

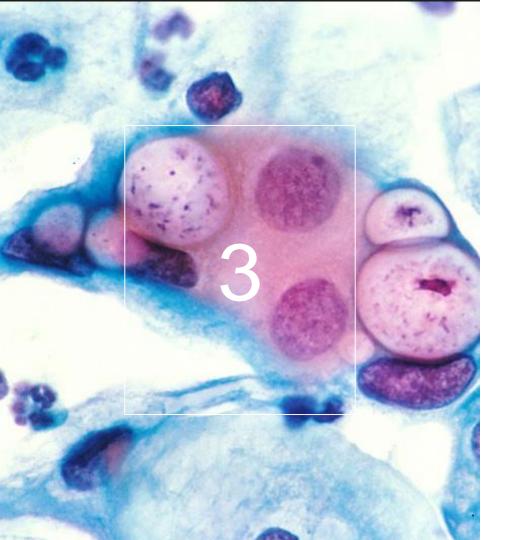


#### **Disclosures**

Speaker: Dr. Emily Groot

Relationships with commercial interests: I have no financial or personal relationships related to this presentation to disclose.

Relationships with non-commercial interests: I am employed by the Thunder Bay District Health Unit.

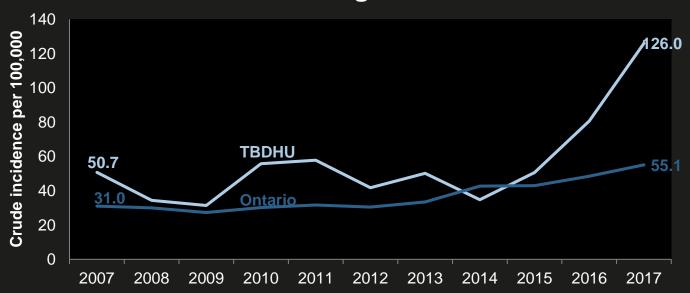


#### **LEARNING OBJECTIVES**

- Discuss the Northwestern Ontario epidemiology for gonorrhea, chlamydia, and hepatitis C.
- Order appropriate tests for hepatitis C, including a viral load, and interpret the results.
- Treat gonorrhea and chlamydia according to Public Health Ontario guidelines.
- Complete the chlamydia and gonorrhea follow-up form from the Thunder Bay District Health Unit.

## **GONORRHEA**

## Incidence of gonorrhea





51% v 34%

Proportion of gonorrhea cases in TBDHU v ON who are female

45% v 37%

Proportion of gonorrhea cases in TBDHU v ON who are <25 years old

| Chiamydia & Gonorrhea Follow-up Form  |             |   |  |   |  |                 |  | Please fax back to: 807-625-4866                |                        |   |  |  |
|---|-------------|---|--|---|--|-----------------|--|---|------------------------|---|--|--|
| Date:   |             |   |  |   |  |                 |  | Clinic:   |                        |   |  |  |
| Physician/NP/Midwife:   |             |   |  |   |  |                 | Cl   | Clinic Fax:                                     |                        |   |  |  |
| Client demogra  | phics: p    | lease co  | onfirm current ad  | dress and tele  | phone number(  | s)/e-mail       |  |   |                        |   |  |  |
| Name:   |             |   |  | Gender: DO  |  |                 |  | OB (yyyy/mm/dd):                                |                        |   |  |  |
| Telephone # (main):   |             |   |  | Telephone # (alternate):  |  |                 | Email:   | mail:   |                        |   |  |  |
| Address:  |             |   |  |   |  |                 |  |   |                        |   |  |  |
| Reason for Testing  |             |   |  | Chlamydia positive treatment  |  |                 |  | Gonorrhea positive treatment                    |                        |   |  |  |
| ☐ Routine   | ☐ Cont      |   | ☐ Prenatal   | (as per Canadian STI Guidelines) (as per Public Health  |  |                 |  |   |                        | Health Ontario Guidelines)                  |  |  |
| ☐ Symptoms:   | 1144        | 9   |  | Date given:   |  |                 |  | Date given:                                     |                        |   |  |  |
|   |             |   |  | First-line  | First-line Azithromycin 1 g PO Doxycycline 100 mg PO bid for 7 days  |                 |  | First-line                                      |                        | Ceftriaxone 250mg IM AND<br>Azithromycin 1g |  |  |
| Risk Factors  |             |   |  |   | ☐ Ofloxacin 30   |                 |  |   |                        |   |  |  |
| □ No condom used □ Sex with opposite sex  |             |   |  | Omg PO bid for 7 da   | ·  |                 |  | Azithromycin 1g <b>AND</b><br>Cefixime 400mg PO |                        |   |  |  |
| □ Condom breakage □ Repeat infection  |             | Second  | ☐ Erythromycin 2g/day PO for 7 days☐ Erythromycin 1g/day PO for 14 days☐ Amoxicillin 500 mg PO tid for 7 days (if pregnant and/or nursing) |   |  | Second<br>-line |  | Azithromycin 2g PO AND                          |                        |   |  |  |
| □ New partner in last two months □ Substance misuse   |             | -line   |  |   |  |                 | (  | Gentamycin 240mg IM<br>Azithromycin 2g PO AND   |                        |   |  |  |
| ☐ More than 1 partner ☐ Under housed in last 6 months   |             | der housed  | Reason for giving second-line treatment:   |   |  |                 |  | (   | Ciprofloxacin 500mg PO |   |  |  |
| □ <25 years old □ Sex trade work  |             |   |  |   |  |                 | Reason for giving second-line treatment:       |   |                        |   |  |  |
| ☐ Pregnant ☐ Not discussed with client  |             | Counselling   |  |   |  |                 |  |   |                        |   |  |  |
| ☐ Sex with same sex [   |             | ☐ Other:  |  | Client is aware of diagnosis:   |  |                 |  |   |                        |   |  |  |
|   |             |   |  | In all cases, clients are to be advised to notify all sexual partner(s) in the last 60 days.  |  |                 |  |   |                        |   |  |  |
| When to Consider  | a Test of ( | Cure?   |  | ☐ Client is comfortable notifying partner(s)  |  |                 |  | □ Public Health to help notify partner(s)       |                        |   |  |  |
| Chlamydia: 3 to 4 weeks post- Gonorrhea: ≥ 2 weeks (NAAT),  |             |   | ☐ Healthcare provider to notify partner(s)   |   |  |                 |  |   |                        |   |  |  |
| treatment ≥ 4 da  |             | ≥ 4 days (<br>treatmen  | (culture) post-  | Client advised of:  |  |                 |  |   |                        |   |  |  |
| Indicated when: poor<br>compliance suspected,<br>second-line therapies used,<br>for prepubertal children and<br>pregnancy |             | Indicated when: poor compliance suspected, second-line therapies used, pharyngeal/rectal infection, potential reduced susceptibility/treatment failure, for prepubertal children and pregnancy (PHO quidelines) |  | □ No sexu   | s post treatment   |                 | ☐ No sexual contact with un-treated partner(s) |   |                        |   |  |  |
|   |             |   |  | ☐ Transmis  | rs for other STIs and I  | BBIs            | ☐ Test of cure (if recommended)                |   |                        |   |  |  |
|   |             |   |  | ☐ Risk reduction with condom use & rescreening in 6 months  |  |                 |  |   |                        |   |  |  |
|   |             |   |  | If you do not have first-line therapy in stock at your facility you can call the Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication.  For more information on treating sexually transmitted, |  |                 |  |   |                        |   |  |  |
|   |             | -   | _  |   | For more information on treating sexually transmitted, reportable infections see our online toolkit at TBDHU.COM |                 |  |   |                        |   |  |  |

| Chlamydia &  | Gonorrhea  | Please fax back to: 807-625-4866  |   |  |  |  |  |  |  |
|--|--|---|---|--|--|--|--|--|--|
| Date:  |  | Clinic:   |   |  |  |  |  |  |  |
| Physician/NP/Midwife   | :  | Clinic Fax:   |   |  |  |  |  |  |  |
| Client demographics: p   | olease confirm current   | address and telephone number(s)/e-mail  |   |  |  |  |  |  |  |
| Name:  |  | Gender:   | OOB (yyyy/mm/dd):   |  |  |  |  |  |  |
| Telephone # (main):  |  | Telephone # (alternate):  | Email:  |  |  |  |  |  |  |
| Address:   |  |   |   |  |  |  |  |  |  |
| Reason for Testing  Contact Prenatal Tracing   |  | Chlamydia positive treatment (as per Canadian STI Guidelines)  Date given:  | Gonorrhea positive treatment (as per Public Health Ontario Guidelines)  Date given: |  |  |  |  |  |  |
| ☐ Symptoms:  |  | First-line  | 7 days First-line Azithromycin 1 g  |  |  |  |  |  |  |
| Risk Factors  No condom used Condom breakage New partner in last two months More than 1 partner in last 6 months   | □ Sex with opposite se     □ Repeat infection     □ Substance misuse     □ Under housed  | Second -line  General Department of the program of | days Cefixime 400mg PO 4 days Second Azithromycin 2g PO AND                         |  |  |  |  |  |  |
| □ <25 years old □ Sex trade work   |  | Keison for diving second-line freetment   |   |  |  |  |  |  |  |
| ☐ Pregnant ☐ Not discussed with client   |  | Counselling   |   |  |  |  |  |  |  |
| ☐ Sex with same sex  | ☐ Other:   | Client is aware of diagnosis:   YES  NO  In all cases, clients are to be advised to notify all sexual partner(s) in the last 60 days.   |   |  |  |  |  |  |  |
| When to Consider a Test of<br>Chlamydia: 3 to 4 weeks post-<br>treatment<br>Indicated when: poor<br>compliance suspected,<br>second-line therapies used, |  | □ Client is comfortable notifying partner(s)     □ Healthcare provider to notify partner(s)  Client advised of:     □ No sexual contact for 7 days post treatment     □ Transmission and risk factors for other STIs and BBIs  Test of cure (if recommended)  |   |  |  |  |  |  |  |
| second-line therapies used,<br>for prepubertal children and<br>pregnancy   | compilarios suspected,<br>second-line therapies<br>used, pharyngeal/rectal<br>infection, potential reduced<br>susceptibility/treatment failu<br>for prepubertal children and<br>pregnancy (PHO guidelines) | Risk reduction with condom use & rescreening in 6 months  Tryou do not have installine therapy in stock at your racinity you can can the Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication.  For more information on treating sexually transmitted.   |   |  |  |  |  |  |  |

Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication. For more information on treating sexually transmitted, reportable infections see our online toolkit at TBDHU.COM



| Chlamydia & Gonorrhea Follow-up Form   |   |   |   |   |  | F           | Please fax back to: 807-625-4866          |   |   |  |  |
|--|---|---|---|---|--|-------------|---|---|---|--|--|
| Date:  |   |   |   |   |  |             | Clinic:                                   |   |   |  |  |
| Physician/NP/Midwife:  |   |   |   |   |  |             | Clinic Fax:                               |   |   |  |  |
| Client demographics: p   | lease co  | onfirm current ac   | ddress and tele   | pho   | ne number(s)/e-mail                                    |             |   |   |   |  |  |
| Name:  |   |   | Gender: D   |   |  |             | OB (yyyy/mm/dd):                          |   |   |  |  |
| Telephone # (main):  |   |   |   |   | Emai   |             |   |   |   |  |  |
| Address:   |   |   | Total III   | \circ.  |  |             | ··  |   |   |  |  |
| Reason for Testing   |   |   | Chlamyo   | lia I   | positive treatment                                     |             | Gonor                                     | rhea  | positive treatment  |  |  |
| ☐ Routine ☐ Contact ☐ Prenatal   |   |   | (as per Canadian STI Guidelines)  |   |  |             | (as per Public Health Ontario Guidelines) |   |   |  |  |
| □ Symptoms:  | ing   |   | Date given:   |   |  |             | Date given:                               |   |   |  |  |
|  |   |   | First-line  |   | Azithromycin 1 g PO<br>Doxycycline 100 mg PO bid for 7 | days        | First-line                                |   | Ceftriaxone 250mg IM AND<br>Azithromycin 1g   |  |  |
| Risk Factors  No condom used Condom breakage New partner in last two months More than 1 partner in last 6 months           | □ Rep □ Sub □ Unc □ Sex   | with opposite sex<br>peat infection<br>estance misuse<br>der housed<br>trade work | Second<br>-line<br>Reason for s   | ☐ Ofloxacin 300mg PO bid for 7 days ☐ Erythromycin 2g/day PO for 7 days ☐ Erythromycin 1g/day PO for 14 days ☐ Amoxicillin 500 mg PO tid for 7 days (if pregnant and/or nursing) or giving second-line treatment: |  | ays<br>days | Second<br>-line<br>Reason fo              | □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □   | Azithromycin 1g AND Cefixime 400mg PO Azithromycin 2g PO AND Gentamycin 240mg IM Azithromycin 2g PO AND Ciprofloxacin 500mg PO g second-line treatment: |  |  |
| ☐ Pregnant ☐ Not discussed with client   |   | Counselling   |   |   |  |             |   |   |   |  |  |
| ☐ Sex with same sex ☐ Other:   |   |   | Client is aware of diagnosis:   YES  NO  In all cases, clients are to be advised to notify all sexual partner(s) in the last 60 days.   |   |  |             |   |   |   |  |  |
| when to Consider a Test of Cure?   |   |   | ☐ Client is comfortable notifying partner(s) ☐ Public Health to help notify partner(s) ☐ Healthcare provider to notify partner(s)   |   |  |             |   | to neip notify partner(s)   |   |  |  |
| Chlamydia: 3 to 4 weeks post-<br>treatment    Gonorrhea: ≥ 2 weeks (NAA<br>≥ 4 days (culture) post-                        |   | (culture) post-   | Client advised of:  |   |  |             |   |   |   |  |  |
| Indicated when: poor<br>compliance suspected,<br>second-line therapies used,<br>for prepubertal children and<br>pregnancy  | Indicated when: poor<br>compliance suspected,<br>second-line therapies<br>used, pharyngeal/rectal |   | ☐ Transmis  | ☐ Transmission and risk factors for other STIs and BBIs   |  |             |   | No sexual contact with un-treated partner(s)     Test of cure (if recommended)  onths |   |  |  |
| infection, potential reducec<br>susceptibility/treatment fail<br>for prepubertal children and<br>pregnancy (PHO guidelines |   |   | If you do not have first-line therapy in stock at your facility you can call the Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication.  Thunder Bay District |   |  |             |   |   |   |  |  |

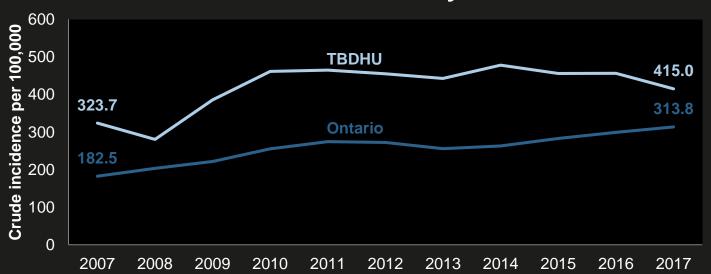
Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication. For more information on treating sexually transmitted,

reportable infections see our online toolkit at TBDHU.COM



**CHLAMYDIA** 

## Incidence of chlamydia



65% v 61%

Proportion of chlamydia cases in TBDHU v ON who are female

66% v 56%

Proportion of chlamydia cases in TBDHU v ON who are <25 years old

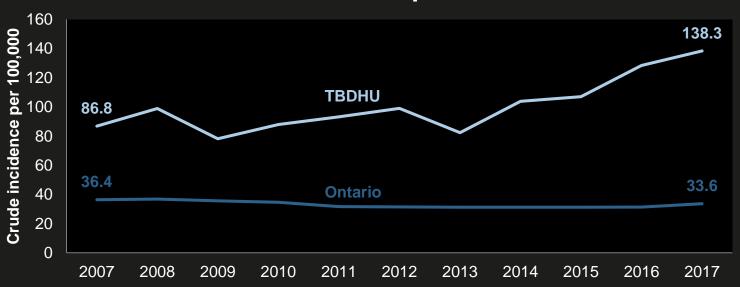
| Chiamydia &  | Gonorrnea F   | Please fax back to: 807-625-4866  |  |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|--|
| Date:  |   | Clinic:   |  |  |  |  |  |  |  |
| Physician/NP/Midwife:  |   |   | Clinic Fax:  |  |  |  |  |  |  |
| Client demographics: p                                       | lease confirm current ad  | ddress and telephone number(s)/e-mail   |  |  |  |  |  |  |  |
| Name:  |   | Gender:   | DOB (yyyy/mm/dd):  |  |  |  |  |  |  |
| Telephone # (main):  |   | Telephone # (alternate):  | mail:  |  |  |  |  |  |  |
| Address:   |   |   |  |  |  |  |  |  |  |
| Reason for Testing  Routine Cont                             | act  Prenatal   | Chlamydia positive treatment<br>(as per Canadian STI Guidelines)  | Gonorrhea positive treatment (as per Public Health Ontario Guidelines) |  |  |  |  |  |  |
| Traci  | ng  | Date given:   | Date given:  |  |  |  |  |  |  |
| ☐ Symptoms:  |   | ☐ Azithromycin 1 g PO☐ Doxycycline 100 mg PO bid for  | Eirst line Ceftriaxone 250mg IM AND                                    |  |  |  |  |  |  |
| Risk Factors   |   |   |  |  |  |  |  |  |  |
| <ul><li>□ No condom used</li><li>□ Condom breakage</li></ul> | <ul><li>☐ Sex with opposite sex</li><li>☐ Repeat infection</li></ul>  | ☐ Ofloxacin 300mg PO bid for 7 ☐ Erythromycin 2g/day PO for 7 ☐ Erythromycin 1g/day PO for 7  | days Cefixime 400mg PO   |  |  |  |  |  |  |
| □ New partner in last two months □ Substance misu            |   | line  |  |  |  |  |  |  |  |
| ☐ More than 1 partner ☐ Under housed in last 6 months        |   | Reason for giving second-line treatment:  | Ciprofloxacin 500mg PO   |  |  |  |  |  |  |
| □ <25 years old □ Sex trade work                             |   |   | Reason for giving second-line treatment:                               |  |  |  |  |  |  |
| ☐ Pregnant ☐ Not discussed with client                       |   | Counselling   |  |  |  |  |  |  |  |
| ☐ Sex with same sex  | ☐ Other:  | Client is aware of diagnosis: ☐ YES ☐ NO  |  |  |  |  |  |  |  |
|  |   | In all cases, clients are to be advised to notify all sexual partner(s) in the last 60 days.  |  |  |  |  |  |  |  |
| When to Consider a Test of (                                 | Cure?   | ☐ Client is comfortable notifying partner(s)  | ☐ Public Health to help notify partner(s)                              |  |  |  |  |  |  |
| Chlamydia: 3 to 4 weeks post-                                | Gonorrhea: ≥ 2 weeks (NAAT),  | ☐ Healthcare provider to notify partner(s)  |  |  |  |  |  |  |  |
| treatment  | ≥ 4 days (culture) post-<br>treatment   | Client advised of:  |  |  |  |  |  |  |  |
| Indicated when: poor<br>compliance suspected,                | Indicated when: poor  | ☐ No sexual contact for 7 days post treatment   | ☐ No sexual contact with un-treated partner(s)                         |  |  |  |  |  |  |
| second-line therapies used,                                  | compliance suspected,   | ☐ Transmission and risk factors for other STIs an   | nd BBIs  |  |  |  |  |  |  |
| for prepubertal children and<br>pregnancy                    | second-line therapies<br>used, pharyngeal/rectal  | ☐ Risk reduction with condom use & rescreening in 6 months  |  |  |  |  |  |  |  |
|  | infection, potential reduced<br>susceptibility/treatment failure,<br>for prepubertal children and<br>pregnancy (PHO guidelines) | If you do not have first-line therapy in stock at your facility you can call the Sexual Health Clinic at 625-8347 or 1-888-294-6630 to obtain medication. |  |  |  |  |  |  |  |
|  | pregnancy (rito galacilles)   | For more information on treating sexually transmitted, reportable infections see our online toolkit at TBDHU.COM  |  |  |  |  |  |  |  |

For more information on treating sexually transmitted, reportable infections see our online toolkit at TBDHU.COM



R.R.O. 1990, Reg. 557: COMMUNICABLE DISEASES -GENERAL **HEPATITIS C** 

#### **Incidence of hepatitis C**



# 16

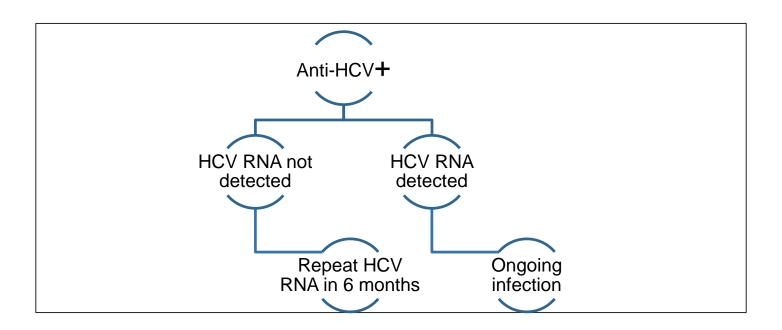
45% v 38%

Proportion of hepatitis C cases in TBDHU v ON who are female

20% v 11%

Proportion of hepatitis C cases in TBDHU v ON who are <25 years old

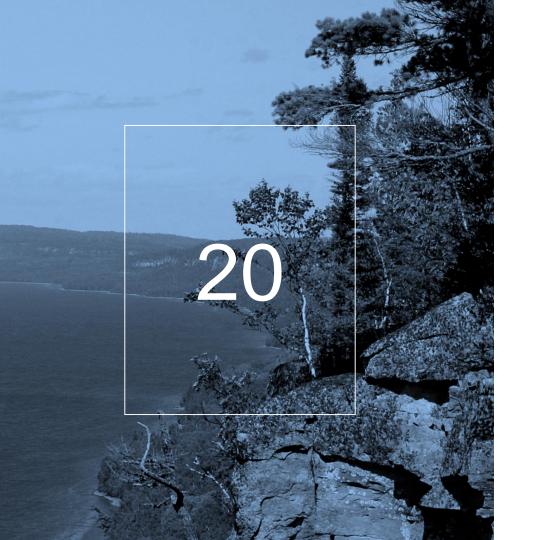
#### **Interpreting hepatitis C lab results**



#### **THANKS!**

Any questions?

E-mail me at emily.groot@tbdhu.com



#### **IMAGE CREDITS**

- Presentation template by SlidesCarnival
- Sharon Mollerus, 2006,
   Thunder Bay Lookout,
   Sleeping Giant
- Julo, 2007, <u>Magnifying glass</u>
- WiLPrZ, 2012, Milla dort
- Dr. Lance Liotta Laboratory,1988, <u>Pap smear</u>