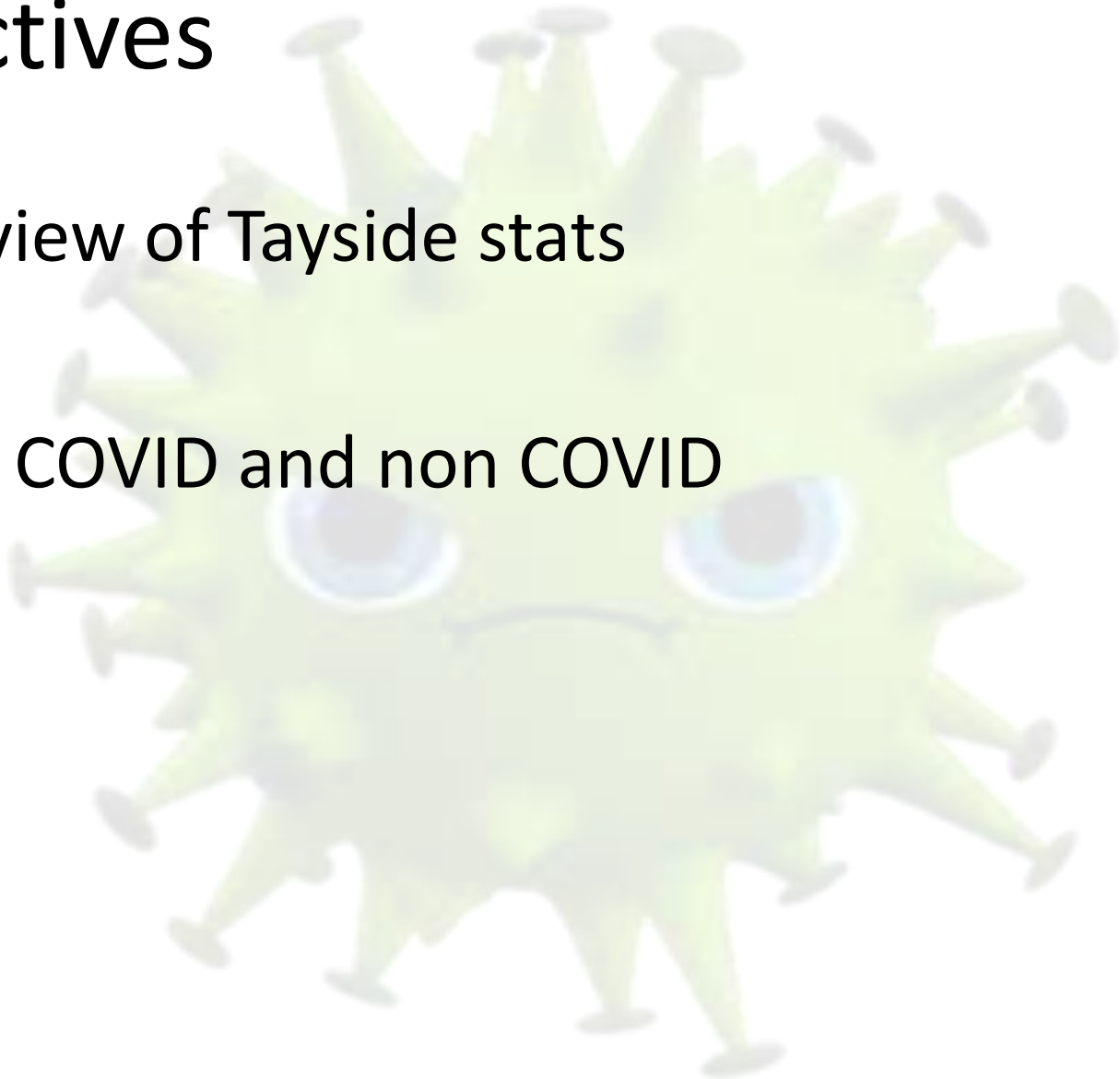
# COVID – 19



NHS Tayside  
Heather Kennedy  
Nov 2020

# Objectives

- Overview of Tayside stats
- Audit COVID and non COVID
- AMT



# Overview

- 331 patients with SARS-CoV-2 came through Ninewells from 13<sup>th</sup> March to 1<sup>st</sup> May.
- 85 of these patients have died (at least)
- 247 positives presented through medical COVID assessment
  - 15 of these were negative on admission
  - 53 who presented through COVID assessment have died
- 82 positives came through alternative pathways
  - 32 who presented through alternative pathways have died

Ninewells positive COVID swab via ICNet  
Jan 2020 to May 13<sup>th</sup> 2020  
N= 326



Assessed in COVID medicine wards/assessment area  
N=874

Negative  
N= 642  
NB 15 subsequently positive

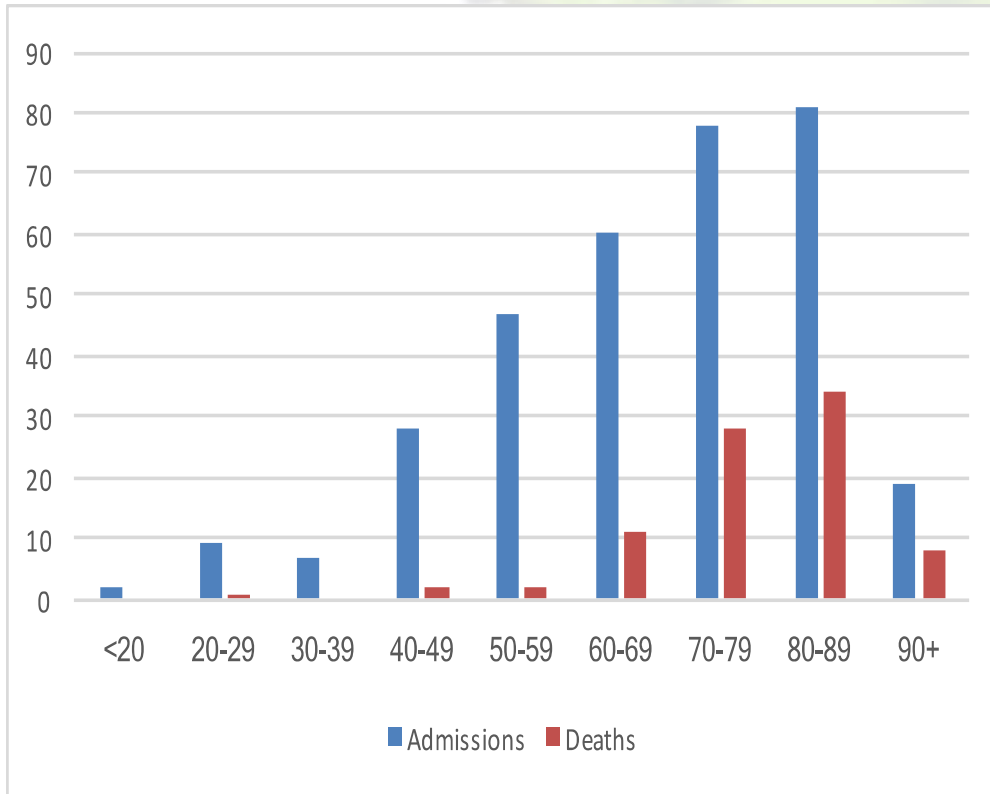
Positive  
N= 232

Admission under 24 hours (n=72)  
Median age: 57 (48, 63)  
34 males, 39 females

Admission over 24 hours N = 160  
**Ward level (n= 131).** M:F 2:1, age 74 (63, 84)  
Survived 96 (73.2%) : Death 35 (26.8%)  
HDU = 19  
**HDU Total** ignoring admission route = 42  
Survived 14 (48.3%) : Death 15 (51.7%)  
ICU = 9  
**ICU Total** ignoring admission route = 24  
Survived 8 (33%) : Death 16 (77%)

**Median age of admissions:**  
NW: 65 (55, 79) M:F 3:2  
ISARIC: 72 (57, 82) M:F 3:2

# Overall COVID pathway



Total admissions

Age: 71 (58, 82)

Gender: 199 male, 132 female

Deaths

Age: 79 (71, 86)

Gender: 57 male, 28 female

# COVID WARD ANTIMICROBIAL AUDIT

- **Included**

- **All patients on Covid wards - 42, 18,19,11,12,CHDU (CITU not included) on 14/04/2020**

- **Data collected**

- **Antimicrobial Prevalence**
  - **Compliance with NHST Antimicrobial Guidance**
  - **For IV therapy – review documented every 24 hours**
  - **For PO therapy – duration documented and as per guidance**
  - **Review of use of CRP/PCT**

# OVERALL RESULTS SUMMARY

- **PREVALENCE**

- Patients audited = 50
- Patients on antimicrobials = 15
- Overall antimicrobial prevalence = 30%

Prevalence rate similar to audits pre Covid

- **COMPLIANCE WITH POLICY**

- 100%

☑ Well done, great result!

# OVERALL RESULTS SUMMARY

- IV ANTIMICROBIAL REVIEWS

- 10/15 patients on IV antibiotics (some combined with PO)
- 50% on IV had a documented review within the last 24 hours
- 2 patients had been on IV >72 hours
  - 1 patient was suitable for IVOST

## Good Practice Points:

- ☑ Please review all IV antimicrobials daily and document decision to continue/IVOST/stop
- ☑ No minimum time for IV duration – always good to consider IVOST



# OVERALL RESULTS SUMMARY

- ORAL DURATION DOCUMENTED
  - 11/15 patients were on oral antimicrobials
  - 64% documented duration - 100% in line with guidance

## Good Practice Points:

- ☑ Always document duration on TPAR and score off boxes not required
- ☑ Doxycycline
  - For non severe CAP/Exac COPD
    - 200mg stat then 100mg **OD** for 5 days
  - For severe CAP
    - 100mg bd – **NO** need for 200mg stat dose
  - levels reduced significantly if given at the same time as multivalent ions e.g. Fe/Ca/Mg/antacids
    - Consider withholding/stopping while on doxycycline
    - If not possible then separate administration by at least 2 hours
    - Reducing the frequency of the supplement/antacid may be possible

# OVERALL RESULTS SUMMARY

- CRP
  - 92% of all patients on COVID wards had CRP checked
- PCT
  - 1 patient (2%) had a PCT recorded
    - <0.5
    - antimicrobials not prescribed

## Good Practice Points:

CRP tends to be moderately → significantly elevated in COVID-19 disease even in absence of secondary bacterial infection

- ☑ Look for other evidence of bacterial infection (unilateral CXR changes, neutrophilia) - don't be guided by CRP alone
- ☑ Consider measuring procalcitonin if there is clinical uncertainty. See NHST poster!

## Does my patient need antibiotics?

### Most patients do not require antibiotics

- CRP can be raised in COVID-19 infection and does not necessarily indicate a bacterial infection
- Request a Procalcitonin (PCT) if considering antibiotics. 1 test authorised per patient in COVID-19 wards
- If in doubt ask a senior team member for advice
- Many patients have a prolonged fever with COVID-19

### Factors that reduce the likelihood of bacterial infection

- CXR - bilateral symmetrical consolidation/ground glass change
- Bloods - lymphopenia without neutrophilia
- Symptoms - dry cough, clear sputum

### Factors that increase the likelihood of secondary bacterial infection

- CXR - unilateral / asymmetrical consolidation
- Bloods - neutrophilia or increase in WCC
- PCT > 0.5
- Symptoms - purulent sputum



### Hold off antibiotics

- Reconsider if patient deteriorates, COVID-19 testing is negative, or patient develops:
  - a neutrophilia or purulent sputum
- Send repeat microbiological investigations (blood cultures, sputum culture) and assess for an alternative source of infection.



### Consider antibiotics

- Prescribe as per NHS Tayside Guidance
- Use IV therapy when oral route not available or if severe
- Review all antibiotics daily along with microbiology investigations/results
- Stop antibiotic treatment after 5 days unless microbiological results suggest a longer course is needed or the person is not clinically stable. Check duration on Antibiotic Man. These patients should be discussed with ID/Micro

# REVIEW ANTIBIOTICS DAILY

## COVID-19 Poster

- Adapted from Lothian template
- Highlights where antibiotics can/should be used



# AMT

- Clinical role – ID ward → COVID assessment  
Out patient clinic area (HIV/ID) → COVID triage
- Moved to diff working patterns (evenings/weekends)- mirrored medical staff
- Stewardship work postponed – clinical role priority (same as other boards)
- AMG/ADTC – virtual
- E & T – no students in wards, maintained virtual session with medical students through blackboard



**WHAT NEXT?**

